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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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VOL. XLVIII.

LONDON, ONTARIO, JULY 17, 1913

No. 1086

Don't Shiver Next Winter Have A Warm House

A COLD HOUSE cannot help being a damp house. Muscular rheumatism, la grippe, pneumonia and neuralgia are often caused by continued exposure to a cold, damp atmosphere. Install a McClary's Sunshine furnace in your home this summer and next winter you can defy the zero days. A Sunshine furnace will make your home worth living in—warm, cozy, comfortable and healthful.

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As far as taking care of a Sunshine furnace, it's almost no trouble at all. It only takes a minute to open the wide, double feed doors and throw in two or three shovels of coal—or a big chunk of wood if you have any you wish to burn up.

Then it requires only another minute to fill up the water pan, which is conveniently and correctly placed over the feed doors. By so locating the water pan, the moisture, as it is evaporated, takes the short, direct route to the rooms and the proper humidity of the atmosphere is obtained.

No old-fashioned, back-breaking shaking to McClary's Sunshine, either. You simply "rock" a handle, to and fro, about six times, and the ashes fall into the ash pan. Then to take out the ash pan and empty is a small chore. Taking care of a Sunshine furnace requires less work than one ordinary heating stove.

And, mind you, when rocking down the ashes, no dust escapes to go up into the house and settle on and injure the furnishings. It all goes up a sure-acting dust flue, and thence up the chimney. McClary's experienced furnace builders have simply thought of every little, as well as every big thing, to make the Sunshine the cleanest, most convenient, healthful, durable and economical furnace in the world.

Fire Under Control From Upstairs

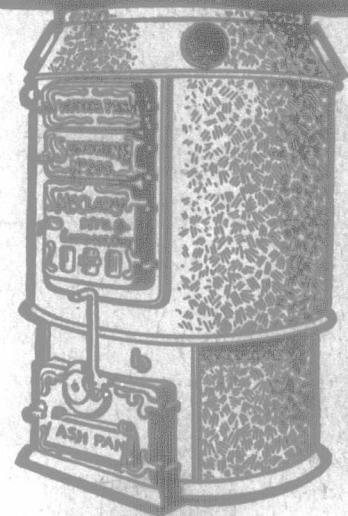
The fire, for instance, is always under control without going down cellar. By merely pulling up a chain from, say the hall on the ground floor, you can make the fire burn up briskly in a few minutes. If too warm another chain will check the fire. The only time you need go down to the Sunshine is to put in two or three shovels of coal night and morning.

Very Economical on Fuel

McClary's Sunshine is very economical on fuel. Hundreds of Sunshine owners say the Sunshine burns fully a third less coal than other furnaces they have used. Certainly, it will heat your house to your satisfaction! We, the largest stove and furnace makers in the British Empire, guarantee it.

Our installation experts will also help you and the McClary agent in your locality to plan the arrangement of your heating system. They will also co-operate in other ways to insure the proper installation of your Sunshine furnace.

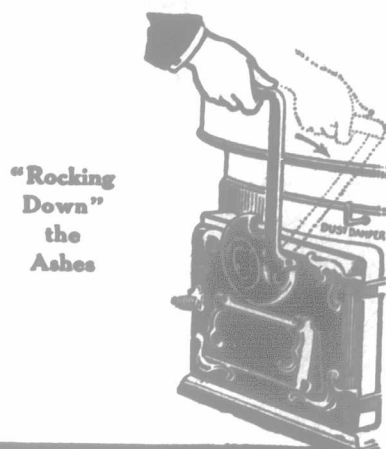
Drop a line to our nearest office for a Sunshine furnace booklet. It contains particulars about many other features of the Sunshine furnace that we could not cover in this advertisement.



Big Double Feed Doors



Filling Water Pan



"Rocking Down" the Ashes

McClary's Sunshine Furnace

327

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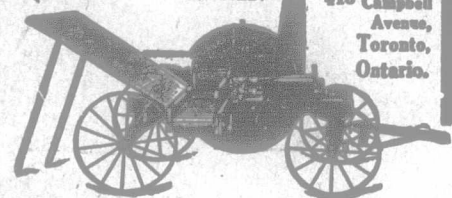
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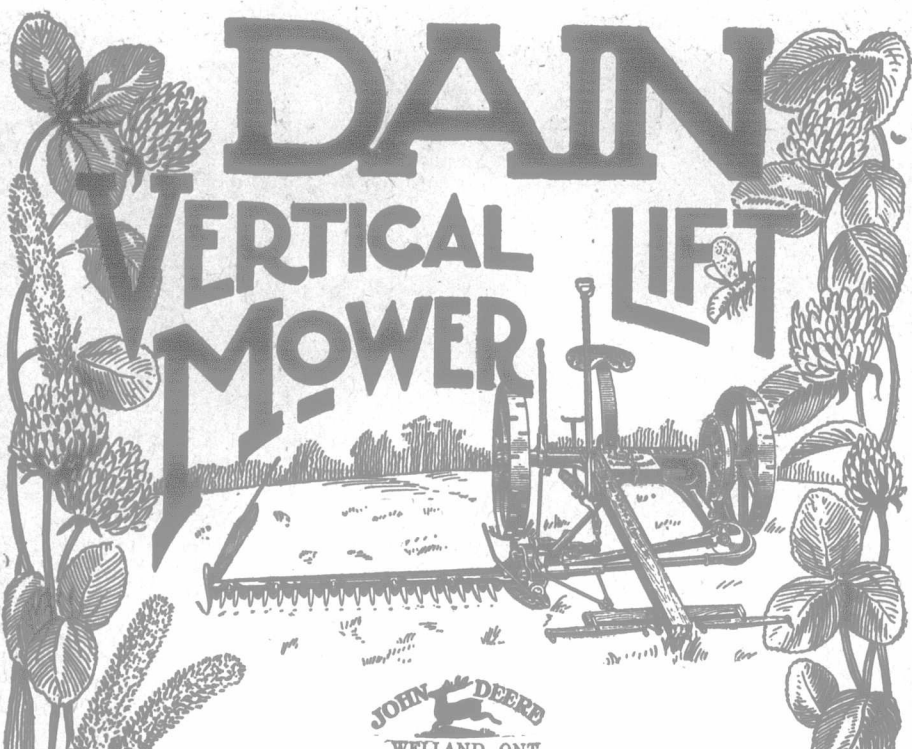
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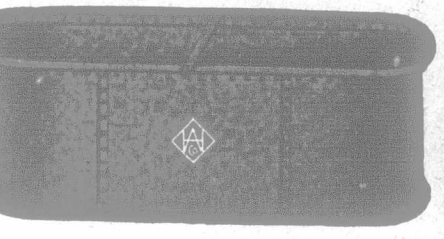
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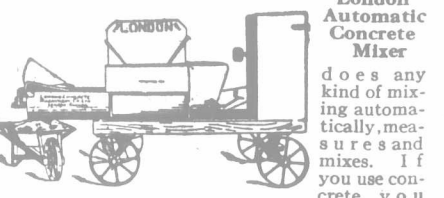
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The quantity of cement required to build a silo of this size is approximately 55 barrels. Other material required---about 13 cords of gravel and 1½ cords of small field stone.

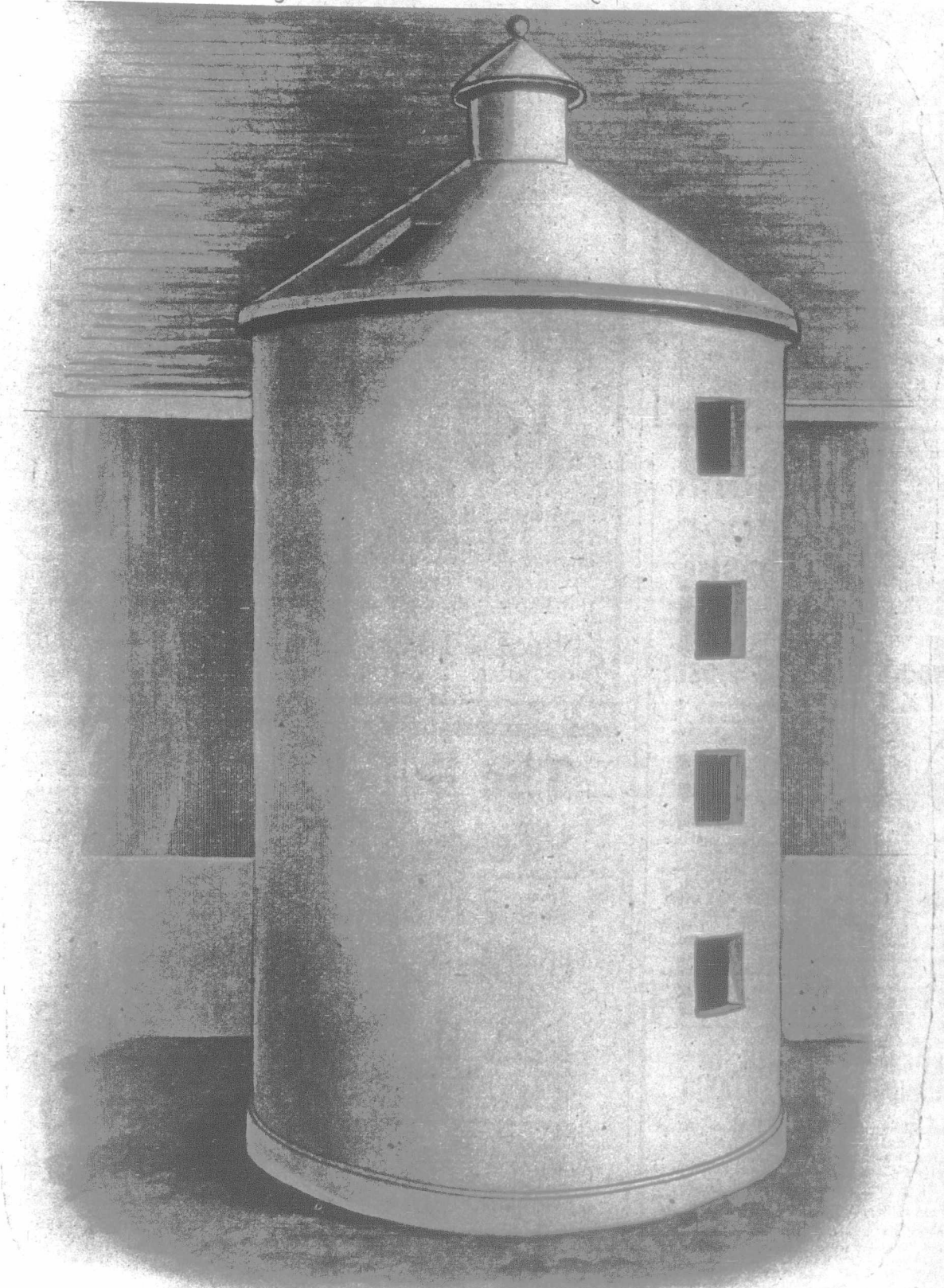
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Can be placed in cellar or elsewhere in any home. Requires no plumbing or sewage; only connection with stove-pipe to chimney-hole for ventilation.

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This great saving of time and labor counts for more in summer than at any other season, and often alone saves the cost of a separator, aside from all its other advantages.



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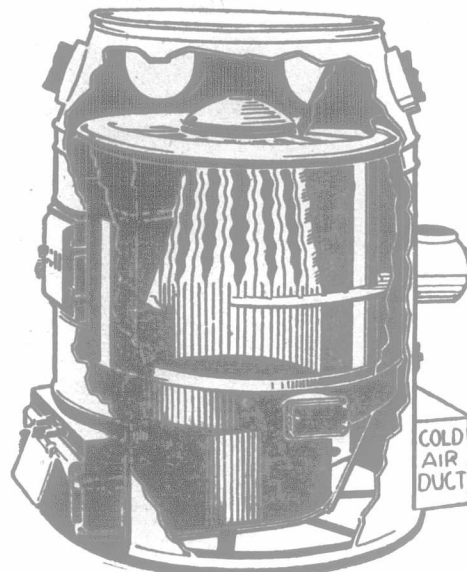
As compared with other separators, the DE LAVAL saves much time and labor by its greater capacity, easier running, easier handling, easier cleaning and freedom from need of adjustment or repair.

These are merely some of the advantages which make a DE LAVAL cream separator the best of all summer farm investments, as every DE LAVAL agent will be glad to explain and demonstrate to anyone at all interested.

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A Kelsey heats larger volumes of air than an ordinary furnace, and does it with less coal.

Because a Kelsey consumes

about one-third less coal than an ordinary furnace it is more economical to operate.

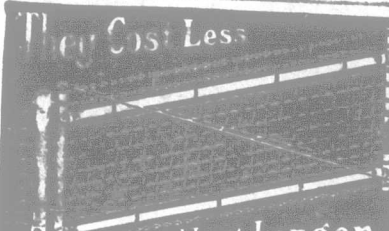
A house heated with a Kelsey is worth more to live in and will rent or sell for more money.

The cost of a Kelsey is small when the saving in coal bills and repairs is considered.

This economical heating system is fully described in our booklet, "Achievements in Modern Heating and Ventilation." Send for it. 5

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The Farmer's Advocate and Home Magazine

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Vol. XLVIII.

LONDON, ONTARIO, JULY 17, 1913.

No. 1086

EDITORIAL

Rain defies hay-making directions.

A first-class farmer operating on a mixed-farming basis has few, if any, "bad years."

Do as much of the cleaning of the hoe crop with the cultivators as possible. Hand hoeing is at best tedious work and takes up valuable time.

He is but a shallow thinker, or one who cannot bear to think, who forsakes the rural home because of its "isolation." In this lies one of its chief charms.

In lieu of a more elaborate irrigation outfit for field and garden, "The Farmer's Advocate" begs leave to recommend the judicious use of the hoe and scuffler every other day.

Prof. G. W. Dyer, of Vanderbilt University, pins his faith to this sensible maxim: "Exalt the country home as giving the best opportunity for woman to find her true life and render the largest service to the world."

Get a cover crop sown in the orchard. Hairy vetch, mammoth clover, common red clover and alfalfa are among the best crops for the purpose. But don't leave the alfalfa longer than till spring. It is too successful a competitor for moisture and plant food. As a cover crop to be plowed under the next spring it is good.

There is some good sound judgment exercised in the practice followed on some farms in periods of very hot weather, of doing the greater part of the work early in the morning and towards evening, resting in the middle of the day, when the heat is most intense. It is easier on men and horses.

Among other things Prof. Dean would do if he were a millionaire would be to put a milk scale into the hands of every man or woman who milks cows—which would be a very good thing indeed if he could insure that they would use it. Progress that does not spring from aroused initiative within oneself is weak-jointed, delicate and easily killed.

It has been suggested that an effort be made to get systems of farm accounting into the schools of the country, and let the farmer's boy, as part of his school work, keep the accounts of the home farm. If there is any better line of mathematics than this to teach in rural schools, we should like to know what it is. When shall we get down to brass tacks in rural education?

Many weeds come to this office for identification each year during this season. We are glad to help all those desiring to know the noxious pests which infest their fields, and how to fight them. Every farmer should know the weeds he has on his farm, and also the bad weeds which from time to time gain a foothold in new neighborhoods. The study of weeds should be a part of every farmer's work, and after learning the name and nature of the weed strive to remember it.

Educational Bungling.

One way of learning the truth about things at home is to go abroad. In recording in "The Methodist Review" his personal observations in the Philippine Islands, Alfred Burbank, of California, verifies in part, at least, the criticism that in the education of the Filipinos, under American methods, too much attention is paid to "Book Learning", and too little to manual and industrial training. A rational idea of education is to prepare the individual for work, but it is not remarkable that the unsophisticated but observant Filipino should have got the notion in his head that the object of education is to fit the individual so that he will not have to work. In the judgment of Mr. Burbank the weakest part of American administration in the Philippines relates to agriculture, in which the future of the Islands is really bound up and the possibilities of which are beyond computation.

Co-operation and Sanity.

It seems reasonable to suppose, as the Chief of the Dominion Fruit Division brings out in another column, that co-operation of producers will never guarantee its largest possible benefit until supplemented by co-operation of consumers, and vice versa. It is hardly to be expected that city dealers will go very far out of their way to encourage and stimulate co-operation among producers, though some few may be disposed to do so. Anyhow, the middleman's service will always demand its reward, which must be simply a slice wedged out between the share of the two parties, taking something as a rule from each. Contrast with this the case cited whereby the co-operating civil servants of Ottawa (in which commendable move Mr. McNeill has played a more prominent part than his modesty permitted him to explain) obtained a car of strawberries direct from the Niagara Peninsula delivered at their houses within thirty-six hours after being picked, and at a price considerably less than that at which the fruit could have been obtained through the regular channels. Again in apples, they have been able to pay Nova Scotia growers full price for their Gravensteins, and yet lay them down for a dollar a barrel less than the prevailing Ottawa price.

Under such an economical system of distribution, think how much more Canadian-grown fruit would be consumed by our growing cities, and how much farther removed the fear of disastrous over-production. Producers have a very real business interest in consumers' co-operation.

Mr. McNeill has a very lively faith in the outcome of the present co-operative movement among the fruit growers. He ventures to anticipate the linking up into what would be virtually a single selling agency of the co-operative apple growers in Nova Scotia, Ontario and British Columbia. There are already thirty-two local co-operative associations in Nova Scotia, all but two or three of which have united into a provincial organization. Ontario's fifty local co-operative apple-selling associations are being organized into a central selling association, and negotiations have been under way looking to the sale of the pack or a large quantity of it to the

Western Grain Growers on a wholesale basis. The co-operative associations in the Pacific Province are also aiming towards central organization. Why not a union of the provincial organizations? Mr. McNeill is confident that such a close organization of producers could never bear any but good fruit, and, of course dropping the pun, they should never handle anything else. Large possibilities of advantage loom up. But are we educated to the point of co-operating on such a scale? If not, why not become so? A modern writer has declared that the saner one is the more people he can co-operate with. Incapacity to co-operate denotes a form of imbalance. Remembering this, let us work toward the ideal of sanity and co-operation.

Seeding and Preserving Clover.

The fundamental importance of a catch of clover in any proper system of crop rotation should induce us to give every care to getting a good stand of seeds, and preserving it when secured. In this latitude nearly every one seeds clover with grain, and is warranted in so doing by the fact that a fair catch may usually be secured without much extra labor or expense, and without giving up a season's use of the land to the purpose of securing a catch. It is a mistake, however, to assume that a "nurse" crop is necessary, or that spring is the only season in which clover seeding may be successfully done. Some of the most successful catches of alfalfa are obtained by sowing alone in July just after a rain, and a series of Indiana experiments indicate that in that territory midsummer also offers excellent opportunity to get a good catch of clover seed. In those tests, midsummer seedings have invariably proven more successful than those made earlier or later. From some little experience of our own we are prepared to credit the statement. In 1911, having a seeded oat field in which drouth seemed to have all but exterminated the clover, we disk-drilled some extra timothy seed in August with a sprinkling of alsike, red clover and alfalfa added. One land we disked up thoroughly and sowed with a full mixture of seeds on August 23rd. Rainy weather followed and we got a good catch, though the clovers and alfalfa had hardly enough top to come through the winter well. Last year we found quite a thick stand of timothy here, which, however, cut rather a short crop, not so good as on other areas which had not been disked up. There was a good deal of timothy, and some short clover. This spring, however, we noticed before plowing for corn that the strip in question was much more promising than the area alongside. Our inference is that while August 23rd is too late to sow clover on ordinary soil in this latitude, the latter part of July or first of August might prove fairly satisfactory. We don't say for sure that it would, but intend to try it. Those who have thin catches would do well to run over them with a disk drill, sowing some more seed in front of the tubes. Then, if there is a little manure to spare, it will tell wonderfully if broadcasted over the field with a manure spreader immediately after the crop is off. Catches which look hopeless may, by these means, be preserved and stimulated sufficiently to cut a ton and a half or two tons of hay per acre next summer if the season is not too unfavorable. Save the clover if possible.

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
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Gold Getting Cheaper.

The quantitative theory of money, i.e., that any decided increase in the volume of money will be followed by rising prices for every commodity measured by it, and vice versa, has been generally accepted. Every ounce of bullion ordered for coinage decreases the purchase value of every coin stamped by the Government. In other words, it tends to raise prices. A coin will not go as far as before.

The greater the quantity of gold coined the higher prices will be, if other things remain unchanged. For ages, says a writer in the Independent, economists recognized the fact that the best interests of the people required a standard of value that would remain unchanged. They naturally turned to the two precious metals, but these have not proven very stable. Thanks to new discoveries of goldfields and to scientific progress in mining, the gold production of the world has been increasing enormously.

During the initial years of the last five centuries, the annual production of gold was as follows:

1500	\$ 4,000,000
1600	6,000,000
1700	7,000,000
1800	12,000,000
1900	254,356,000

Beginning with the Australian and Californian mining activities the world's gold output in 1849 was \$27,100,000; in 1850, \$44,540,000; in 1851, \$67,600,000; and in 1852, \$135,150,000. A zenith of production, \$161,250,000, was reached in 1856 and not again attained for thirty-eight years. In 1896, the year of the free-coinage-of-silver agitation in the United States, the world's output of gold was \$202,251,000. In 1912 the world's production of gold was \$466,512,700, which was almost double that of 1900. Africa leads with a production of \$205,978,325. Canadian gold production last year showed a large increase, amounting to \$13,900,000, giving us sixth rank among the world's largest producers.

By the discovery in 1884 of the Witwatersrand district of the Transvaal, the greatest gold deposits of all history were made known. There are said to be billions of gold scattered through the rocks and soil of that region.

The Independent writer referred to believes it is not an exaggeration to claim that the purchasing power of the gold dollar of 1913 has less than 10 per cent. of the purchasing power of the gold dollar of 1800.

It has recently been suggested that the nations of the world get together and by gradually increasing the amount of gold which the standard coins represent do away with the constant depreciation of the purchasing power of these coins and consequently end the constant appreciation of the things which the coins will buy, but it is a question whether the efforts were worth while. It is the abundance of usable commodities which is desirable not the amount of them which a given weight of gold will buy.

A System with a Reversible Gear.

Certain of the leading American magazines have been paying attention to the revision of the Canadian Bank Act. The Review of Reviews for July takes cognizance of the demand for inspection by a Commission similar to the Dominion Railway Commission, and not unlike the United States Interstate Commerce Commission. The July Forum goes further, and publishes an exceptionally lucid article by Peter McArthur, covering ground already familiar to our readers, but contributing some very incisive observations. For instance, Mr. McArthur says the Canadian banking system is

"An engine that, when working as represented by its friends, serves the country admirably, but when its gear is reversed it works with equal smoothness against the people, and for the benefit of those who are in control. And the fact that it can be switched for or against the people without a jar makes it the wonderful engine it is, while handled by astute men. It is so hard to know in which way it is working at any particular time, that investigators are being constantly baffled. When working as it should it deserves all the praise that is lavished on it, but that it frequently works with reversed gear is shown by certain peculiarities of Canadian business, if not by the banking returns that are made to the Government. As it is absolutely free from outside inspection, this kind of manipulation is hard to detect; but the all-too-frequent failures of weak banks have given the public occasional glimpses of the more sinister workings of the system."

And he concludes with this next paragraph, the force of which may not be conceded by all, but which is liable to impress one more as he ponders the situation:

"As matters stand in Canada to-day, the money of the people, received on deposit through a system of branch banks, is under the control of a few men. It is being used to centralize all the forms of industry for the enrichment of a small privileged class. In consequence the vast profits of the development of a new country are passing into a few hands. The fact that the people of Canada are not more seriously alarmed by this state of affairs, is due to the general prosperity caused by the opening up of the natural resources of the country. Mines, forests, and farm lands are being exploited as they were some years ago in the United States, and the influx of foreign capital for the building of railroads, and the promotion of other enterprises is causing an artificial prosperity which keeps the people from realizing that a day of reckoning must come sooner or later. As might be expected, the beneficiaries of this system are exercising the usual sinister influence in politics and on the public press, so that Canada is at the present time quietly enduring a state of affairs that in almost any other country would be intolerable."

Observations by the Way.

These paragraphs are picked from the report of the Royal Commission on Industrial Training and Technical Education.

The teaching profession is being recognized more and more as one of honor and social importance.

New buildings and equipment for technical instruction were found everywhere in evidence.

Effort is being focussed on the boy or girl, particularly between the ages of fourteen and eighteen.

Throughout the countries visited continuation classes, technical classes, and art classes have become prominent features of the educational work, on behalf of scholars whose attendance at the ordinary schools ends with their fourteenth year.

The personal power and wellbeing of the units of the community are looked after for the sake of the state.

Comparing a German city with one in England or Canada, one is struck by the absence from the streets in the evening of the youth of both sexes standing on corners or wandering aimlessly about.

In co-operative industrial schools in the United States young men from fifteen years of age up-

wards attend high schools and workshops where they are employed week about.

In Germany the young people engaged in gainful occupations attend continuation schools from four to ten hours per week, frequently during the morning or forenoon.

Occupation conserves the best that humanity has achieved.

A new country like Canada needs the constructive and conquering qualities as well as the sedentary, absorbing and remembering capacities.

Teaching and training the youth is much more than instructing them in the art of reading, writing and reckoning.

A happier day is dawning when a larger portion of the time and effort of teachers may be devoted to caring for the health, and habits and standards of the pupils, while watching and directing the development of their powers of body, mind and spirit.

When (in Canada) manufactured goods were wanted in increasing quantity and variety, and towns and cities were growing by leaps and bounds, it was discovered that there had been practically no organization of means for preparing the hundreds of thousands of young people to become the best qualified artisans, farmers and housekeepers in the world.

Industrial and technical education is to train individuals for this warfare against ignorance, helplessness, poverty, disease, vice and ill wills.

Industrial training and technical education have everywhere proved advantageous to the community and the nations.

There is no short cut by which a sufficient body of teachers for all the industries and all the people in the various levels of service can be obtained.

The permanency of the service of teachers in Germany impressed the commission as one of the strongest factors in what has brought about the efficiency of their schools.

Fortunate are the people who learn to use and choose to use their material wealth for the enrichment of life itself, and improvement of opportunities for boys and girls in the country.

In all the progressive countries education is being adjusted to meet the needs of the children of the rural population, to interest them in rural life, and to qualify them to follow it with advantage.

Banking and Farm Credits.

Editor "The Farmer's Advocate":

It seems to me that in discussing the Bank Act question there is a tendency to confuse two separate issues, which ought to be kept distinct. The criticisms which have been running in "The Farmer's Advocate" have applied to the Canadian banking system as it stands, and we must not forget that, on the whole, it is a good system and not a bad one. But from time to time there have been allusions to the need of better credit accommodation for farmers as a class, and this, as I take it, is another problem altogether. The legitimate business of Canadian chartered banks is chiefly commercial credits, which they furnish reliably on reasonable terms. When a farmer wants credit of this sort he can get it as well as any other business man. Discounting of sale notes, and advances on crops are commercial credits. When a bank will advance on a growing crop for the purchase of cattle for feeding, it is clear that commercial credit cannot go much farther. What else is required?

Honestly, I am not sure. Are the farmers of Ontario, for instance, in need of substantial credits which they cannot now obtain? Many of them would say no, we want to keep out of debt. Even a farm mortgage is often looked upon as an evidence of want of thrift, a disgrace even, and something to be cleared off at all hazards at the earliest possible moment. There is a very fine sentiment behind this habit of thought, which no economist would recklessly undermine. There are other farmers, no doubt, who say, Well, if I had two or three or five thousand dollars I could use it to good advantage. I would underdrain, get better live stock, try experiments, hire the best help by the year, and, in a general way, take business chances which can only be expected to pay in the long run. How many are in this class?

If there is a real problem here, that is if one-half the enterprising farmers of Ontario really need credits which they cannot obtain at a price they can afford to pay, or at all, then it is a problem of first-rate importance. At the present time the Canadian demand for land credits is enormous, and too much of it is purely speculative. In cities it is hard to obtain funds on first mortgages at six per cent. and the rates for the second mortgages are usurious. It is the speculative buyers who pay—or promise to pay—these rates. They are looking for a quick turnover at a profit, and a few per cent. more or less, on interest which they may never have to pay at all is nothing. But it comes very hard on the man who is trying to buy a home, at an inflated

price, while the farmer, who, of all men, has a certain moral right to liberal land credits, finds himself hopelessly outbid by those who are looking for easy profits instead of the legitimate rewards of industry.

In time the real-estate frenzy will run its course, and land credits will get back to a normal basis. The values of Ontario farms can hardly shrink, for they have been too low for years, and farm mortgages will always be gilt-edged, as they are now. The question is whether some more extended system of farm credits is necessary, something in the way of twenty-year loans, repayable by instalments, at a minimum rate of interest. If so, some new credit mechanism is needed. Co-operative Loan Societies are found in Europe, and might be established by farmers themselves; but one must go slow in advising farmers to embark in any sort of business they do not understand. It is just possible that the chartered banks, with their far-flung country branches, might be able to handle business of this sort to the best advantage of all concerned, but the first step would be to give them the necessary legislative authority to do so.

Canadian banking is undergoing a great change. The outlook is wider than it was ten years ago, the banks are getting closer to the people, and farmers' sons are getting into the banks. The old type of city-bred banker is giving place to young men who know the land and the people. Soon there will be hundreds of bank managers whose whole experience has been rural, except for the regulation service in city branches, and this will have a most salutary effect upon banking generally. But, in the meantime, it is not fair to blame the banks for failure to provide credits which they are not authorized to grant.

WILLIAM Q. PHILLIPS.

Bartram's Sandpiper.

Editor "The Farmer's Advocate":

In Peter McArthur's letter on page 1150 is a reference to some interesting birds which he has "decided are rails." These happen to be a much more unusual bird than the rail, namely, Bartram's sandpiper, or field plover, as they are often called.

This is a rare bird in Ontario, and is certainly an agreeable addition to the life on any farm. They are exclusively insect eaters, and are believed not to take grain at any time.

These birds nest on the ground, like all others of their tribe, and hide the eggs in a tuft of grass. They have a very pretty habit when alighting of stretching the wings full length above the back and slowly drawing them down to the position of rest. One of their calls is quite weird being given on a chromatic scale ascending and descending. Another call bears a close resemblance to the sound made by air bubbling out of a bottle whose neck is under water.

Mr. McArthur may be congratulated on having these birds located at his place. They are worth dollars to any farmer, and were I a farmer I would be willing to pay dollars to have them live with me, even if they were of no economic value.

They are apt to frequent large pasture fields with a very few trees in them. Two pairs live in such a field about six miles south of London. Another pair was seen last summer about fifteen miles southwest. There are also a few pairs near Ilderton, and last summer I saw one between Adelaide and Arkona along the line of the Sarnia Gravel.

These are all that are known by the London bird students just now, though they are doubtless scattered all over the country at rare intervals.

W. E. SAUNDERS.

THE HORSE.

Appetite is the best indicator of the amount of feed necessary for most young horses.

Hot, dry weather makes brittle hoofs, requiring more frequent shoeing than during cooler, damper seasons.

New importations are arriving now from Scotland, England, and France. If in need of a good imported stallion or filly, it might be worth while to look through the breeders' stables early and make selections before the various lots have been picked over.

There has been considerable discussion going on in the British agricultural press regarding the practice of docking horses. Walter Winans, a prominent owner and exhibitor of fancy horses, in a lengthy letter in the Live Stock Journal says: "The fashion has changed for riding horses, and now a docked horse is of less value for riding purposes. Very shortly the fashion will also change for driving horses, and the dock-

ing iron will only be seen in museums (its proper place), alongside thumbscrews, racks and other instruments of torture of the middle ages."

A subscriber to "The Farmer's Advocate" recently informed us that colts are as thick as calves in his district this season. Either calves must be scarce or there must be a large number of exceptionally sure breeding mares and stallions in his district. He also believes that "The Farmer's Advocate" is making a mistake in advising farmers to breed their mares. If a man has a really good working brood mare, there seems to be no very good reason why he should not make an endeavor to raise colts from her. What do our readers think?

Give the Stallion Work.

Now that the heaviest of the stallion's breeding season is over, there are many farms upon which he could profitably be put to work. Where a large stud is maintained on a small farm, or where no land is worked in conjunction with the horse-breeding operations, work for the stallions is impracticable as no stallion owner would think of letting men other than his own work his horses, but there are many draft stallions in this country, owned by practical farmers who keep a stallion largely for use on their own mares and those of the immediate neighborhood. This class of stallion owner is in a good position to keep his horse in first-class condition. By "condition" is not meant fat, but rather vitality. The horse should be kept fit to stand a hard day's work, if it is necessary that he be called upon to do it. This will ensure his getting exercise, and work is the best exercise. His legs, if he is the right type, will keep clean, and his muscles will not waste through lack of use. The farmer stallioner is very often more neglectful of his stallion than is the large breeder and importer who makes "horses" a business, and always has in his stables a number of experienced grooms to look after the welfare of his horses, because he is usually not too well supplied with labor, and very often a man is just hired for the two months of the breeding season to care for the stallion, after which the horse is placed in his box stall and compelled to remain there with a

valuable inheritances which come from regular exercise in the collar? The small farmers in La Perche keep stallions and work them continually, and some of the world's best stallions are to be found in that district. There is really no good reason why a stallion should not work to earn his keep, and also to develop and maintain a strong, vigorous physical condition. As with all other horses his training should begin during his earlier years of life, but with a good-tempered horse, rightly handled, little trouble should be experienced if he is a little older than the usual "breaking" age. Preferably, he should be broken as a two-year-old and driven enough that year to become handy in harness, and to understand what is expected of him. As a three-year-old his work may be increased to the amount which a gelding would do at that age. Never forget that he is a colt at this age, and, no matter what his age, always bear in mind that he is a stallion. Handled properly he will work in the team with a mare or a gelding, although it is generally preferred to work a stallion with a mare. Firmness is necessary, though no roughness on the part of the driver can be tolerated. It is often necessary to fasten a stick or staff from the stallion's bit to the hame of his team-mate to prevent crowding or biting. A little judicious persuasion will soon teach him to keep his place. Work gives the stallion less time to acquire bad habits due to idleness, tends to improve his temperament, ensures regular and proper feeding, for he gets his rations when the other horses are fed, and tends to keep all his organs in a normal, healthy condition. He should be a better breeder than the idle horse.

The Horse Indispensable.

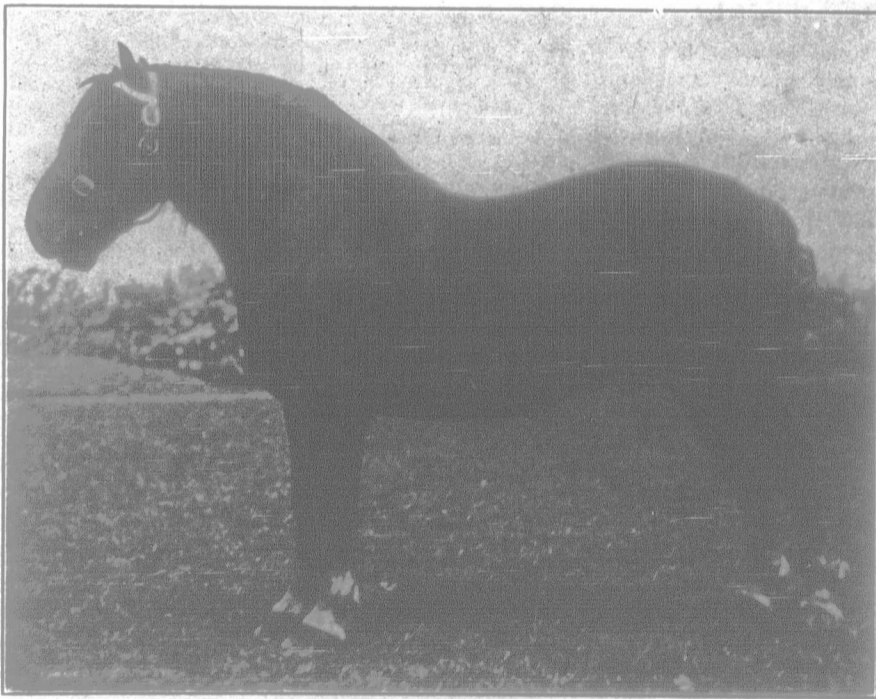
While standing with one of the District Representatives of the Ontario Department of Agriculture a few weeks ago watching the heavy draft teams haul the dirt out of the basement then being dug for the new twenty-storey sky-scraper, in course of construction, at the corner of King and Yonge streets, Toronto, Ontario, the latter remarked that it would be a long time before the motor truck could be utilized to get the earth out of such places. At that time the men were digging down

some twelve or fifteen feet below the street level, the dirt being loaded directly into large wagons, the heavy teams being doubled up to pull the heavy loads up the steep, improvised bridge leading to the ground level. There is a good deal in our friend's statement, and thinking over the horses' position, one has little difficulty in coming to the conclusion that the economy of our country is such as to give the noble animal a permanent and prominent place for years to come. The auto and the motor truck have their place, but the horse can go where these are practically useless, and for this reason he cannot be dispensed with.

Starting with the pleasure and recreation end of the horse's usefulness, many of the wealthy people are sure to maintain stables of fancy hunters, saddlers, carriage, and trotting horses. They have their automobiles, but still enjoy a ride in the saddle on a springy horse, or the excitement of taking the jumps following the hounds, or perhaps riding behind a speedy roadster, or a fancy high-stepper. It is a change, and the animal life connected with the outing adds to its charm.

Then the driving horse must for years and years to come be the means by which the average man's carriage will be propelled. His cost is less, and his efficiency meets the demands of the masses of the people. The greater portion of the city parcel delivery (especially groceries and the like) is still done by horses. There never has been so much agitation as at present for the breeding of more army remount horses. The light horse still has his duty to perform.

Turning to the drafter, the case of the horse is still stronger. While many light or general-purpose horses are used on the farms, the draft horse does the bulk of the work. Tractors are an advantage on some very large farms as are operated in the West, but even where they are used horses are necessary to haul fuel for them, and to



Bawdsey Laddie.

This Suffolk-Punch stallion was recently sent from England to Australia at a record price for the breed.

little feed thrown to him two or three times daily. There is no time to give to grooming and exercising anything but the work horse. There are scores of stallions being kept right now under just such conditions. Their owners are busy men, and the rush of summer work compels them to let the stallion take more or less "pot luck." Why not make him a work horse? If he is quiet and tractable, he should be able to help with the work and let one of the other horses have a much-needed rest and a run on grass. The work horse would make good use of the time, and the stallion would benefit from the change. There is a widespread impression among horsemen that a stallion should not work. It is no disgrace to a stallion to show the marks of the collar on his massive neck and shoulders.

Horsemen put a premium on size and strength in the draft animal, yet stallions of these breeds live a life of idleness and confinement. We demand muscle, yet we rob the horse of the best means of developing sinew. Can enforced idleness add to the usefulness of the stallion, and is it fair or wise that the mare should be expected to give to the progeny all those important and

LIVE STOCK.

The greatest amount of success in fattening pigs invariably comes when a variety of feed is fed.

A good farm scale is of great value in feeding live stock. It pays to know how much feed is being fed, and how large the daily gains are.

Discussing the founding of a herd of Shorthorn cattle for milk and beef, a writer in the Farmer and Stock Breeder advises the purchase of good-typed, well-conditioned young cows, giving not less than forty pounds of milk a day when fresh. Such cows, he reasons, should give six or seven thousand pounds a day during the milking period, which is fair work for a cow which also drops a good young bull or heifer calf. He also recommends Shorthorn breeders to pay some attention to improving the quality of the milk by selecting moderately high-testing cows.

Canada and particularly the live stock counties of the Province of Ontario might well take a lesson from the old land in the matter of annual county live-stock exhibitions. For many weeks during the summer season in England their shows are held following each other, and from all accounts numerous and exceedingly creditable are the exhibits. Our stockmen should put a little more spirit into the county fall shows. Let some of the smaller breeders get out their stock. The time is at hand to make preparations. All cannot win, but winning is not all the honor of exhibiting.

When to Give the Calf Skim Milk

There are many different opinions held by breeders regarding the feeding of the young calf of the beef type. Some hold to nature's methods—the whole milk plan, the milk being drawn by the calf; others feed whole milk from a pail for some time; while others give only a very few feeds of whole milk, and place the calf on a skim milk ration at much too early an age. Experience has proven that unless the calf is of fancy breeding, and is being developed rapidly for sale as a breeder, or for showing purposes it does not pay to give a calf whole milk very long after birth. It has also been demonstrated time and again that if the calf is to make good gains and grow into a sturdy, thrifty youngster it is not advisable to confine him to a skim-milk ration until he is at least a few weeks old and then the change must be gradually brought about so as not to injure the calf's delicate digestive apparatus.

How long should a beef calf get whole milk? Many good authorities say that up to from four to five weeks of age all the milk given should be whole milk preferably fresh-drawn from the dam, and considering that the calf even at the expiration of this length of time is still very young, this does not seem to be too long a period. When the calf reaches four or five weeks of age small portions of sweet skim milk might be safely added to the whole milk, increasing the amount from feed to feed until in a few days sweet skim milk has entirely taken the place of the whole milk. It is necessary to do this with the average beef calf in order to keep down the

cost of raising the animal to a profitable age to market.

It is necessary to replace the fat lost in the feeding of skim milk by some means if the calf is to make the best possible growth. For this purpose nothing is better than linseed. As the calf grows a meal ration should be given, and one recommended in the old country where much good success is met with in calf rearing looks good. It is one part of pure ground faxseed, two parts of oatmeal, and two parts of corn meal. A gruel is made of these by adding boiling water, after which the skim milk is poured in, the whole being fed warm. Good feeders in Britain give about one-quarter of a pound of this meal daily in the beginning, increasing the amount gradually until at the time skim milk is discontinued the calves are getting about one pound each at a feed. Too much importance cannot be attached to keeping the calf growing and in good condition, and while it is not generally profitable to feed whole milk for very long, it is necessary for a time, and after it is stopped some easily-digestible milk-fat substitute is advisable to keep the calf growing.

Good Gains in Growing Stock.

Editor of "The Farmer's Advocate":

In a late number of the Advocate the profits of feeding light and heavy cattle without figures concludes that the most profit will be made from heavy cattle. This conclusion is contrary to laws of animal growth.

A colt full fed will make half his mature weight the first year. The second year half what he made the first year. The third half what he made the second. This law of animal growth will apply to cattle, sheep, and hogs.

The first of last winter we bought nine Shorthorn-grade calves, well bred, but very thin. Their average weight was 329 lbs. We fed oats and barley with a very small sprinkling of peas, ground fine with some bran and shorts added. This was fed night and morning, carefully mixed with corn silage and alfalfa hay. They were again weighed the middle of June. The average of the nine was 686 lbs. (28 lbs. each over double their weight).

If a 1,200 lb. steer doubled his weight (2,400 in six months) feeding heavy cattle certainly would pay well. We bought an old cow for \$14. She nursed calves the summer and winter before. She had a few teeth left. She was nurse for a strong, thrifty calf. He took warm separated milk besides. At two weeks he weighed 107 lbs. Forty-one days after he tipped the scales at 214 lbs., having doubled his weight. At one year old he weighed 1,035 lbs. I suppose another year's feed he would have been 1,500 lbs.

I certainly think these facts clearly demonstrate the extreme folly of starving a calf, a yearling and a two-year-old to get a twelve-hundred steer to fat.

THOS. B. SCOTT & SON.
Middlesex Co., Ont.

[Note.—We presume the article referred to by our correspondent was one which appeared on page 1069 of our issue of June 12th. We realize that gains are made more rapidly in the young animal, and this is shown in a lengthy article on this subject which appeared on page 945 of our issue of May 22, as well as in many other articles which have appeared from time to time. In the article in question, the reference was made in connection with buying cattle in the fall to fatten,

haul the grain from the fields to the thresher, and generally from the thresher to the elevator, although this latter could be accomplished by auto drays. But the tendency of the age is towards smaller farms, and more intensive agriculture. Farm work in Ontario, for instance, is work for the horses. Comparatively small fields eliminate the tractor. Cultivation of the land and of the growing crop, cutting and harvesting the crop and marketing the produce either in the raw state or as finished meat require horses. The horse is indispensable on the farm.

But city trade is also necessary to keep the horse market at its best, and all that is necessary to prove that the big drafter and the general-purpose horse have their work to do there, is to spend a day or two in a large city looking over the work being done by horses. The biggest transportation companies use some auto trucks, but they still retain a large number of heavy horses. That they do so after trying the truck is ample proof that the horse pays them well for some kinds of work. The truck and the horse each has its work. There are many places in which the horse is called upon to labor that the truck would not be a success, and for some things the truck is the more economical. We have a rapidly growing country, and business increases yearly by leaps and bounds. There is work for all classes of motive power.

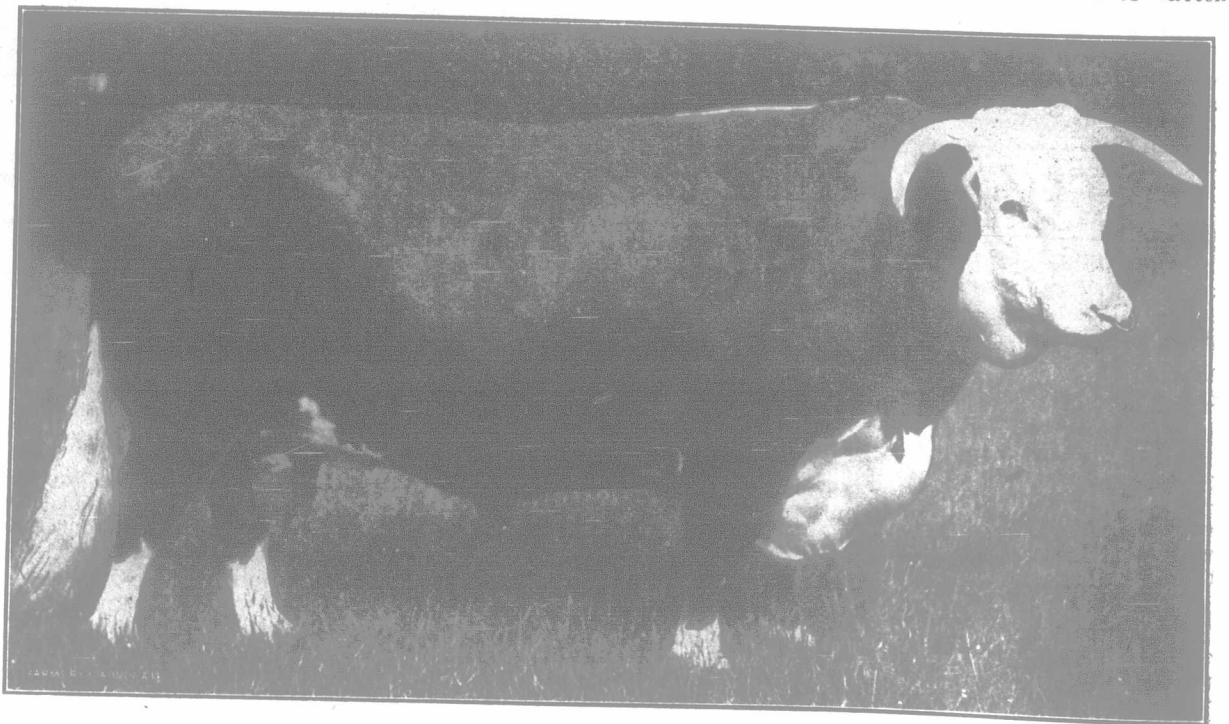
Our climate with the heavy winter snows makes auto-operation difficult, even on city streets in winter, and precludes it on country roads. The horse works from January to December, and is always reliable. Horses will pull a fair load even in deep mud, an auto truck may mire without a load. Excavating, drawing sand and gravel from pits for building purposes, short hauls and frequent stops with heavy loads, and countless other kinds of work are bound to maintain the horse's position. True, prices may fluctuate, have their ups and downs, and may at times go quite low, but what class of live stock is not subjected to declines and soarings in price. The auto and the motor truck have taken the places of many horses, and will continue to do so, but there are so many new places to be filled that the horse is sure to continue in demand. City and country must have horses.

Aged Horses Serviceable.

The Horse World cites some interesting cases to prove that aged horses are most serviceable when rightly used. One of these refers to the old-time trotter Goldsmith Maid 2.14 that lowered the world's record six times, won 332 heats in 2.30 or better, and earned about \$325,000 during her career. She trotted her first race at eight years of age, and at nineteen equalled her best record. Continuing, the article says the annals of harness racing are full of instances only a little less notable, and in early days of the running turf, before colts were tried as yearlings and raced as two-year-olds, many of the best performances were made by horses in what would now be termed "old age." Eclipse was nine years old when he won the memorable match race against Henry for \$40,000 stakes at the Union Course, on Long Island, in 1823. Boston was the same age when he ran four-mile heats with Fashion over the same course for \$20,000 a side in the great sectional match of 1842. In the show ring harness and saddle horses have won their greatest victories and reached their best form when well past the age commonly believed to mark the zenith of power.

There are scores of other instances to prove the statement. The old assertion "an old horse for a hard road" is invariably proven true, provided, of course, the old animal has had good care, has not been overdone, and is in good condition. While it is good practice to work the colt and get him handy, it is never advisable to overdo it. A colt, no matter what the breed, which has its spirit broken by overworking never lasts long as a useful animal, and is generally an "old" horse at the comparatively early age of eight or nine years.

In the opinion of Prof. Warren, of the New York State College of Agriculture, the present era of high prices may, in ten or twenty years, bring about a period of over-production. In the meantime the farmer cannot reduce the townsman's cost of living. That is only to be accomplished by a more economical distribution of food products, unless the town family will adopt more economical ways of living.



Avondale.

First-prize aged Hereford bull at the Royal Counties Show in England. Owned by H. M. the King.

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stating that the spread in price worked on much greater weight in heavy cattle than in light giving figures to prove this statement, and also stating that it is generally less difficult to get a high degree of finish on a more mature animal than upon a young animal which uses a large portion of its feed for growth. The same article states farther down that more economical gains are made with the young animal. We would not for one moment discourage the feeding of young stock, but when buying a bunch of cattle to put in the stable in the fall the initial weight must have considerable importance in considering profits accruing from spread in price. Whether the law given in our correspondent's article applies equally to all classes of live stock or not there is always plenty of good argument to take good care of the young stock. It always pays, and profits in making baby beef are good for the man in the business.—Editor.]

Prepare, Show, Win.

To the stockman who has been exhibiting at exhibitions for a number of years, and through experience has learned all the ins and outs which lead to success in the show ring, no word of warning in regard to final preparation of the stock is necessary. He knows full well that the animal must be fit or a win will not be registered to his credit, and he also knows how to make the animal fit. But new breeders enter the arena each year to do battle with the veterans, and these men, inexperienced in the game, are often at a disadvantage. A year or two in experience adds much to their chances.

It is to be hoped that this year will see a larger number of young or new exhibitors at all our Canadian shows from the largest industrial or national show down to the smallest county fall fair. An annual autumn exhibition cannot live without live stock unless it be some special feature like a horticultural show. Live stock exhibits are the life of the fall fairs, and breeders should endeavor to strengthen all these shows by increasing the entry of creditable animals. Good shows and keen competition cannot but help the live-stock business in the locality in which they are held, and there is no better incentive for the young man to put the best that is in him in the business than to make a creditable showing at the fall fair. It is not absolutely necessary for him to win in order that his stock be favorably looked upon. All cannot win. Good judges' opinions differ. The point is to bring out good stock in the best possible condition. If you have a good animal it will be appreciated even though it does not stand at the head of the strong class in which it is entered. It will avertize your business, give you a start in the right direction, and plant within you, if you are the right kind of a stockman, a resolve to try and try again until the highest goal of your ambitions is reached, and your herd, stud or flock, carries off the reds and the blues, and the accompanying gold and silver from the greatest exhibitions in the land. The young showman must have a single purpose, dogged determination and must be a good loser as well as a good winner. It is said that anyone can be a good winner, but it takes a real man to be a good loser, and in this sense every person contemplating entering his stock at any exhibition, no matter what its calibre must first of all decide that whatever befall, he is going to play the part of a man in every sense of the term. Hilarious boasting over winnings is often followed by the nastiest kind of growling and grumbling when another of the same owner's entries goes down to defeat. It pays to be enthusiastic. No living man could see his own stock, which he has bred and raised and carefully watched over through days, weeks and months, and the coveted trophies without feeling a thrill of satisfaction, but undue boastfulness always irritates spectators and other exhibitors, and often is resented by the latter, because they feel that their stock is being belittled. Let the pride felt in winning be displayed by increased efforts through greater care and attention given the stock in preparation for further conquests.

Having decided to exhibit, which should always be done early in order to bring each animal out in such condition as to do it as well as the exhibitor justice, it is always well to stand by the decision. If other exhibitors are visited and their entries appear to have a little the advantage in fitness summon all the energy possible to place your own stock in as good or better condition and under no consideration withdraw from the competition if your stock is at all worthy. Get the good stuff and stay right with it undaunted and success must eventually crown your efforts.

It is generally advisable to begin the showing business at the county fairs. Here competition is not usually so keen as at larger exhibitions, and the experience gained stands the young exhibitor in good stead when he launches out upon a large scale and seeks new fields to conquer. By entering the local show it is improved, others are induced to follow suit, the show grows in

magnitude, and as it grows the honor of winning increases, confidence is instilled in the consistent winner, and he steps on and up to the larger shows, leaving the county fair to younger men beginning where he began a few years before. And yet we would not have all the successful exhibitors leave and forget the county fair where their dreams of success first became realities. Let them still exhibit a few animals and by their advice and help aid in every way possible the younger breeders to keep the exhibitions progressing, and gaining in scope and value. Older and more experienced breeders can do much to encourage their neighboring breeders to compete.

Now is the time to commence to put the finishing touches on the stock ready for the September and October fairs. Herdsmen who have been through the mill time and time again, know just how to handle their stock, and yet very often, in fact, in nearly every show herd no two animals will do their best under identically similar conditions. Each cow or heifer has her own peculiar individuality which must be recognized in reaching the high-water mark in condition. This is something which young feeders are prone to overlook. Little likes and dislikes shown by the different animals are ignored, and what one does well on, the other is compelled to take in like quantity. This is very often a mistake. It is wise to study individuality, feed as regularly as possible, and cater in a measure to the animals' little peculiarities of temperament and taste. By all means have the stock educated. No cattle beast old or young, and no horse, should go into the showing ring without having been taught "manners." Cattle should lead well, and should be taught to stand in good position while being examined. A badly-trained horse seldom wins even the smaller prizes. Awkwardness or viciousness detracts greatly from his chances. Colts should lead well, and older animals, on the line, in the harness, or under saddle, should do what is expected of them readily and freely. A little training accomplishes all that is desired in most cases. Occasionally a stubborn animal cannot be made as handy as one would like, but these are seldom met with if proper treatment is given in time. Even pigs and sheep require a measure of "sense" in the judging ring. By all means have the pigs quiet. Quietness in the pen, with frequent rubbing of their backs while feeding will do much to get them accustomed to handling. Sheep may easily be taught to lead, and at least should be handled frequently so that they will stand quietly while the judge goes over them. It is absolutely necessary to handle sheep in judging, and so quietness facilitates the work of the judge and the sheep to best advantage. Too much handling the stock to get it "educated" for its appearance before the judge is seldom given, and more of the entries, especially at our smaller shows, give evidence of two little training than otherwise. Training is almost as essential as feeding and keeping the stock clean. Upon this latter point also depends a great deal of the success of the entries. Cattle and horses should be carried regularly and frequently before the show to give their hides the gloss which is so much admired. Use the brush and a rag to wipe off after combing and brushing is done. This besides polishing up the coat, keeps the skin clean and the animals finish better. The brush may be used to good effect upon pigs, and, of course, soap and water is often used on cattle and pigs in immediate preparation for the ring. Shears and a coarse comb must be used to put the sheep's fleece in condition, and with sheep care must be taken to keep dirt out of the wool. These little things will add to the appearance of the entry when it enters the ring.

Perhaps, after all, feeding is the most important consideration after animal form. Recognized type must be the foundation of show stock, and this must be filled in and rounded out by flesh put on smoothly, proportionately, and in liberal quantity. This must be covered with skin, and wool or hair of good quality, which is largely influenced by feeding, and the breeding of the stock. Anyone can throw a forkful of hay, a bucket of silage, and a gallon measure of chop into a manger in front of a bull, and he may eat it, but not all men, even those who have been raised in the business, can feed that bull in such a manner as to bring him out in nicest form—not overdone, yet finished. It requires skill to keep the animal's digestive system working to best advantage. Appetite must often be coaxed a little, and care is always necessary that the animal does not "stall" and fail instead of gain. Even after a "stalled" animal begins to eat again it is generally some time before gains are made. Refusal of food is simply a sign that the organs of digestion and assimilation have been overtaxed, and are injured, and it takes them some time to regain their normal state and to exercise their normal functions. Feed liberally, but carefully; bring the entries out in the best condition possible; win or lose, be courteous to judges and officials, and ever-face the problem with a determination to win by strictly fair means—the merits of your stock. Prepare, show, and win.

Raising Pigs for Profit.

Swine are more universally kept and raised on the farm than any other class of live stock. They are used as the scavengers to utilize many of the products on the farm that would otherwise go to waste. They are constantly getting, when allowed, here and there many things that other stock will not consume. If there is any spoiled fruit or vegetables, they are given to the hogs. If there is any injured grain, it is the hogs that consume and convert it into marketable produce. They are the most economical producers of meat of any kind of stock kept on the farm. They waste less and, with proper management, give greater returns. Pork is the most economical meat for family use, because one pound of pork will go as far for family consumption as two pounds of beef. It is more easily cured and retained for future use, and can be transported and used in all parts of the world. It is always ready for family use. A good slice of smoked ham, shoulder or bacon, cooked along with eggs makes not only palatable but substantial food for the laboring man, whether on the farm or in the workshop.

There are a number of important things to consider in raising pigs successfully. It is much easier and costs less to produce pigs on the farm than to purchase the same for feeding and fattening. The breeding of the pigs on the farm brings into activity the farmer's best judgment in regard to the stock he raises. When the comparatively small price at which good breeding stock can be had, is considered, it is not worth the while to bestow much time or expense on an inferior class of stock. The very best is none too good, and is far cheaper in the end.

In order to raise such pigs as meet the highest ideal of the farmer, it is an important matter to select breeding stock that will be nearly, if not quite, the highest ideal in form and general characteristics. It is safer and better to take special pains to select brood sows from families that are known to be prolific, as it doesn't cost any more to keep a brood sow for a year that will raise twice the number of pigs than another sow will raise, than it does the latter.

Sires should be selected of not only the right conformation, but from families that are prolific. The fact should be borne in mind that the sire transmits to the progeny the external form and general make-up; therefore, the animal selected should be compactly built, with a short, broad head, short neck, wide at the heart, broad back, good length of hip and broad hams, together with bones of good size. Strong-boned pigs cannot be expected from small-boned sires. It is well to remember, also, that the progeny inherit the vital organs and internal structure largely from the dam. Thus it is easily seen that by the proper selection of the sires and dams that one can raise pigs that are strong, vigorous, have good-sized bones and muscles, and large vital organs, which carry along with them a strong constitution.

The most economical meat-producing hogs do not represent either extreme coarseness or fineness. It is the medium-sized hog that can be brought to market weights and conditions at an early period in its life that is the most profitable meat producer. The fine-boned, small ones do not attain size quickly, and the extreme coarse ones require too much time to get to market condition and weights to be as profitable as the pigman likes.

It is a matter of prime importance that should not be neglected to surround the herd with such conditions as will promote both health and vigor. Nature seems to have designed that the hog should live out of doors, and come in direct contact with the ground. If kept confined to close quarters, disease germs gather and the hogs are liable to fall victims to disease, which either takes them off or reduces greatly the profits in the business. The ideal conditions for raising pigs are out in the open where they can have ready access to vegetation, and, if possible, good running water. Of course, during the winter the animals need protection from the cold, and well-constructed houses then are an absolute necessity for their best-doing.

Considerable stress is laid on what is called a hog wallow in the summer time. It is contended that the wallow adds not only to the comfort of the hogs to allow them to get into the mud during the heat of the day, but it promotes and maintains a healthy condition. I prefer clear running water to a mud wallow, but the clear water cannot always be at hand on every farm. To compel the animals to endure the heat of the day without some means by which they can relieve the heated condition by getting into the wallow or water, is to subject them to endure that which is not only detrimental to their health, but dangerous, as many hogs are lost from the lack of these conveniences.

The importance of keeping the hogs free from external parasites should not be overlooked. If the quarters where the pigs sleep become infested with lice, it is well to clean them out thoroughly, burn the bedding and spray the sidewalls and floor of the nesting places with some good disin-

THE FARM.

fectant. Then the pigs should be sprinkled with a solution that will be sure to destroy the lice. The animals should be taken in hand, and, with a good, stiff hair brush, the lice-killer scrubbed into the skin around the ears and neck, down the side, in the fore flank and all around the back. This will not only kill the lice on the pigs, but will destroy the nits. If by any chance the lice appear again, they should not be neglected, but the same operation repeated until the herd is entirely free from lice. Pigs cannot be expected to be healthy, thrifty and profitable meat producers if tormented with parasites.

There is a diversity of opinion among breeders as to the propriety of promoting rapid growth of pigs while young. Breeders of pure-bred hogs contend that they want to make the growth slowly while young, in order to retain great strength and vigor necessary for a long life, but with the average farmer it is different. To him it is a matter of importance that he pay attention to the promotion of growth early in life. There are several reasons why he should do so. In the first place, it costs less to increase the weight of the animal while young, than it does later in life. By feeding well-balanced rations, containing a large percentage of protein, the bones and muscles can be grown rapidly, and the strength and vigor of the vital organs retained. In the second place, the quality of the meat from a pig that grows rapidly from the time of birth to market weights, is superior to that produced on the slow-growing pig. The fact should be kept in mind that the muscle and bone on all animals grow during the growing period, and if one desires to raise stock with good bone and muscle, they must be well fed while young. In the third place, it is more desirable to hasten the growth of the pigs to market weights, because the returns come in more frequently. At the age of six or eight months, pigs well handled and kept growing should have reached the popular market weight of 250 to 380 pounds each, and be of quality equal to the best that can be produced, and have cost less money than by the slow-feeding process.

The fact that it requires a certain percentage of the feed to maintain the animal should be kept in mind. If only as much feed as is necessary to maintain the life of the animal is given, then that feed is wasted, but if fed more and in a manner to make the largest possible gains, then there are the greatest possibilities for profit. These facts should be kept in mind from the beginning to the end of the term in raising, fattening and marketing hogs.

Johnson Co., Ill.

W. H. UNDERWOOD.

[Note.—The popular weight in the United States is higher than here where the bacon hog of 160 to 200 pounds is favored. While this article is written from the United States feeders' viewpoint, it is none the less interesting, and most of what is said is applicable to conditions in this country.—Editor.]

Carbolic Acid for Abortion.

The internal use of carbolic acid for the prevention of contagious abortion in cattle, with some notes on the relation of granular vaginitis to abortion, is the subject of a Montana State bulletin by W. J. Taylor. The experiments reported, which were carried on in three herds, have led the author to the following conclusions:

"Carbolic acid, fed in solution or injected hypodermically, seems to be a specific against contagious abortion. Cows, as a rule, will eat with apparent relish as much as 750 cc. of a 4 per cent solution of carbolic acid in feed daily. The hypodermic injection as a treatment in an affected herd involves less labor than feeding. In cases of impending abortion carbolic acid can be injected in sufficient quantity to cause staggering gait and dilation of the pupil of the eye (when it should be withheld for from 10 to 15 hours and repeated) with no apparent unsatisfactory after effects. All males used for breeding purposes should be treated as indicated. Contagious abortion and granular vaginitis may be transmitted through the medium of the male, unless proper precautions are observed. Not all cows showing granular vaginitis abort. Heifers pregnant for the first time are more liable to abort than during subsequent periods of gestation, and should be carefully watched and vigorously treated if abortion exists in the herd."

Did you ever pump water into a large trough from which ten or twelve large cows or steers were drinking at a time, and as many more impatiently waiting their turn at the trough? The cattle drink the water as fast as it is produced, and remain at it until you think you have nearly dried the well. Anyone who has had this experience understands just how thirsty cattle get at this season, and how important it is that they have access to water at all times. A day or two without water gives them a set back, and is cruel in the heat of summer.

tion with a complete fertilizer high in phosphorus will give better returns than when either is used alone."

How Fast Does Corn Grow?

It is very interesting to take note of the growth of a corn crop from week to week and from month to month. There are times when it seems to be fairly jumping. After a warm soil-soaking July rain the growth of a good stalk reaching towards the tasselling stage is almost miraculous. In times past we have measured selected hills from day to day, and the number of inches of growth made in a day was so astonishing that we refuse to trust our memory to quote the figures. Any corn grower may easily do some measuring for himself, however, and we would commend the practice for the eye-opening interest it arouses. Upon this point we quote some very conservative figures used by Joe Wing, in the Breeders' Gazette. The variety was Wisconsin No. 7, and it was grown on a clay-loam field in Southern Wisconsin during the season of 1912. The corn was planted the latter part of May, and the accompanying table shows the growth made during each of the periods indicated, as well as the average daily growth.

Date.	Height of corn.	Amount growth during period.	Average daily growth during period.
July 2	1ft. 2in.	1ft. 2in.	0.4in. (about)
July 12	2ft. 6in.	1ft. 4in.	1.6in.
July 22	3ft. 6in.	1ft. 0in.	1.2in.
Aug. 2	5ft. 4in.	1ft. 10in.	2.0in.
Aug. 12	7ft. 4in.	2ft. 0in.	2.4in.
Aug. 20	8ft. 2in.	0ft. 10in.	1.2in.

The table indicates, as most of us would expect, that the plant makes its greatest growth during the latter part of July and the first part of August. From July 22 till August 12th it grew on an average 2.2 inches per day, and there must have been many days when the average was considerably exceeded, and as the total height attained was only 8 feet 2 inches, it is not so hard to credit stories of corn stalks of big dent varieties having grown five or six inches in twenty-four hours. But measure a hill or two for yourself this summer and see what you may see. It will help to impress the need for continued shallow cultivation to conserve all possible moisture to supply the large water needs of the crop while making its wonderful growth.

Using Barnyard Manure.

An Ohio State Experiment Station bulletin by J. W. Ames and E. W. Gaither contains information derived from experiments at the station and compiled from other sources on the production composition, conservation, reinforcement, and value of barnyard manure. It shows that the liquid excrement contains nearly half the nitrogen and potash voided by farm animals; "when steers are fed on cement floors the value of the manure produced is more than \$4 per year greater for each animal than when fed on earth floors; . . . the least amount of nitrogen will be lost from stored manure if animals are kept on it, or it is kept in a moist, well-packed condition; . . . open barnyard manure is about one-half as valuable as stall manure; stall manure appears to be more effective in rendering phosphorus available from floats and other materials carrying phosphorus in slightly available form than yard manure; the addition of phosphatic materials to manure greatly increases its fertilizing value and pays a handsome return for the trouble, for this purpose phosphatic materials [proving] more valuable on most Ohio soils than gypsum or kainit; manure used in connection with continuous cropping will not maintain the maximum yield, but when used in connection with crop rotation it increases the yield of all crops grown in that rotation; [and] manure used in conjunc-

Sowing Clover after Grain Harvest.

During the last three seasons the Soils and Crops Department of Purdue Experiment Station has been conducting experiments to determine the practicability of sowing clover alone at different times during the growing season from April to September, making a seeding every three or four weeks. The degree of success has varied considerably, due to the extreme weather conditions, but the midsummer seedings were invariably more satisfactory than those made earlier or later. The success of the earlier seedings has been menaced most by beating rains shortly after seeding, followed by heat and resulting in crusting of the ground. Weeds, which spring up very rapidly at that time, have also given trouble. The late August and September seedings have not developed sufficiently to withstand the winter, and, in this latitude, are not to be recommended at all. So far as these experiments have gone, they indicate that seedings of this kind made in July and early August are most likely to succeed, and, on the average, one may expect to get satisfactory results from seeding clovers at any time when a good seed bed can be prepared after wheat or oats harvest, and before the middle of August.

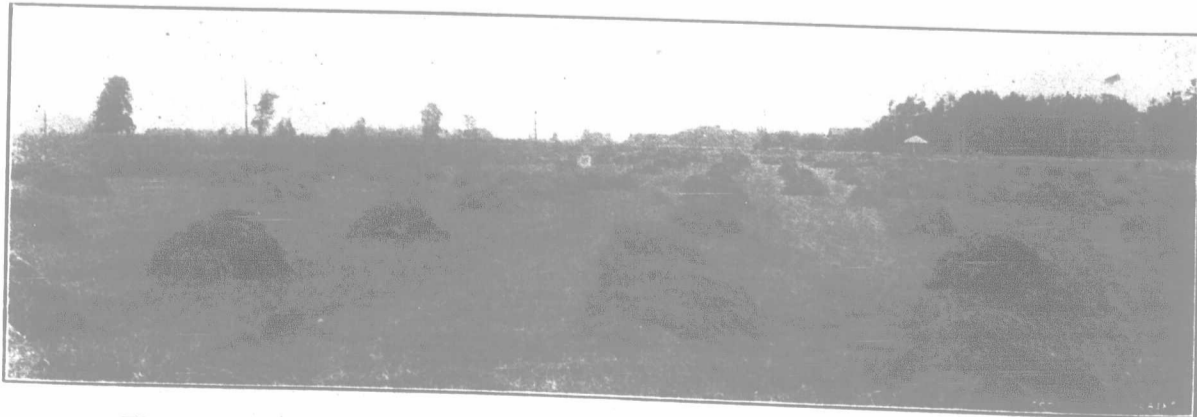
Wheat and oats-stubble ground should be thoroughly double-disked and harrowed as soon after harvest as the shocks can be removed, and the ground is moist enough to work, says Prof. A. T. Wiancko in a recent press bulletin on the subject. The opportunity must be watched for and usually there will be several chances, as there is very seldom a season when there is not enough rain to soften the stubble ground some time in July or early August. The earlier the first working is given the ground the better, on account of the destruction of weeds and the preservation of moisture. The disking will chop up the stubble, weeds and trash, and mix them with the surface soil, and, if properly done, there will be a fine seed-bed for the clover which should then be sown at a favorable opportunity when the soil is moist and after, rather than before a rain to avoid crusting of the surface. The seed may be broadcasted and lightly harrowed in, or it may be drilled shallow through the grain tubes of a regular seed drill. The special clover and grass seed drill will, of course, be excellent for such work.

From experience on the Station plots, with summer moisture conditions less favorable than on the average farm, the authorities feel confident that the chances of successfully seeding clover alone in midsummer are much better than they are with the usual methods of spring seeding.

Sweet Clover's Soil Preference.

With reference to sweet clover, which one or two correspondents have recommended highly as a crop, and which Prof. Shaw has given qualified endorsement as a means of soil improvement, it may be of value to some readers to know the experience of E. J. Zavitz, Provincial Forester, who has tried it on some of the light sand in the section of Norfolk County where his forest-tree nurseries are situated. On such land he has found it difficult to obtain a satisfactory catch of the seed, although it grows rankly on hard-clay hills, and on the edges of roadsides. It is somewhat similar in this respect to alfalfa which endures longest on hard clay, providing it is sufficiently well drained.

Many Indiana farmers are facing a clover failure, especially in the Central and Southern parts of the State, where extreme drouth destroyed every vestige of young clover.



Three Acres of Alfalfa (Second Year of Cropping) in Coil at Weldwood, 1913. This strip yielded a trifle over six tons of fresh-cured hay, mostly alfalfa, but with some blue grass. The whole field of ten acres yielded 18 loads of mixed alfalfa and blue grass. The small building in background is a waiting-room along the electric railway.

THE DAIRY.

Keeping Cream Right.

From an extended series of investigations in the care and handling of cream for butter making, Geo. H. Barr, Chief of the Dairy Division Department of Agriculture, Ottawa, draws the following conclusions:—

An ordinary cellar is not a good place in which to keep cream.

Cream must be cooled to 55 degrees, and held at that temperature to be delivered to the creamery every other day in a sweet condition. Setting the cream cans in water, or in water and ice, is the best method of cooling.

Cream delivered only twice a week must be cooled immediately after skimming to 48 or 49 degrees, and held at that temperature.

A refrigerator is not as good a place in which to cool cream as a tank with water and ice.

The natural ripening of gathered cream at the creamery will not produce butter with good keeping qualities.

The use of ten per cent. of clean-flavored starter improves the flavor and keeping quality of the butter.

Butter made from pasteurized cream without a starter has better flavor and better keeping quality than butter made from raw cream to which a good starter has been added, especially when the cream is tainted.

Pasteurized cream with 10 per cent of a starter added gave the best-flavored and best-keeping butter.

Cleanliness and low temperature are the two most important essentials in the production of fine-flavored butter with good keeping quality.

HORTICULTURE.

Co-operation of Fruit Producers.

There are in Nova Scotia 32 co-operative apple-selling associations. With the exception of two or three, these associations have united into a central selling association so that in all probability this year from 50 to 75 per cent of the fruit of the Annapolis Valley will be handled by a single selling association. Ontario has over fifty co-operative apple-selling associations. These are now being organized into a central selling association, so that, if not this year, in the near future a very large proportion of the apples grown in Ontario will be sold by a single selling agency. The fruit growers of British Columbia are also being united into co-operative selling associations, and it is their aim to have the selling of practically all the apples grown in British Columbia done through a single association. When this is consummated, no doubt the three large apple-producing provinces, through their three selling associations, will meet and so arrange business that practically a large proportion of the apples of the Dominion will be sold through what to all intents and purposes will be a single selling association. Even the suggestion of such a consummation will startle the consumer into the thought that here is a gigantic trust being organized, one more octopus to assist in sucking the life out of the poor consumer. Nothing could be further from the actual facts. Such an organization among apple growers will result only in good to the consumer, though of course the organization is undertaken primarily for the good of the producer. If the production of apples could be controlled as easily as the selling of them, we might indeed look for all the evils of a corner in the fruit market. Such, however, is not the case. It is in the interests of fruit growers—and the co-operative associations are simply the fruit growers combined—to lower the price to the consumer. I have no hesitation in saying that no greater disaster could come upon the fruit industry than a series of years with high prices, made so by trust methods. That these views are shared by fruit growers I think is amply demonstrated by the fact that for the last half dozen years the California Fruit Exchange has controlled from 40 to 60 per cent. of the total output of citrus fruits in California, a control that was quite ample to enable them to make a corner in citrus fruits at any particular time they wished—and I may say, in parentheses, I believe they would have done so if they had considered it for the good of the industry to do so—but they have not done so and citrus fruits were never cheaper to the consumer and the grower never before received such good returns as since the inception of the California Fruit Exchange.

In Canada there are tens of thousands of acres just as suitable for apple culture as the land already in orchard. Any artificial manipulation of prices would only result in increased plantings, not only by the members of the co-operative associations, who hold much of this land, but by

others, and eventually disaster would come upon the whole industry through over-production.

What the united fruit growers' associations want is a wider distribution and an increased consumption. They propose to benefit themselves directly by the economies that will be introduced into the selling and shipping of the fruit, and they will benefit themselves indirectly by lowering the price to consumers, thereby increasing consumption. For this purpose there is no agency quite so efficient as the organization of the consumers into co-operative buying associations. The selling associations cannot reach the individual consumers, and, therefore, until the consumers are organized, they are obliged to market through middlemen and under conditions that still unnecessarily increase the cost of selling the fruit. They are, therefore, particularly anxious for the organization of the consumers, and no doubt a part of the propaganda fund which is being set aside by the selling associations will be used to help in the organization of the consumers.

There are other forces at work just now that will assist materially. Co-operation is in the air. The grain growers of the North West are now being thoroughly organized, and it is hoped that something can be done this season through this organization. The railway people of Canada have started a large consumers' co-operative scheme. The labor organizations are agitating to the same end, and while all these larger schemes are being worked, here and there is being established a co-operative store in Canada that is proving the efficacy of co-operative methods.

To illustrate the advantages that may accrue let me cite a single case of what has actually happened, and this will be more effective than any amount of talking that may be called "theory." The civil servants of Ottawa want strawberries. The fruit growers of St. Catharines grow strawberries and wish to sell them. In the ordinary course of trade, a fruit merchant goes among the strawberry growers, buys their fruit and has the individual growers draw the fruit to the railway station where it is loaded into a car. The necessity of passing from one grower to another and making a separate bargain with each takes time, and, presuming that the buyer started Monday morning, he probably could not begin to load his car until Monday afternoon, and in the usual course of things it would be Tuesday, or

berries to sell. The consumers' society in Ottawa could take a carlot in a day and the fruit growers in St. Catharines could pick a carload in half a day. Consequently, arrangements were made in advance between the consumers in Ottawa and the fruit growers in St. Catharines. The consumers put in their orders for the quantities they wished, one crate, two or three crates, and the morning that the picking was to be done for this particular car, a telegram was sent to Ottawa, noting that the car would arrive the next day at 11 o'clock. The manager of the co-operative store in Ottawa then notified each member that had ordered berries when to expect them, and preparations were made in the way of getting fruit cans, sugar, etc. The next morning the car arrived at the station, and the fruit was delivered direct from the car to the home of the consumer, and many of the consumers in Ottawa were using berries for their luncheon that had been picked near St. Catharines the preceding forenoon. There were at least two, and probably three loadings and unloadings on wagons saved, and the consumers were their own middlemen.

It can be readily seen where the advantage was. Not only was the fruit in much better condition, but it was considerably cheaper, and yet the fruit growers got the full price which they asked for the fruit.

No more need be said to show the very great advantage of having not only the producers thoroughly organized, but the consumers as well.

A. MCNEILL,
Chief Fruit Division

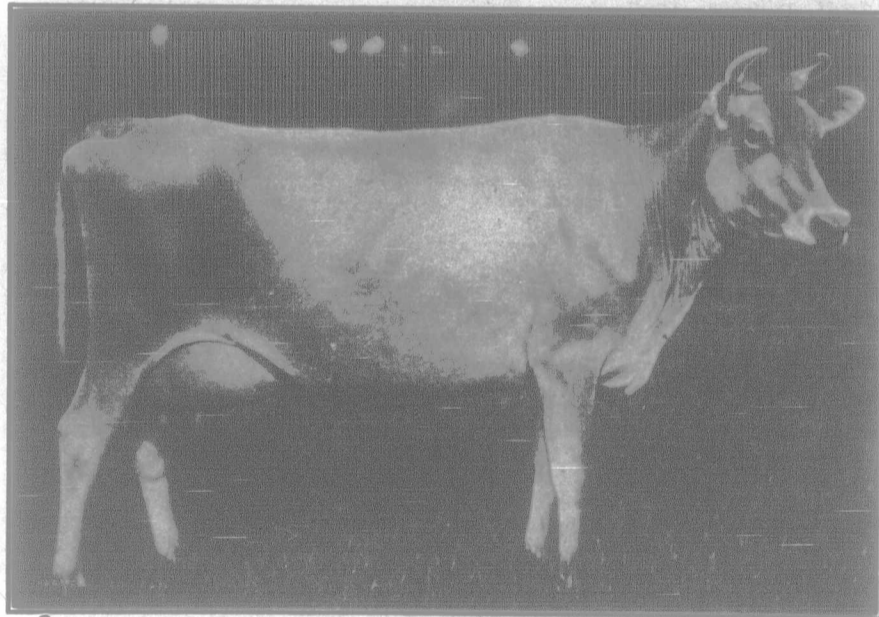
Co-operation of Consumers.

Co-operation among Canadian consumers is a comparatively new thing. In England, the single institution, the Co-operative Wholesale Society, is supporting nearly every need of a population only slightly less than the whole population of Canada. To have attained this proportion there must certainly be some merit in co-operation. One of the reasons why consumers have not combined co-operatively in Canada is the want of proper co-operative legislation. Some improvement, however, has been made, and it is now possible to use the ordinary Joint Stock Company Act, with fairly satisfactory results, by limiting the number of shares that any particular individual may hold.

The Civil Servants of Ottawa have been operating a co-operative grocery store for two years, and now have a membership of nearly five hundred, though these can scarcely all be called active members. The business has been put upon a thoroughly firm foundation, and paid this year five per cent. on capital invested, and, in addition, two per cent. was returned to all customers on their purchases at the store. This in itself is a substantial showing, and indicates that co-operative methods will succeed even under the adverse conditions now existing.

The chief difficulty we have experienced has been lack of capital. It is hard to persuade people that a co-operative is not in some way or other a charity concern, and there are few people who will accept the condition which ought to go with each consumer's co-operative society, namely, that each member should put up capital to finance his own account. We have found in our experience that it takes about \$20 per member, on the average, to finance the ordinary corner-grocery business. That is to say, the ordinary member requires about \$20 worth of goods upon the shelves in order to supply his needs, and if cash is the basis he will be obliged to put up that amount. Cash, of course, can be hired directly from the banks, but that usually requires that some one becomes personally responsible to the bank, and this usually falls upon the directors. My conclusion is that it is better to insist upon each member bringing in his own capital, and there will be no necessity then for borrowing for ordinary purposes.

There is, however, another source of expenditure that may be called extraordinary, that is to say, certain goods cannot be bought and sold to advantage immediately. These will require special financing. Cheese, for instance, should be purchased in September in sufficient quantities to



Muriel's Oxford Daisy.

A three-year-old Jersey heifer, first at Bath, and first and champion at Oxford and Royal Counties Shows in England.

possibly Wednesday before the car would be finally loaded. Presuming that the car was loaded Tuesday, it would reach Ottawa Wednesday morning, when the fruit would be carted from the car to the wholesale warehouse. If the fruit was put on the auction, it would be sold the same day and then delivered to the retailers. There would be no special preparation and no chance for preparation on the part of the consumer, and it is quite possible that in the majority of cases, even though the fruit was bought Wednesday, it would not be used until Thursday, and as a matter of fact much of the fruit would remain with the retailer Thursday, and some of it much longer, the net result being that, delivered in this way, the fruit is three or four days between picking and the consumer. Even the best arrangements made by private dealers can only shorten this, perhaps by a single day.

Now this is what happened when both consumer and producer were organized: The Civil Service Co-operative Supply Association, with a membership of between 400 and 500, wanted strawberries. The co-operative fruit growers of St. Catharines, three hundred strong, had straw-

last the members until the following June at least. Potatoes, apples, and several other commodities should be bought in quantities at the time they are cheapest and stored. For this particular class of expenditure a guarantee note should be taken from each member for about \$25. This guarantee note, being payable on demand, can be used as collateral for the Association's note, and will thus provide this emergency capital at ordinary bank rates. In starting any kind of a consumers' co-operative association work on a cash basis, by all means. It will require considerable firmness, but it is the only way in order to make a success of co-operation.

One of the greatest obstacles in the way of success has been our expenses. The ordinary system of competitive stores has completely spoiled Canadians in the matter of service. They insist upon being served the moment they enter the store quite irrespective of the time of day. They never have been taught that some days are busy days and some slack days, and the average corner grocer will deliver four times a day if the customer insists, and as they all do this the grocer loses nothing as he simply charges it up to the cost of the goods. Co-operators should learn to economize in the matter of service.

Perhaps our greatest difficulty is the fact that there are not enough of us. A single co-operative association is in the hands of the wholesalers for four-fifths of the goods and the full effect of co-operation will not be felt until there is a co-operative wholesale society established that can deal directly with manufacturers and jobbers. Indeed, I look forward to the time when the consumers' co-operative concerns in Canada will be carried even further than this, and a union of co-operative stores will not only have its own wholesale houses, but its own bakeries and fruit-canning establishments. In Great Britain the Co-operative Wholesale Society has its tea gardens in Ceylon. It owns the largest flour mills in the world, and manufactures nearly all the supplies for 2,000 societies.

Even under present circumstances, however, our society in Ottawa has made a success of the grocery business, and is preparing to introduce other lines, such as a bakery, and, in all probability, a tailoring business, but we will make a success of each before venturing into another. We have also been able to deal, to a certain extent, directly with the producers. We were able to give the St. Catharines fruit growers their own price for strawberries and yet deliver them to our members at considerably less than they could be purchased through the regular sources. Our greatest gain, however, in dealing with the St. Catharines co-operative fruit-selling association was the extra quality of the fruit we obtained, and the splendid condition in which we delivered it, resulting from the fact that it was only 36 hours from the vine before it was distributed to our members in Ottawa, the delivery being done direct from the car to the consumer. We have done equally well with apples, and have been able to pay the co-operative apple-selling associations in Nova Scotia, for instance, the highest price for their Gravensteins, and yet deliver them to our members in Ottawa at \$1 per barrel less than they could get them from other sources. It is only natural, therefore, that the co-operative fruit-selling associations, which are becoming numerous in Canada, should be extremely anxious that the consumers unite as this is the only way in which the full benefits of co-operation can be secured. Co-operation among consumers or producers alone will never give perfect results. Both must organize and work together to get the full benefits of this great movement.

A. MCNEILL.

Farmers of Western Middlesex are pleased with the prospects of growing fruit and vegetables, and they are co-operating with the new canning company just organized at Glencoe, known as The Glencoe Canning Company Limited. For many years this district has been noted for its stock farms and grazing lands, but the owners are anxious to try out more intensive farming, believing that it will not only be more profitable, but greatly enhance the land values. Recently they have been devoting their attention to their orchards, and this year they are expecting to receive returns through the agency of The Glencoe Fruit Growers' Association, which was organized the past winter. The Glencoe Canning Company will also afford a big and convenient outlet for the fruits and vegetables of this district. For the present year a factory has been leased, machinery installed to handle tomatoes, pumpkins, and apples. For next crop an up-to-date sanitary factory will be erected capable of canning 200,000 cases. The company has a strong financial backing, and will prove a great benefit to the farmers of Mosa and Ekfrid.

POULTRY.

Grading, Packing and Shipping Poultry.

In last week's issue of "The Farmer's Advocate" a somewhat lengthy article appeared on "Killing, Dressing and Cooling Poultry," as it is done at some of the feeding stations in the United States, and recorded in the United States Year Book. Let us follow the birds to the market, and learn some valuable lessons in handling the poultry after it is picked, dressed and cooled. The Year Book thus describes the procedure of grading and packing:

Having removed the natural heat from the dressed fowls, the next step in their preparation is to grade and pack in suitable containers for shipment. This operation should be performed in a room having a temperature of 30 degrees F., and in this room the packed boxes may remain for several days while awaiting shipment.

No longer does the packer thrust old cocks, broiling chickens, and fowls indiscriminately into the big sugar barrel, pressing down the birds in his endeavor to pack tightly, and so bruising flesh and tearing skins. Such a procedure prevents good keeping, therefore, the skipper, far from his market, must not only avoid it, but he must use a package that allows the birds to stay in good condition the maximum length of time. With this end in view, as well as to enable his customers to see at a glance the quality of his product, he has adopted wooden boxes, holding only twelve birds each. He also takes care that each bird of the twelve is an exact match for the other eleven, both in weight and quality, and when he has a brand on the box and a reputation in the market, he even matches the color of the skins, that the package may present an attractive appearance. Such exactness involves experience and knowledge in grading the birds, and is by no means a simple operation. Each dozen birds as selected are weighed on the track scale, and the weight stamped on the box into which the packer puts them. The boxes are lined with parchment paper to protect the skins and to prevent evaporation, and sometimes, especially if long storage is contemplated, each bird is separately wrapped.

Broilers are placed breast up, and but one layer is put in the box; roasters and fowls are packed on their sides, and two layers are used. The boxes of broilers weigh from fifteen to twenty-four pounds; roasters and fowls may run sixty pounds to the box. The ordinary barrel of poultry weighs 250 pounds or more. When one considers the delicate character of the skin and flesh of a chicken and the pressure that the poultry in a heavy package exerts upon itself, it is easy to see what advantages, in the way of good carrying, apply to the small box.

For very high-grade poultry the carton holding one roasting or two broiling chickens is being used to a limited degree. Like all individual wrappers put on at the source of production, it tends to keep the bird clean and sound-skinned. It also insures to the housewife a package that has not been mauled by prospective customers nor soaked in water by the retailer to freshen up a dried-out bird, or perhaps to remove the odors of beginning decay. When high-grade poultry is to be kept from the season of production to the season of scarcity, as is necessary to feed this great country, the carton pack is highly desirable. The drying out of the flesh in the low temperature of the cold store is very largely prevented, and, what is even more desirable, the unbroken package can be sent hard-frozen to the consumer. As the consumer becomes better informed on the subject of food supplies and their handling, the packers will mark the cartons with the date of killing, as well as the brand of goods. Thus the purchaser will see that the bird has been killed during the season when the quality is highest—broilers before December and roasters between September and January—and that they have not been held in storage more than twelve months. The packer of high-class goods is now more than willing to put such information on his labels; the warehouseman desires it; the wholesaler wants such information; but the retailer can not risk giving the true story to the consumer, because the prevailing ignorance would translate the truth into undesirability, and the purchaser would go elsewhere to purchase the same grade of goods, but accompanied by the verbal statement of "strictly fresh and nearby." The consumer does not realize when he clamors for true labels on food stuffs that his own ignorance and prejudice are the greatest bars to the obtaining of his wishes.

SHIPPING BOXED POULTRY.

How must the long journey of the boxed-poultry be made to insure good order on arrival? The answer used to be "speed," because the time that the produce would keep was so short, under even the best of prevailing conditions, that the whole course of marketing must needs be rushed. Now the reply is, good handling and refrigera-

tion, from start to finish; refrigeration evenly and constantly maintained, because cold is a great discourager of those all-pervading and ever wide-awake forms of plant life, bacteria and molds, without which we do not have decay. Refrigerated carriers must be used.

Chickens seldom become too cold. It is heat that must be guarded against when they are shipped; therefore, the careful packer will ask the railroad to set the refrigerator car on his siding at least twenty-four hours before he expects to load, for no packer who works to prevent decay ever loads his poultry in a car having a high temperature, or hauls chilled goods in wagons. Then he will examine the car to see that when the doors are closed not a ray of light enters, because that would mean inefficiency of insulation. He looks also to see that drain pipes are working and the general repair good, and, finally, after the car has been iced and salted for at least twenty-four hours, he takes the temperature about four feet from the floor, midway between the doors. If it is below 40 degrees F., he may load his chilled birds with safety.

Loading the car should be done as expeditiously as possible to prevent a rise in the temperature of the car. Even with prompt loading it is well to have a heavy canvass curtain hung in the door of the car to keep the outside air from entering. A better plan still is to have a door in the packing room which opens on the loading platform, and then connect the car and the packing room by means of a canvas corridor.

If the packer has dressed and chilled the birds properly, if the refrigerator car is well insulated and built, if ice and salt are added as needed during the haul, the load is just as sure to reach the market a thousand miles away—that is, about five or six days as reckoned by time—in good condition as is a carload of cast iron.

FARM BULLETIN.

Some Amateur Science.

By Peter McArthur.

Yesterday I had a chance to do some excellent moralizing, but missed it, because I couldn't keep from laughing. To moralize properly a man must be very solemn. He must look wise, so that the things he is saying will seem wise. Although I do not often indulge in moralizing, I have done enough of it to know that its chief value lies in the satisfaction it gives to the moralist rather than in any good it does to his hearers. That is why I am sorry I missed my chance yesterday. It isn't often that I get a chance to feel wise and self-righteous. But I couldn't keep from laughing and that spoiled everything.

We were waiting for the horses to finish their dinner before returning to the corn-field, when one of the boys threw a crust of bread among the hens. They all made a dive for it and a moment later a nimble Leghorn hen broke out of the scrimmage with the crust in her beak. It was too big to be swallowed at a gulp, and she had to find some quiet place where she could peck it to pieces and swallow it bit by bit. But to get the necessary quiet and leisure was the problem. Half a dozen other hens pursued her across the barnyard snatching at the crust. With neck outstretched, and a look of vested rights in her eye, she ducked under the granary still pressed by her relentless pursuers. A moment later she appeared at the other side, and as they say in the old-fashioned novels, "The villains still pursued her." Back she came across the yard a neck ahead of her tormentors. Occasionally one of her pursuers would drop out of the race, but her place would be taken at once by a fresh plunderer. The chase disappeared around the corner of the stable only to appear a few seconds later around the other side. Try as she would, she could not shake off her pursuers. Her steps began to show signs of weariness, but to stop meant to lose her prize. She started towards the house, but her pursuers, fresh ones that had just joined the chase, were just at her shoulder. Her steps began to wobble for she was about winded, and at last she had to open her beak to pant. The crust fell to the ground where it was immediately picked up by one of her pursuers. But the new owner was no better off than the one that had been robbed. The change of ownership seemed to increase the energy of the other hens, and the run continued. Back they came to the granary, passed under it, across the yard, around the stable and hen house, and into the orchard where a new bunch of hens took up the chase. While we continued to watch the crust changed ownership three times, and not a morsel of it had been eaten. At one time or another every hen in the flock had taken part in the fruitless pursuit. When we started for the field the crust was being carried by a long-legged Andalusian, but though gifted with more speed she was faring no better than the others, for there was a fresh hen at

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every turn ready to take up the chase. Now, if you stop to consider the matter could you possibly get a better example of the embarrassment of riches? Just like a man who has acquired a fortune, the hen in possession had to spend all her energy in protecting it and could not take time to enjoy it. And just like wealth, it was constantly changing hands—or beaks. What finally became of the crust we did not learn, as we could not spend the whole afternoon in watching, but at the last glimpse we got the Andalusian was still running strong. Probably the chase was kept up until roosting time. But though I missed the chance to moralize because I could not keep from laughing at the plight of the hen in possession, I may be permitted to score a point with poultry raisers. I understand that to do record laying hens must have plenty of exercise. From what I saw yesterday I learned that a whole flock of hens can be made to exercise to the point of falling from exhaustion by one crust of bread. Here is a scheme for giving hens exercise that beats the usual one of giving them their grain in chaff or straw so that they will have to scratch. One durable crust would keep a flock in motion for a whole day. So you see I learned something even though I missed the chance to enjoy the pleasure of moralizing.

Having ventured to give a tip to the scientists about the best methods of exercising hens, I may as well unburden my mind of some more scientific suggestions. I have been watching with interest the wonderful work that is being done in the development of improved strains of grain by selection, and have been wondering if the scientists are not missing something. The work of natural selection is going on all around us, and haven't you noticed what vigorous weeds Nature is producing in spite of our efforts to destroy them. Many weeds seem to be like "The camomile" the more it is trodden the more it grows. Is it not possible that the scientists are coddling the plants they are favoring? They are doing wonders in the way of producing better yields of corn, wheat, oats, etc., and maturing them in shorter time, but all these better products only tend to fasten on us more securely the curse of labor that makes us earn our bread in the sweat of our brows. These improved products require unusually careful cultivation, and that is not Nature's method at all. Nature seems to aim at getting results without cultivation of any kind. Now why should not the scientists make some experiments along the same line. If they were to throw handfuls of corn among weeds and grass it is probable that a few grains would struggle through and mature ears of corn. If the best of these were selected and sown again under the same conditions, a hardier and more vigorous product could be secured. The process of selection could go on by constantly choosing the most vigorous and best-yielding products until in time we might produce a strain of corn that would not only be able to hold its own with the weeds, but would choke them out and still give a noble yield. By following this suggestion they would simply be aiding natural selection instead of developing strains that need artificial conditions to make them do their best. Think of what a boon it would be to have grains that would grow like weeds without cultivation of any kind and still yield good crops. With hired help so scarce this suggestion should not be brushed aside too scornfully. Besides it would make farming possible for amateur farmers who are obeying the impulse to get back to the land. I am afraid that scientific agriculture is suffering from the same defects as our educational system. There is too much coddling. What I want to see is self-producing crops. If we once get that, the farmers can produce more just as they are being urged by the editorial sages of the city papers. Trusting that the scientists will accept this suggestion in the spirit in which it is meant, I offer it for what it is worth.

What glorious rains we had last week, and what a world of good they did. The oats, barley, and corn seemed to grow six inches in a night—and the weeds and thistles at least a foot. And now we have to start all over again at breaking up the capillaries in the corn field. The rain pounded down the dust mulch until the ground is almost as firmly packed as it was before the cultivating and hoeing began. But no one is objecting—except, of course, the people who were caught with a lot of hay down. Before the rain came the world was hot and dusty, but now every thing is clean and cool and purified. The sky seems more blue and farther away, and every breath of air is refreshing. After a flood of summer rain life seems better worth living than before, and yet if you take it in the right way it is good enough at any time.

Hay Poor in P. E. Island, Too.

Editor of "The Farmer's Advocate":
The weather which was cold and dry all through June, turned warmer when July came in with some welcome showers. The hay is backward, and clover that promised so well early has not come up to expectations. Unless we have good rains with plenty of heat the next few weeks the hay crop will be short. Pastures are still rather short, but coming better now. Grain crops especially oats, are splendid. Potatoes and root crops have got a fine start, and promise a big crop. Orchards promise a bumper yield. Apples have set well as the blooming season was very favorable. Cherries promise well, and plums are making a good showing. Our co-operative cheese and butter factories are doing an average business with prices good. First-half-of-June cheese sold on board for 12 7-16 cents—a record price for first sales here. Prices of beef cattle have been soaring the last few months, and the price of the best cattle during June reached seven dollars per cwt. Eggs, which have become one of our largest and most profitable exports, are going forward in greater quantities than in other years, and the price here to farmers is about 20 cents per dozen. Our egg and poultry business has developed very fast during recent years since prices have been so good. We look for much to greater development in the near future as a result of the efforts of our poultry specialist, T. A. Benson, whose teaching is helping us along the lines of both production and marketing. The marketing of our eggs has been the weak point in the business here, but with the establishing of "egg circles" we hope to get eggs to the consuming centres in better condition, commanding a higher price.



Prof. J. M. Trueman.

Professor of Agriculture, and Farm Superintendent, Nova Scotia Agricultural College, Truro.

Our local department of agriculture is very active in the interest of the farmers. Professor Reid, our Live Stock Specialist, is doing educative work by holding a large number of meetings, at which lectures are delivered, and demonstrations in dipping sheep, and judging stock are the principal features.

Another business which is being developed here is the cultivation of oysters. We have large areas in our numerous bays suitable for the production of the very best oysters. Surveys have been made of these grounds, dividing them up into claims which are rented to companies who plant them with small oysters, and after some three or four years large returns are expected. Prince Edward Island oysters have a good reputation in the large Canadian cities. This is expected to develop into an exceedingly profitable business. Many of our farmers living near these bays are organizing in companies to plant and care for these oyster beds, expecting a big harvest from them in the near future. Capitalists are also taking hold of the business, and we look for the development of another profitable industry that will rival, and perhaps surpass the now booming Black Fox business. Our people are beginning to find out that they have no need to leave home to find profitable and safe investment for their spare cash. A company is now carrying on negotiations with a view to establishing an oatmeal mill in Charlottetown of a 300-barrel-a-day capacity, if it can make satisfactory arrangements with the city in the matter of exemption from taxation and other matters.

The proposed investors have a very high opinion of the quality of Island oats for making meal. Such a mill with the output proposed

would take the larger part of our oat crop that is available for export. We are expecting a number of farmers from the British Isles to buy up farms here in the near future. Arrangements are completed for bringing out several parties to settle on farms, on which options have been secured by those who are promoting the matter.

Our experimental farm here has been enlarged by the addition of about 40 acres, and this year Superintendent Clark has added poultry and apiary departments. During a recent visit we noticed all field crops and grain plots looking well, and showing great care and neatness in cultivation. Some of the alfalfa plots have winter-killed, and clover is not so good as last year on account of adverse winter conditions.

WALTER SIMPSON.

Calgary Summer Show.

The 1913 Calgary summer exhibition of live stock was one of the most successful ever held in Alberta. Fine weather brought an attendance of visitors totalling 100,000 through the gates, and an increased exhibit of stock. All the breeds were well represented in numbers and quality, and the management of the exhibition by Secretary E. L. Richardson was excellent.

For the most part the horse classes were exceptionally good. Clydesdales made a very strong showing. In the aged stallion section, John A. Turner, of Calgary, was first and second with Rubio and Charming Prince. The same exhibitor was first in three-year-olds with Scottish Crown, and first in two-year-olds with Lord Mersey, and he was awarded the male championship on Scottish Crown, and the female championship on Lady Bountiful.

Percherons were shown chiefly by four exhibitors, and the animals exhibited were of the top-notch order. In aged stallions, first place was given J. C. Drewry, Cowley, on Jureur, which was declared male champion. The female champion was Upper Bros. Rosine, which was first in aged mares. Shires were out in larger numbers than usual (six exhibitors competing) and were in excellent quality. In the aged stallion class, A. C. Shackerly, Pekisko, won with Lynn Laddie, and the same exhibitor had the male championship on Leos, the first-prize three-year-old horse.

The champion stallion in Belgians was Cullshaw and Sons' first-prize aged horse Caesar de Machelen, and the champion Suffolk Punch stallion was Baker and Hunter's Trimley Prince.

Shorthorns and Angus were not as strong in numbers as usual, probably owing to several of the large herds being held back for the Dominion Exhibition. Dairy classes were never stronger in numbers and quality. The champion Shorthorn bull was Bryce Wright's first-prize aged bull Baron Robson, and the same exhibitor had the champion female.

Holsteins made a splendid showing, eclipsing any previous exhibition. The champion bull was Michener Bros. aged bull Sir Pietertje Riverside, and the same exhibitors won the female championship with their first-prize aged cow Hilda Wayne Johanna Lass. The line up in Ayrshires was as strong as the Holsteins, Rowland Ness of Dewinton won many honors, including first and championship for aged bull, Woodland's Prince Boy, first for two-year-old bull on Admiral Beau d' Eurfe, first on aged cow, Ravensdale Countess, first on two-year-old heifer, Lakeside Clara, first on three younger classes, and first on herd.

Hay a Failure in Huron.

If one crop were counted upon above another last spring it was hay, yet there is no other of which reports are now so unfavorable. In some sections there are numbers of very fair fields, but speaking generally, hay is light, and in various localities almost a failure. In the excellent farming county of Huron, conditions seem particularly bad. Thos. McMillan, of Seaforth, confirms this report to the Farmer's Advocate, and writes:

"In this locality, in many instances, hay is not half a crop. I know field after field where the clover was so frozen in the spring that with the unfavorable weather following, it has grown almost none, and scarcely covers the knife in cutting. Some old meadows too, are scarcely worth the cutting. Fall wheat looks to be a fair average, but the recent hot weather has so hastened its ripening that it cannot be a good sample. "Spring grains are a fair crop, and if the weather holds suitable it may yield an average crop of grain."

The Minister of Agriculture for the Dominion has asked the principal officers of the Live Stock branch of his department to confer, as opportunity presents itself, with the leading breeders of the various provinces in order to secure such information as will enable him to act upon the recommendations presented to him by the delegation representing the Live Stock Record Association regarding a national live stock show. The minister has taken this means of acquainting himself with the best judgment of the principal live stock men in the country.

Markets.

Toronto.

REVIEW OF LAST WEEK'S MARKETS

At West Toronto, on Monday, July 14, receipts at the Union Stock-yards numbered 76 cars, comprising 1,600 cattle, 18 hogs, and 69 sheep; no sales. At the City yards, there were 10 cars, comprising 10 cattle, 498 sheep and lambs, and 64 calves. Everything was sold at good prices. Butcher steers and heifers, \$6.40 to \$6.92; cows, \$4.50 to \$5.10; calves, \$5 to \$8; lambs, \$9 to \$10.50. Hogs were quoted at \$9.50, fed and watered.

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

	City.	Union.	Total.
Cars	18	275	293
Cattle	210	3,761	3,971
Hogs	159	4,610	4,769
Sheep	589	2,796	3,385
Calves	89	441	530
Horses	—	16	16

The total receipts of live stock at the two markets for the corresponding week of 1912 were:

	City.	Union.	Total.
Cars	119	204	323
Cattle	1,124	2,288	3,412
Hogs	2,551	4,420	6,971
Sheep	1,988	1,817	3,255
Calves	750	497	1,247
Horses	—	280	280

The combined receipts of live stock at the two markets for the past week show a decrease of 80 cars, 559 cattle, 2,202 hogs, 717 calves, and 214 horses; but an increase of 180 sheep, compared with the corresponding week of 1912.

Receipts of live stock at the Toronto markets last week were not as large as for the previous week of this year, nor nearly as large as for the corresponding week of 1912. The quality of the bulk of the cattle was not as good as for the previous market. Stall-fed cattle are becoming scarcer as each week passes. Prices for cattle, on account of smaller receipts, were from 10c. to 15c. per cwt. higher than at the close of last week. Trade was brisk and firm in all the different classes of live stock, especially for lambs, calves, and hogs, more of which could have been readily disposed of.

Exporters.—William Howard bought for Swift & Company, of Chicago, 100 steers for the London, England, market, weighing 1,250 to 1,850 lbs. each, at \$6.80 to \$7.10.

Butchers'.—Choice butcher cattle sold from \$6.75 to \$7; good, \$6.50 to \$6.75; medium, \$6.20 to \$6.45; common, \$5.25 to \$6.10; inferior, \$4.50 to \$5; good to choice cows, \$5.25 to \$5.75; medium, \$4.50 to \$5; cutters, \$3.50 to \$4.25; canners, \$2.50 to \$3.25; export bulls, \$5.60 to \$6; butcher bulls, \$4.75 to \$5.50.

Stockers and Feeders.—The demand for stockers and feeders was not as great as for many weeks past. Feeders, 750 to 900 lbs., sold at \$5.50 to \$6, which is about 25c. per cwt. lower; stockers, 450 to 700 lbs., at \$4 to \$5.25.

Milkers and Springers.—There was a little more activity on the market for milkers and springers, but prices were not any higher. The bulk of the cows sold at \$48 to \$65 each, and a very few, not half a dozen, reached \$70.

Veal Calves.—The calf market was strong on account of light receipts. Choice calves sold at \$8 to \$9 per cwt.; good calves, at \$7 to \$8; medium, at \$6 to \$7; common, \$5 to \$5.50; Eastern calves, \$3.75 to \$4.50.

Sheep and Lambs.—Receipts were moderate and prices firm. Ewes, light, sold at \$3.75 to \$4.50; heavy ewes and rams, \$3 to \$3.50; lambs, \$8 to \$10 per cwt.; culls, \$6 to \$7 per cwt.

Hogs.—The bulk of the hogs sold at \$9.35 fed and watered, and \$9 to \$9.10 f. o. b. cars, and \$9.50 to \$9.60 weighed off cars. A few lots of choice, light, butchers' hogs, sold at \$9.40, fed and watered.

Horses.—Trade in horses was the dull-est yet at the Union Horse Exchange last week, no outside buyers being on the market. The local demand was light also, only a few sales being made. Prices were reported as follows: Drafters,

\$175 to \$250; general-purpose horses, \$150 to \$225; express and wagon horses, \$160 to \$225; drivers, \$100 to \$175; serviceably sound, \$85 to \$70 each.

BREADSTUFFS.

Wheat.—Ontario, No. 2 red, white or mixed, 98c. to 99c.; outside; Manitoba, No. 1 northern, \$1.03; No. 2 northern, \$1; No. 3 northern, 96½c., track, lake ports. Oats—Ontario, No. 2, 34c. to 35c.; outside; 36c. to 37c., track, Toronto. Manitoba oats—No. 2, 40c.; No. 3, 38c., lake ports. Rye—No. 2, 61c. to 62c., outside. Peas—No. 2, 90c. to 95c. Buckwheat—No. 2, 52c. to 53c., outside. Barley—For malting, 50c. to 53c.; for feed, 43c. to 48c., outside. Corn—American, No. 2 yellow, 64½c.; Midland; 69½c., track, Toronto. Flour—Ontario, ninety-per-cent. winter-wheat flour, \$4.10 to \$4.15, seaboard, in bulk. Manitoba flour—Quotations at Toronto are: First patents, \$5.50; second patents, \$5; in cotton, 10c. more; strong bakers', \$4.80, in jute.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, No. 1, per ton, \$13 to \$14; No. 2 hay, \$12 per ton.

Straw.—Baled, car lots, track, Toronto, \$10 per ton.

Bran.—Manitoba, \$18 in bags, track, Toronto; shorts, \$20; Ontario bran, \$18 in bags; shorts, \$20; middlings, \$21 to \$23.

HIDES AND SKINS.

No. 1 inspected steers and cows, 13c.; No. 2 inspected steers and cows, 12c.; city hides, 13c. to 13½c.; country hides, cured, 13c.; calf skins, per lb., 16c.; lamb skins and pelts, 20c. to 45c.; sheep skins, \$1.50 to \$1.85; horse hair, 37c.; horse hides, No. 1, \$3.50; tallow, No. 1, per lb., 5½c. to 7c.

WOOL.

Coarse, unwashed, 15c.; coarse, washed, 24c.; fine, unwashed, 17c.; fine, washed, 26c. per lb.

COUNTRY PRODUCE.

Butter.—Prices unchanged. Creamery pound rolls, 28c. to 30c.; creamery solids, 27c. to 28c.; separator dairy, 23c. to 24c.; store lots, 20c. to 21c.

Cheese.—New, 14c. to 14½c.; old, 15c. to 15½c.

Eggs.—New-laid, 22c. to 23c. per dozen, by the case.

Honey.—Extracted, 13½c. per lb. Beans.—Hand-picked, \$1.75 to \$2 per bushel; primes, \$1.70 to \$1.90, and down as low as \$1.65 for poor quality.

Potatoes.—Car lots of old potatoes are being offered at 45c. per bag. American new potatoes are selling at \$2.50 to \$3 per barrel.

Poultry.—Receipts were large for the past week. Spring ducks, alive, 15c. per lb., and 20c. dressed; spring chickens, 22c. per lb. alive, and 30c. dressed; old fowl, 14c. to 15c. alive, and 18c. to 20c. dressed.

FRUITS AND VEGETABLES.

Receipts of fruits and vegetables thus far have not been equal to other years at this season, especially for strawberries. Prices are high for all kinds of fruit. Strawberries, 12c. to 14c. per quart box, by the case; raspberries, 15c. to 17c. per quart; cherries, per basket, 85c. to \$1; red currants, 50c. to 90c. per basket; cucumbers, \$2.75 per hamper; new carrots, 50c. per dozen bunches; beets, 50c. per dozen bunches; peas, 75c. per basket; spinach, 75c. per hamper; cabbage, new, per case, \$2.75 to \$3; watermelons, 35c. to 65c. each; peas, Canadian, \$2.75 per bushel; Canadian tomatoes, 15c. per lb.

Buffalo.

Cattle.—Prime steers, \$8.75 to \$9.10; shipping, \$8 to \$8.65; butchers', \$7 to \$8.50; cows, \$3.75 to \$7; bulls, \$5.50 to \$7.50; heifers, \$6.50 to \$8; stock heifers, \$5.50 to \$6.25; stockers and feeders, \$6 to \$7.50; fresh cows and springers, \$35 to \$80.

Veals.—\$6 to \$11.75.

Hogs.—Heavy, \$9.50 to \$9.55; mixed, \$9.55 to \$9.65; Yorkers and pigs, \$9.65 to \$9.70; roughs, \$8.15 to \$8.25; stags, \$6.50 to \$7.50; dairies, \$8.25 to \$9.60.

Sheep and Lambs.—Lambs, \$5.50 to \$8.50; yearlings, \$4 to \$7; wethers, \$5.55 to \$6; ewes, \$2.50 to \$5.25; sheep, mixed, \$5.35 to \$5.60.

Montreal.

Live Stock.—There was little change in the cattle market last week in Montreal. Prices held about the same, being 6½c. to 7c. for choicest steers; 6½c. for fine, and 5½c. to 6½c. for good, while medium were quoted at 5c. to 5½c., and common as low as 3c. There was a fairly active demand for small meats, and sheep were quoted at 3½c. to 4½c. per lb., lambs selling at \$3 to \$5 each. Very few good calves were available, and the top price was around \$6 or \$7, while common sold as low as \$2. Hogs were in good demand, and selects were quoted at 10½c. per lb., weighed off cars.

Horses.—Heavy-draft, 1,500 to 1,700 lbs., \$300 to \$350; light-draft, 1,400 to 1,500 lbs., \$225 to \$300; light horses, 1,000 to 1,100 lbs., \$125 to \$200; broken-down, old animals, \$75 to \$125, and choicest saddle and carriage animals, \$350 to \$500 each.

Poultry.—Turkeys, 23c. to 24c. per lb.; geese and fowl, 15c. to 17c.; ducks, 20c. to 22c., and chickens, 18c. to 19c.

Dressed Hogs.—The market for dressed hogs was fractionally easier, and small lots changed hands at 14½c. per lb. for abattoir-dressed, fresh-killed.

Potatoes.—Prices were steady, but offerings of American new stock are increasing. Quotations: 70c. to 75c. per 90 lbs. for Green Mountains, carloads, on track. Quebec potatoes, 60c. to 65c. Smaller lots, 25c. to 30c. more than carloads.

Syrup and Honey.—Tins of maple syrup sold at 9c. to 10c. per lb., and syrup in wood at 7c. to 8c.; maple sugar, 11c. to 12c. per lb. Honey, white-clover comb, 16c. to 17c. per lb.; extracted, 11½c. to 12c.; dark comb, 14c. to 15½c., and strained, 8c. to 9c.

Eggs.—Offerings not of as good quality, but prices were steady, and selects still sold at 25c. to 26c., in a wholesale way, and next quality at 1c. less, while No. 1 candled were 23c. to 24c. per dozen.

Butter.—Western demand was not quite so active, and as stocks were found to be fairly large, the market was not quite so firm. Prices were a shade easier last week. Finest creamery was quoted at 25½c. to 26c.; fine, 25c. to 25½c., and under grades, 24½c. Dairy butter, 22½c. to 23½c. per lb. On Monday, the tone of the local market was easier.

Cheese.—Prices a little firmer last week. Western white was 13½c. to 13¾c., and no longer brings a premium over colored. Eastern white and colored were quoted at 12½c. to 13c. By Monday, prices had advanced a fraction, being 13½c. to 13¾c. for Ontarios, and ¼c. under for Townships.

Grain.—A slight fraction higher on oats. No 2 Canadian Western oats, 42c. ex store; No. 1 extra feed, 41c. to 41½c., and No. 1 feed, 40c. to 40½c.

Flour.—\$5.60 per barrel for Manitoba first patents, in bags; \$5.10 for second, and \$4.90 for strong bakers'. Ontario winter-wheat flour, \$5.50 for patents, and \$5.10 for straight rollers.

Milled.—Shorts were higher, being \$21 per ton in bags, while bran was \$1 up, at \$19, and middlings \$1 up, at \$24 per ton. Mouille steady, at \$30 to \$32 per ton for pure, and \$26 to \$28 for mixed.

Hay.—Advanced, to \$14.50 to \$15 per ton for baled hay, car lots, track; extra good No. 2, \$13 to \$14, and ordinary No. 2, \$12.50 to \$13.

Hides.—Prices were firmer on lamb skins. Beef hides, 11½c., 12½c. and 13½c. per lb. for Nos. 3, 2 and 1, respectively. Calf skins, 17c. and 19c. per lb., respectively, for Nos. 2 and 1. Lamb skins, 35c. each, and horse hides, \$1.75 and \$2.50 each. Tallow sold at 1½c. to 3c. per lb. for rough, and 6c. to 6½c. for rendered.

Chicago.

Cattle.—Beeves, \$7.25 to \$9.15; Texas steers, \$7 to \$8.20; stockers and feeders, \$6.50 to \$8; cows and heifers, \$3.85 to \$8.50; calves, \$8.50 to \$11.

Hogs.—Light, \$8.85 to \$9.30; mixed, \$8.70 to \$9.27; heavy, \$8.50 to \$9.17; roughs, \$8.50 to \$8.70; pigs, \$3.75 to \$9.15.

Sheep and Lambs.—Sheep, native, \$4.25 to \$5.50; yearlings, \$5.65 to \$7.25; lambs, native, \$6.60 to \$8.40.

Cheese Markets.

Stirling, Ont., 13½c. to 13 5-16c.; Campbellford, Ont., 13½c.; Madoc, Ont., 13½c.; Alexandria, Ont., 13c.; Picton, Ont., 13 1-16c. to 13½c.; Napanee, Ont., 13½c.; Iroquois, Ont., 13c.; Cornwall, Ont., 13½c.; Ottawa, Ont., 13c.; Kemptville, Ont., no sales; bidding 13½c.; Perth, Ont., 12½c.; Belleville, Ont., 13 1-16c. to 13½c.; St. Hyacinthe, Que., 12½c., butter 24½c.; London, Ont., 12c. to 12½c.; Cowansville, Que., butter, 24½c.; Watertown, N. Y., 13½c.

Questions and Answers. Veterinary.

Wounds.

Two head of cattle were injured on the railway. One had bruised hock and severed tendons, and the foot turned up when he put weight on the limb. The other had cut on right hind leg, between fetlock and foot, out of which there came a piece of bone. We treated with carbolic acid, and the wounds are all clean now. What would be best to use to heal them?

J. F. McK.

Ans.—Keep as quiet as possible. Keep wounds clean, and dress three times daily with carbolic acid 1 part, water 24 parts. If there be any more pieces of detached bone they should be removed, else they will cause further trouble. V.

Calf Chews Cud and Grinds Teeth.

Calf three months old chews its cud nearly all the time, and grinds its teeth. It is fed on skimmed milk, and will not eat hay or grass.

R. E. E.

Ans.—You must be mistaken about it not eating hay or grass. If it took only milk it would not need to chew its cud, as there would be nothing to chew. It is no doubt suffering from indigestion. Give it a purgative of 8 ounces raw linseed oil. Give new milk if possible, but whatever you give to drink, add to it one-fifth of its bulk of lime water. Mix equal parts of sulphate of iron, gentian, ginger, and nux vomica, and give it a small teaspoonful three times daily in a little cold water as a drench. V.

Lame Mare.

Mare is lame in her shoulder. She goes lame when working or driving, but is all right when on pasture. Her foal is all right. The trouble is in the muscles of the shoulder.

J. S. M.

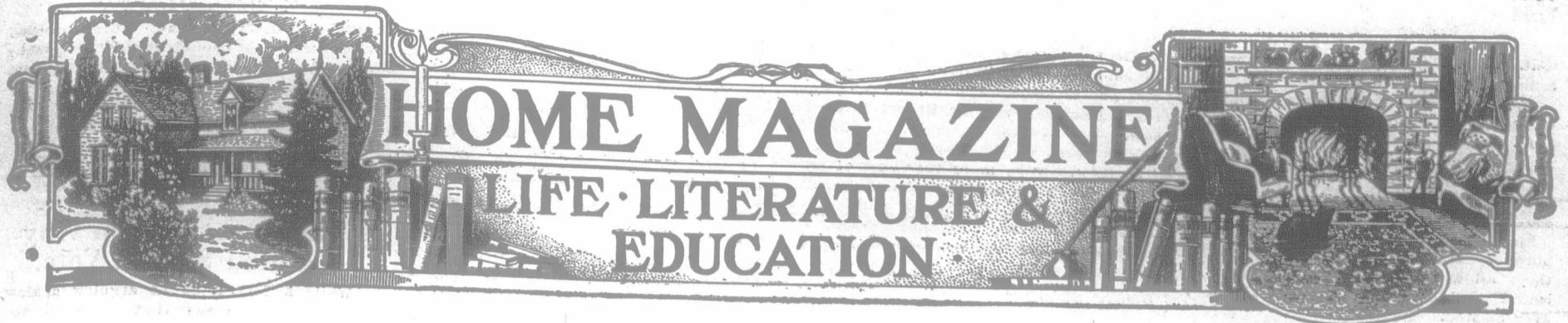
Ans.—The slight symptoms given rather indicate foot lameness, but you seem sure that it is shoulder trouble. The parts should be blistered. Get a blister made of 2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces vaseline. Clip the hair off the parts. Tie so that she cannot bite them. Rub well once daily with the blister for two days, and on the third day apply sweet oil and turn her loose in a box stall. Oil every day until the scale comes off, and then tie up and blister again, and after this blister once monthly as long as necessary. It would be wise to have her examined by a veterinarian, as, if the trouble be in the foot the coronet should be blistered instead of the shoulder. V.

Trade Topic.

A FOLDING BATH TUB.—The luxury of a bath after a hot day's work in mow and field, or over the kitchen stove, is something one can never fully appreciate until it has been experienced. Every farm home should have a bath tub, but not every home is equipped with a fitted bathroom and sewage connections. Many will be interested in the folding tub, offered for delivery on trial anywhere in Ontario for \$7.50, by the Folding Bath Tub Co., Ltd., Gananoque, Ont. See advertisement in this issue, and get in touch with the company, mentioning "The Farmer's Advocate."

Gossip.

Good horses are in demand. Percherons are looked upon with great favor by draft-horse men. A carload of choice breeding Percheron mares are advertised in this issue by F. J. Sullivan, importer and dealer, Windsor, Ont. He also has a few prizewinning stallions of the highest order—champions among them. Don't fail to see this advertisement, and, better yet, plan to see the horses.



Barley.

Up in the barley a wind began;
Over their levels of gold it ran,
Plunged into them,
And furrowed through them
Foamy channels the height of a man.

Deep in their dark it dipped and shined,
And spake like a vision to all the blind;
Eye not knowing
The law of the flowing,
Real as water flowed the wind.

I was a child, and it seemed to me
A hilltop river set rolling free;
As it was ever
The way of a river,
Somewhere a well-head—somewhere a sea.

Through flexile banks the unbodied stream
Poured its life and mine in a dream.
Currents nameless,
Measureless, tameless,
Clave me, too, with rustle and gleam.

If I come back to the fields to-day
With storm in a time-worn heart, I pray,
The sun to sift it,
The wind to lift it,
The barley floods to wash it away;

For here would I lie on the long-loved
ground,
Seeing one sight and hearing one sound,
No strife to wake me,
No doom o'ertake me,
In that sweet harvest happily drowned.
—Louise Imogen Guiney, in McClure's.

Giving the Child a Fair Chance.

What the Women of North Middlesex Have Done Regarding Medical Inspection of Schools.

By M. C. Dawson.

The Greeks educated the body. Physical beauty was their ideal. In modern times we have educated the mind. Mental efficiency has been our ideal. But the tendency to-day is to educate both mind and body, to make that ideal combination, "A sound mind in a sound body." For both mind and body will be needed in the fight for existence which every day becomes more keen, and it is beginning to be regarded as a crime to send the child into the fight physically unfit.

The women of our Institutes are beginning to realize this, and are taking a keen interest in all that pertains to child welfare, mentally, morally, and physically. These three things cannot be separated, because they depend so much on each other, and in caring for the physical welfare we are doing a great deal to make the child mentally and morally strong.

The women of North Middlesex have been for some time interested in the work which can be done by medical inspection of schools, and an experiment was recently tried in Parkhill, Ailsa Craig, and Sylvan, which will be of interest to Institute women everywhere. For some time an educative campaign was carried on by the District President, Mrs. D. C. Wilson. She visited each branch and talked the matter up, and Dr. Helen McMurchy was procured to attend the annual meeting and address the delegates. After that, matters were at a standstill for a year or more. This spring, Dr. Struthers, Chief Medical Inspector of Toronto, came to Parkhill and addressed a meeting composed of town's-people and teachers and trustees and delegates from the whole riding. The lecture was illustrated, and was a most convincing argument. On the screen would be seen the picture of a boy with adenoids. The open mouth, the dull eyes, the protruding upper teeth, or the

under-shot lower teeth, all proclaimed his trouble. Then, on the screen would appear the same boy after a successful treatment, and all the doctor needed to say was, "What do you think that boy would take for that improvement in his appearance? Would he take one thousand dollars?" . . . And then he would go on to ask, "If two boys came to you seeking a position, which would you engage? The boy suffering from adenoids or the other? Judging by appearance, you would choose the other."

Before Dr. Struthers left that evening, a committee composed of men and women was appointed to go on with this work. A school nurse, Miss Sarah Brick, of Toronto, was procured, through Dr. Struthers, for ten days. The money for the experiment was raised by a house-to-house canvass. Small contributions of ten cents per family were accepted. The printing was donated, and the medical men gave their services free. The results of the examination were somewhat startling. In Parkhill public school there were 178 pupils examined. Of these, 58 were defective. There were 26 cases of adenoids; 28 cases of defective vision; 27 cases of carious teeth (very bad cases); two cases of anemia, and several cases of enlarged tonsils. Of course, in this first examination heart and lungs were not examined. That would come later if it were thought necessary. For such a thorough examination the child would probably be sent to the family physician.

In the High School, defective vision ranked high. Out of 79 pupils examined, there were 28 with defective vision, and over fifty per cent. were defective in some way. The teeth in the High School were well attended to. In the Separate School the results were similar, about fifty per cent. being defective. In Ailsa Craig there were sixty per cent. defective, and at Sylvan, a rural school, the percentage was ninety. Out of twenty pupils examined there, eighteen were defective. In this rural school the teeth were badly neglected, and this brought the percentage up higher.

This is the first experiment of this kind outside of the cities, and the results show that the best asset of the nation, the children, need some attention so that they may start life under the best conditions. But the experiment also brought out the fact that a small town or a rural school cannot afford to do this work alone. A school nurse would cost about \$750 a year, and few of our rural or town teachers are that well paid, so we would likely have trouble over the salary at once. But a nurse could attend to two or three small towns, or to a whole township, and in that way the expense on each school section would be very small. There is a proposition under consideration by the Ontario Government to just have one school board for a whole township. If that be done, then a nurse could be employed for a township very easily, and the cost distributed.

The only way in which we can have medical inspection of our schools is by making it a Government undertaking. All those interested in the work feel that, and the only way to get the Government to take up the work is by educative measures. If sufficient trials of the kind outlined above were carried out, it would create sufficient demand for such legislation to justify the Government in adopting such a course. And all women, at least, will agree that it is time for our Government to do for the children what it has for many years been doing for the pigs and cattle and live stock on the farm.

In North Middlesex, they expect to carry on this work in the fall. Each

branch of the Institute is to contribute ten dollars, and there will be about forty schools inspected. After the inspection, the nurse visits each home and has a talk with the mother about the child. There is no compulsion used, nor can there be, but the parent is urged to give the child a chance by having the defect remedied as soon as possible. One inspection and one visit from the nurse does not always have the desired effect, but as the inspection continues regularly, and the nurse visits the home again and again, the results are seen. Few parents are so callous to their children's welfare that they will not make some effort to give the child medical treatment.

The Duty a Mother Owes to Herself.

[A paper read by Mrs. Norman Anderson at a meeting of the Wilton Grove branch of the Women's Institute.]

We hear so much these days about "motherhood," and "the mother," that we are almost inclined to believe that the mere fact of being a mother exalts in some peculiar way over our sisters, and that, because we are mothers, we must of necessity possess some or all of those beautiful qualities which poets and orators love to ascribe to the mother.

As a matter of fact, the narrow-minded, mean, vain, or selfish woman, is not going to be changed miraculously by the fact that she holds her first or even her seventh child in her arms. Neither is a large-souled, lovable woman, going to be any less an ideal wife and homemaker because no child will ever call her mother.

But the subject of this paper is "The Duty a Mother Owes to Herself." We all know that the majority of women fall very far short of performing their duty to themselves, but the reasons for this, if looked at below the surface, may not take on such high-sounding names as service, self-sacrifice, devotion, etc.

For instance, when a mother wears herself out in an endless waiting upon her family, packing up their ribbons and skirts, packing up their books, mending a little rip in the glove or shirt-waist,—when she slips out quietly and does the little chores the boys are supposed to have done so that father will not scold them,—when she stops her work many times a day to help the head of the house locate a mislaid hammer, or find a nail, bolt, or screw, of a certain size and shape,—when she wears, season after season, the same old hat or gown, so that Mary may have a coveted piece of jewelry, or Johnny a new set of harness—then let her beware of deluding herself into thinking that she is in this way laying up treasure in heaven or acquiring a beautiful character; for, what she is far more sure to be laying up for herself is a nervous and irritable old age.

Now, if any or all of these things had only to be done occasionally owing to unusual circumstances, they would be mere trifles, and not worth considering, but when morning after morning and year after year of the children's school-life see the mother from early morning until 8.30, going through this same nervous strain, is it any wonder that she heaves a sigh of relief when left alone, almost too tired to start the day's work?

Now, surely this is not the service the Master means mothers to perform, for we must see that neither our families nor the world at large is bettered in any way by such an unnecessary expenditure of nervous energy.

But there are certain duties a woman owes to herself which cannot fail

to make life more pleasant for both herself and her family.

In the first place, she must not lose her own individuality in her children. Who has not known bright young girls who have become dull and tiresome mothers, whose conversation began and ended with the recital of their children's sayings and doings, and a list of their ailments, from croup to measles?

Now, in order to avoid the narrow outlook that we are almost sure to get from staying at home constantly, we must make an effort, great as it may seem, to get away from our family and the household cares for at least one day at a time as often as we can. For this reason it is well to keep in touch with the friends of our girlhood, especially if they live in entirely different surroundings. No friends we make in later life can ever mean to us what those do who have shared our secrets and hopes, and understand us through and through. As we spend a day together, the years slip from us, and we come home feeling young and bright, and ready to take up our work more cheerfully. What does it matter if we do find ashes on the hearth, the floor unwept, and the dish-cloth rolled into a greasy little ball? These can soon be put to rights, and our horizon has been widened and our life brightened by the little change.

It is the mother's duty, too, not to exclude herself entirely from the friends of her children in the evenings. I have known mothers who at once repaired to the kitchen or some other remote corner of the house when young men called on their daughters. Now, by so doing, she not only misses what is perhaps her only opportunity of becoming acquainted with these young men, but, what is equally important, she fails to see her daughter revealed in an entirely new light.

However, in this as in other things, there is a happy medium, for I have heard of mournful cases where the mother's too persistent presence kept her daughters in the realm of spinsterhood.

Again she owes it to herself to get rid of any little tricks of manner, or habits that irritate her children, and she should take it in good part when they tell her of them.

I know a girl whose father had a habit, when sitting in church or thinking intently, of bending back and pulling out his fingers one after the other until they gave a little cracking noise as if they were out of joint. Now, this father belonged to the old school, and would have considered it very disrespectful if his daughter had asked him to overcome this habit, so she had to sit in agony Sunday after Sunday, from childhood to young womanhood, listening always for that disagreeable little noise. Now, why should our children not have the same right to improve our manners or speech as we have theirs? Those children were brought into this world without any choice in the matter of parents, relations, or surroundings, and what a bitter disappointment some of these must have proved! Now, while they find themselves, all at once, in possession of two parents, four grandparents, and any number of aunts and uncles, all of whom seem to claim more or less right to reprove them or give them advice, they, in turn, must not even hint that they find these same relations very full of faults; and, in fact, not at all the ones they would have chosen.

Again, the mother owes it to herself not to give up too readily her little plans for making the home more convenient or beautiful. Men are very apt to be wet blankets when any change in the house, however trifling, is suggested. Whether it is a room to be papered, a couch moved from one side of the living-room to the other, a door cut, nails for

coats and caps driven in an unaccustomed corner, or whatever other little change, the man of the house instinctively says, "Let well enough alone." Now, the mother should go on calmly and good-naturedly with her plans—not asking any advice—and before long the husband finds the change as pleasant as she does.

Lastly, mothers should not be so overborne by the practical affairs of life that they allow sentiment to die in their hearts, and even begin to doubt that it ever existed.

You heard, in a lecture given here some time ago, that love is the part of marriage that lasts the least length of time. Now, I am sure you wives will not agree with that, and if girls think that any business arrangement, however satisfactory it may be financially, will take the place of love, they are making a sad and bitter mistake. Surely the novelists and poets of all the ages have not been in the wrong!

The difference between the heroes and heroines in books, and those we jostle against every day, is that the writer of fiction can lay bare all the inner life of his characters, while the best people all around us have many shuttered windows which only immortality may unveil.

Dear as parental love is, we must remember that the children will soon leave us to go out into homes of their own, and then husband and wife will again be left alone as at the first. That loneliness, and the sense of being no longer necessary to her children, will be bitter enough in any case, but surely happiness will come again to the mother whose husband of all the years now understands the heart-ache, and, taking her in his arms, comforts her with a tenderness, born of all the crises they have met together—such tenderness as the young lover did not or could not dream of.

Hope's Quiet Hour.

A Cup of Cold Water.

Whosoever shall give to drink unto one of these little ones a cup of cold water only in the name of a disciple, verily I say unto you, he shall in no wise lose his reward.—S. Matt. x.: 42.

When the disciples asked their Master, "Who is the greatest in the kingdom of heaven?" He called a little child to Him and explained that a man who desired to be great in His kingdom must be humble as a little child. Then He said something which is even more astonishing to us who adore Him as Divine: "Whoso shall receive one such little child in My Name receiveth Me." What a marvellous opportunity is knocking at our doors—the opportunity of receiving as a Guest the King of all the universe. "When opportunity knocks, do not wait for it to break in your door." I have again the pleasure of putting before you the report of the "Toronto Children's Fresh Air Mission." You may not be able to open your doors to welcome the King, in the person of one of His little ones, but at least you can help with the work which is so near His heart. Last year donations were sent in to the treasurer of various sums, ranging from 25 cents to \$37. "God is not unrighteous to forget your work and labor of love, which ye have shewed toward His Name, in that ye have ministered to the saints, and do minister. He treasures gifts of love, even though they may be only as small as a cup of cold water. The riches of all the earth are His, and He does not need our gifts—but we need to give. Gifts of love make the giver rich, and one who grasps all he can get for himself is growing steadily poorer and poorer in soul. The gift of a cup of cold water—or of rich, country milk—to one of Christ's little ones, brings a swift reward in increased nobility of character.

One of the secret sins which can do deadly mischief in a soul is the love of money. This may be the ruling passion in a heart, and yet may be unsuspected. Let us all be on our guard against this dangerous foe which seeks to coil itself around a heart like a snake, smothering all generous instincts.

There are many ways of giving a cup of cold water to Christ's little children, and one of these ways is open before you every summer—see the Report given below.

"There are ways more than one of serving Thee, Lord,
In a world full of sadness and sin,
And all will afford an ample reward,
When the harvest is gathered in.

"What we do for God, be it small or great,
Is never entirely in vain;
The kingdom's fine freight is not measured by weight,
But the passion of love it cost."

DORA FARNCOMB.

Toronto Children's Fresh Air Mission.

SUPERINTENDENT'S REPORT.

Although there are many churches and societies giving thoughtful attention to needy children in our city, yet we find there are many who are overlooked, and it was especially along this line that our interests were centered during the season of 1912.

Some 260 children participated in the Fresh Air Outings, including children and mothers from the Creche—Miss Barnham's Report tells of the benefit and blessings received.

Can you imagine anything more delightful and helpful than the Weston Camp? Mr. Bright, of Wycliffe College, watched over, cared for and "ministered" to the 40 lads, and best of all was the assurance we had, that some of them learned to know and trust the loving Saviour. Mrs. C. P. Smith, Secretary of the Boys' Home, writes that they have 150 boys who need a Fresh Air Outing, and are looking to our mission to assist them.

We are grateful indeed to the many friends who, for years, have had a definite interest in the work, and trust that our needy children will be remembered again this summer. Proverbs 21: 13, "Whoso stoppeth his ears at the cry of the poor, he also shall cry himself, but shall not be heard."

The railways have done their part nobly, the Grand Trunk, Canadian Pacific, Canadian Northern, and Michigan Central, are deserving of better things than are often laid at their door.

Mr. Martin Love, 93 Castle Frank

Road, Toronto, is our Treasurer, and, as usual, donations will be gratefully received.

The Creche.

MISS BARNHAM'S REPORT.

I wish to offer my sincere thanks to the friends of the Toronto Children's Fresh Air Mission, who so kindly provided for the transportation of 125 children, mothers, and workers, to "Blink Bonnie," Grafton. It was our first attempt at Fresh Air work, and we greatly appreciate the kind assistance given—everything was so comfortable.

Our party spent two weeks living, sleeping, and eating, in the open air. Many of the children had been ill, and one mother with four little ones, had never been out of the city before. How much can be done to bring health and brightness to many sad and dreary homes in our city.

We are looking forward to the work again, and trust that the friends will not forget us.

Weston Camp 1912.

Few things fire a boy's imagination like the prospect of a "camp out." It carries with it all the glamour of morning dips in the river, day-long fishing expeditions, homemade rafts, fragrant stews, camp fires, sentries—things dear to the boy-heart.

And what is better for him than country air, fresh water and wholesome food, and what grander opportunities for a word for the claims of the Boys' Friend?

Through the kindness of many, it was possible to own such a camp at Weston during the summer months. The boys hailed from the Toronto Boys' Home, the Working Boys' Home, as well as from our own Mission, between thirty and forty of them coming out to camp at different times, for periods varying from a week-end to a whole week. Especial care was taken that the first day of the week was kept for the Master's use, and advantage taken of the opportunities offered—a quiet talk over the Word as we lay on the grass in the morning sun, walks together by the river, and, in the evening, some magic-lantern pictures and a heart-to-heart talk under the trees.

It is not for us to "tabulate" the results of the summer's work, but that God the Holy Spirit did visit us with blessing there was welcome evidence—one boy in particular, whose mother had early received her call, and the father, finding him an irksome charge, deserted him, leaving him alone in the city with-

out a solitary friend. What wonder, then, that he should seek that abiding companionship of the One that sticketh closer than a brother.

Mending Basket.

The Great Reason Why Women Should Vote.

While some people in arguing against woman suffrage say that there are too many voters already, I am sure that no sensible people would be willing to move backward to the old-time form of government, absolute monarchy. Every revolution and change brings the world closer to responsible government. There are no characters in Canadian history admired so much as Hincks, Baldwin, Lafontaine and the others who labored with them in the struggle for our present form of so-called responsible government. Can any person say that the Canadian people are the worse for having taken this irrefragable step of breaking from the old form of government?

An anti-suffrage sage occasionally tells us that the vote is an expedient, not a right, or, in other words, a plan of government that we have been using with some degree of success, but so far as a person's right to a voice in the government is concerned, there is no such thing. I cannot now recollect the name of such a sage, but I can call to memory the name of Theodore Roosevelt who says, "The people have a right to govern themselves." If it is not the people's right to govern themselves, whose right is it? Have one-half of the people the right to govern two halves of the people?

It is said that men and women lead different lives, men do the work and create the property values, consequently they have a right to rule the nation and protect such values. We all know that the greatness of a nation depends not upon property values, but upon life values. Women create the life values, and I consider this sufficient reason why they have a better right to the vote than men have.

The female is the sex which must walk through the valley of death in order to bring a new life into existence. Being the creator of that life, she appreciates its value, realizes its possibilities, and fears its besetting dangers more than anyone else can. Where is the justice



From a painting by Millet (1811-1875). Potato Planting in France.

From a Perry Print.

What wonder, that abiding that sticketh

asket.

on Why Vote.

guing against there are too sure that no illing to move form of gov- chy. Every gs the world ment. There adia history cks, Baldwin, who labored gle for our sponsible gov- say that the orse for hav- step of break- government? sionally tells edient, not a plan of been using s, but so far voice in the there is no ow recollect ut I can call eodore Roose- have a right it is not the themselves, one-half of govern two

women lead e work and consequently e the nation We all know tion depends but upon life life values, reason why to the vote

ch must walk in order to ence. Being e appreciates abilities, and s more than s the justice

of a law which compels her to throw this life upon a society in which she has no voice?

The entire civilized world was shocked by the Titanic disaster, but the liquor traffic causes a similar and infinitely worse disaster in the United States every day, yet voters permit that traffic to continue.

It is estimated that sixty thousand mothers have created one life each to supply the white slave traffic of to-day in the same country, yet in spite of this terrible sacrifice, voters tell us that they cannot legislate this damnable traffic out of existence. Similar conditions exist in our own country, which, being smaller in population than the United States, does not present figures so appalling, however.

Is it not yet time to, at least, give the women a chance to protect that which they have created? H. L.

A LAWYER'S OPINION.

[While the question of woman suffrage is upon the tapis, the following from The Independent (N. Y.) may be of interest to our readers. The writer, Mr. Alfred Hayes, is a lawyer of experience. He practiced at the bar in New York City for nine years, taught law in Columbia University for five, and since 1907 has been professor of law in Cornell University.]

"The duty of voting should not be thrust upon women until the majority of them desire it." This argument has a democratic sound, and is often heard. Whether the majority of women now desire suffrage is not known. Many women are opposed and many are indifferent. On the other hand, monster petitions presented for suffrage and great parades in its interest show a widespread demand among women of all classes and in all sections.

A sort of official referendum to ascertain the views of women has been suggested. Such a vote would have no legal effect, but would be merely advisory. Whatever is the result the decision will rest with the men, and they would still be unable to wash their hands of responsibility. What would be the relevancy of such information? Would it be of controlling weight? The fact of preponderant feminine desire would be a factor in so far as it showed that the right of franchise would be used, and that its need was so obvious and imperative that the disfranchised class, in spite of their political inexperience, were clearly conscious of it, and that unrest and irritation would result from its denial.

But this factor would remain relatively insignificant, and the heart of the problem still would be: (1) Do women need the suffrage for their development and the promotion of their interests? (2) Does society need the votes of women for its welfare? The test is not inclination but need. It is a strange notion of the ballot which classes it as an ornament to be put on or off as the women may desire.

If not one woman asked for or even desired the ballot, it would still be the duty of the responsible authorities, holding the national destiny in their hands, to give the ballot if woman would be broadened and strengthened thereby, and progress hastened by drawing on the great reservoir of capacity and moral power possessed by hosts of noble women in the United States.

Women need suffrage because of three great social changes: (1) The industrial revolution as a result of which many millions of women no longer do their work in the home, but are breadwinners outside of it. (2) The feminist movement for the full development of woman. No longer content to minister solely to the comforts of man, the woman of to-day realizes that she must have scope for the full development of her individuality. She as well as man can seek the highest education and a career. (3) The great increase of government activity. Unrestrained competition no longer determines conditions of labor. Individual freedom is curbed at every point in the interest of the social whole. At a great meeting sometime ago to promote state pensions for widows, the disadvantages of private charity were pointed out, so that even the field of philanthropy is assailed.

Politics is not a trivial game. It is unequal with religion in dignity and importance. Religion quickens the will

and fires the spirit. Politics furnishes the field for an organized effort to do good works. Religion gives motive power, politics the opportunity for social service. It is almost as reasonable to deny to woman the right to share in religious activity as to forbid her to co-operate with her fellows in a form of social effort where her spiritual vitality can be most effectively utilized. Will American men, better qualified than women, if experience means anything, to understand the importance of enfranchisement to any class, stand by idle, until women themselves, unaided, have decided this problem which puts to a hard test their political sagacity?

The Beaver Circle

OUR SENIOR BEAVERS

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

Some More Prize Letters.

[Subject: "The Wild Flowers I Like Best."]

VIOLET, WILD GERANIUM, TWIN LEAF, MAY APPLE.

Dear Puck and Beavers,—Year after year "The Farmer's Advocate" has been coming into our home, with its pages full of knowledge for one and all. Last week, when I picked up the

paper, and turned to the Beaver Circle, I was delighted to see "Competition" written in large letters, and still more delighted to find such an interesting subject.

At first I thought it an easy subject, but on consideration found it to be rather difficult, as I was unable to decide which of all the hosts that throng the woods now, I really liked best.

However, I came to this conclusion: First of all I like the purple violet. You may think it strange that I do not like a first comer, as the hepatica or spring beauty, better than a later one. I like the early ones real well and am always glad to see the first hepatica, but am still more eager to see the first violet. It opens its blue eyes about the first week in May, and closes them the first of June. It is a very meek and modest flower, growing in some shady dell or in the long grass generally near a creek, lifting its dark purple and wine-colored blossoms amid fresh green leaves. It is a general favorite. Go into almost any home in May, and you will see a bouquet of violets.

Next to the violet I like the wild wood geranium. It grows on a tall stem about two feet high, and has delicate mauve blossoms which blend so well with its dark green foliage. It also makes lovely bouquets, lasting three or four days in water.

The twin leaf is also a pretty little flower, so-called because it has two leaves on each stem exactly alike. It comes about as soon as the spring beauty, with its eight-petalled, creamy-

white flower. It has long stems which cause it to nod and sway in the gentlest breeze. It does not last long in water, however, as the petals soon drop off.

Another plant I like is the well-known May apple. Go into almost any wood early in the spring, and you will see what looks like little green umbrellas coming up very thickly. In a week or so these will have grown from two to three feet high, with large broad leaves. Peep under the leaves and you will see a blossom placed as though it were hiding from the surrounding world. It is a creamy-white, rather round flower, with its face always bent down. It must be a shade-loving flower for it grows under an umbrella, and does not look toward the sun at all.

There are lots of wild flowers that I have never seen, for, although we have quite a variety in the surrounding woods, there are a great many missing. These, then, are the ones I love best of what I have seen and know.

Wishing the Beaver Circle every success,
MAGGIE BELL.
Canfield, Ont., R. R. No. 1.

CRINKLE ROOT, PAINTED TRILLIUM, VIOLETS.

Dear Puck and Beavers,—The crinkle root grows along the banks of a river or any running stream, and sometimes in marshy places with its long stem from six to twelve inches high, and its two leaves (made up of three small leaflets) opposite each other, about one or two inches from the cluster of from five to eleven or twelve blossoms.

Each blossom has four white petals resembling a cross in shape, and has about six stamens with a long, straight pistil in the centre. The five sepals are brownish yellow, long, and slender in shape.

The root is long and crinkly (thereby getting its name) white, and brittle. It is edible and eaten at lunches, and picnics in the woods. This plant blooms only in May.

The painted trillium grows in rich, moist woods, from the middle of April to the first of June. Its thick stem, growing from about six to fourteen inches long, gives place to a slender stem above the whorl of three broad, pointed, deeply-veined leaves, and leads to a dull, purplish-red flower with about six dusky yellow stamens.

The three sepals are bright green, oval, pointed, and longer than the petals. (The petals are about an inch long).

This trillium has a disagreeable odor which the bees do not like, and they seldom go near it.

Its sister, the pure, waxy, white trillium has larger flowers, longer stems and no odor, making it more beautiful than the painted trillium.

The blue violet grows everywhere—in lanes, roadsides, marshes, woods, and banks. On the roadside the violets are small, pale blue, and the leaves light green. Along the creek, in the sun, they grow larger and deeper in color, but in shady, wet places, they are far larger and more beautiful.

The flowers have five petals; two above, one at each side, and one below; they are narrow and quite long. The upper petals have a white, mossy looking stuff on them, in the opening of a cup-like interior. The bottom petal is shaded to white also, and striped with tiny, black strips. The sepals are five, slender, and green. The five or six stamens are bright orange yellow, though seldom seen unless the flower is taken apart, as they are concealed in the cup-like interior.

The leaves of the violet are almost heart-shaped and deeply-veined with yellowish-green. The violets bloom from the first of May to the middle of June.

There are two kinds of violets much like these, the yellow violet, and the white violet. The yellow are very bright in color, and have longer leaves and petals than the blue. The white is smaller, the petals rounder and very sweetly scented.
AMY V. SPEIRS.
New Flos, Ont.

INDIAN TURNIP.

Dear Puck and Beavers,—I noticed the announcement of a new competition in your issue of May 8th, so I have decided to compete.

The Jack-in-the-pulpit or Indian turnip, as it is sometimes called, is, in my



At the Beach.

Down on the beach where the water is curling,
Babies and children at play,
Down on the beach where the water is foaming—

Who are so happy as they?
Watching the waves as they roll from the ocean,
Picking up pebbles and shells,
Sailing their boats, and fishing for minnows,
Digging their miniature wells.

Here comes a wave, oh, see it come rolling,
Now it is wetting their toes;
Back again, back again, back again flowing,
Out to the ocean it goes.

Out where the gay little whitecaps are dancing,
Out where the sky stretches down,
Out where you see but the sky and the water,
And never a sign of a town.

Down on the beach where the water is tumbling,
Wading as far as they dare,
Splashed upon, dashed upon, by the waves' breaking,
Never a bit do they care

Down on the beach where the water is bubbling,
Happy and careless and free,
What is so good as to spend a vacation,
Close to the edge of the sea!

—Clara Odell Lyon, in St. Nicholas.

opinion, one of the most beautiful flowers that can be found in the woods or swamps. It is different from most plants, not having petals or sepals, although one could almost call Jack a pistil. The whole plant is beautifully stencilled—the canopy of the pulpit especially so. The root is in the form of a bulb, and is cream colored with a brown husk covering it. The plant gets the name Indian turnip from the root. No doubt the Indians used to look for the plant to use as food, although I don't admire their taste if they did. The bulb has numerous white rootlets. The stalk has straight "stencil marks." On my specimen there is only one leaf. The leaf is composed of three parts without scallops. Each part is curled up. The leaf is joined to the plant by a stalk about three inches long, which joins the main stalk about two inches above the ground. There is an overlapping skin which covers the joint on some specimens. The stalk is smooth. The flower certainly does resemble a pulpit. It has no perfume. The flower is about two inches long, and the top comes over Jack no doubt to keep the rain off him and the seeds. By looking into the flower one can see little purple seed-cases clustering around the base of the pistil. The bottom of the inside of the flower is white.

The Jack-in-the-pulpit plant is found in moist places, and I noticed over two dozen all near together one night on my way home from school.

LINDSAY McLENNAN.
(Age 12, Class V.)
Guelph, Ont., R. R. No. 5.

VIOLETS.

Dear Beavers,—When I saw what the new competition was I could hardly bring myself to put one wild flower before another, as they all have their use and bring you to a sense of cheer, no matter what mood you may be in. If there were no flowers, the earth would be a very bleak place.

This morning I was taking a walk watching old mother nature unfold its green blanket for its new spring dress, when I espied a patch of violets growing in a fence corner. They were so beautiful; I wondered what man could want more beautiful. A little further on I came to some May flowers, although very pretty they did not come up to the violets in their form or smell, so after all I think the violet is the most sweet smelling and beautiful. To my sense of smell and sight they are. Others may have different; it depends on one's own liking. But a flower is like the rest; it comes to bring joy, fades, dies, and is no more. Alas everything has its end, but I hope the Beaver Circle will stay to the last minute.

DOUGLAS CLEGHORN.
Guelph, R. R. No. 7.

SPRING BEAUTIES, DOG-TOOTH VIOLETS.

Dear Puck and Beavers,—Don't you all feel glad when spring comes? I always do. And with what joy and anticipation do we wait for the first flower to come out? This spring I was walking along the roadside, closely examining along the fences to find the first flower. What was my joy, then, to see five or six of those pretty little pink spring beauties? I gathered them and walked on. They are just like that little one I drew. Further on I spied something yellow. What was it but one of those pretty golden dog-tooth violets? To be sure I was glad, indeed, to get it. Now, when I took it to school many of them were surprised, for they could not find any at all.

Next morning as I came along I found a whole lot of those little spring beauties. They are white with bluish-pink marks on them. The buds are all pink. The leaves are dark green. There are one or two open flowers on each plant, and a lot of buds further down. The next morning, I, with my little companion Edna Wood, found a lot of pretty violet buds. It was Friday. On Monday we found several opened violets, and none of the other children had found any. Aren't those little violets so pretty? On Tuesday I was away, and on Wednesday we found several golden violets. Coming home we got some white ones. Now you can imagine what a fine time two girls with

a mile and a half to go back and forth to school will have. But when I was getting through the fence to explore those bushes, and had just about put my hand down to pull some very pretty violets, what do you think I saw? An ugly snake dart up right under my hand! You may be sure I got my hand out of there pretty quick, and the fright made me scream and run. Now I am always afraid of snakes, and I was angry that a silly snake should spoil my pleasure. You may laugh, but I kept out of there for a good while. But don't those pretty blue violets look nice peeping up from out of their nest of green?

Don't those pretty large flowers look nice when you are running through the woods? Jack-in-the-pulpit I'm speaking of. It seems to me he often preaches a good sermon. One which is often vividly before our minds is, "If the good God can take care of the pretty flowers and give them food and loveliness, cannot He take care of us, who to Him are so much more precious? And just as He clothes those lovely flowers in their pretty colors and pureness, cannot He clothe us with the Divine Spirit of holiness, purity and truthfulness? That we may shine with the Holy Spirit, and respect the good works of God."

Now, when you walk through the woods and find the pretty red and white lilies, don't you feel as though you could stay there all day picking them? I always do. When I find it is time for me to be going homeward, I feel as though I would stay longer. Those funny Dutchman's breeches make me laugh. I don't believe they are much like the original ones. Do you?

But where has my pen been leading me? I must surely say good-bye. I think you have heard from me before.

I remain, yours very truly,
Thorndale, Ont. LUCILE GLASS.
R. No. 8. (Age 11, Class IV.)

RIDDLES.

When is a door not a door? Ans.—When it is a jar (ajar).—Sent by Florence McEwen.

If a barrel weighs fifty pounds, what will you have to fill it with to make it weight twenty-five pounds? Ans.—Holes.—Sent by Muriel Mick.

As I went through a garden gap, Whom should I meet but Dick's red cap, A stick in his hand, a stone in his throat.

If you guess this riddle I'll give you a goat.

Ans.—A cherry.
Why did the farmer call his rooster Robinson? Ans.—Because it crew so (Crusoe).—Sent by Agnes McLellan.

What goes up and down, up and down, and never touches earth or sky? Ans.—A pump handle.

What goes round the house and only leaves one track? Ans.—A wheelbarrow.—Sent by Walter Atkin.

Why is a thump like a hat? Ans.—Because it's felt.

Why is a wig like a lie? Ans.—Because it's false.

What goes up when the rain comes down? Ans.—An umbrella.—Sent by Maud Civalier.

Chemists.

By Ralph M. Thomson.

Hate compounds with cunning craft,
In his noisome beaker,
An intolerable draft,
Sickening to behold;
And as souls the deeper drink
They become the weaker,
Until Time, from whom they shrink,
Counts them with the old.

Love distils in his retort—
Love, who labors longer—
Potions of the purer sort,
For all hearts unstrung;
And as famished mortals sip
Do they grow the stronger,
Until Age, of ashen lip,
Comes, to find them young.

—The Independent.

Grocer—"What was that woman complaining about?"

Assistant—"The long wait, sir."
Grocer—"And only yesterday she was kicking about the short weight. You can't please some people."

Fashion Dept.

HOW TO ORDER PATTERNS.

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Also state issue in which design appeared. Price ten cents PER PATTERN. If two numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

When ordering, please use this form: Send the following pattern to:—

Name.....
Post Office.....
County.....
Province.....
Number of pattern.....
Age (if child's or misses' pattern).....
Measurement—Waist,..... Bust,.....
Date of issue in which pattern appeared.....

Address: Pattern Dept., "The Farmer's Advocate and Home Magazine," London, Ontario.



7752 Girl's Dress, 6 to 12 years.



7782 Girl's Dress with Tunic, 8 to 12 years.



7786 Box Plaited Blouse, 34 to 40 bust.



7773 Blouse with Vest, 31 to 42 bust.



7525 Plain Blouse or Guimpe, 34 to 44 bust.



7840 Lingerie Blouse, 34 to 42 bust.



7806 Fancy Tucked Blouse, 34 to 42 bust. Embroidery design not given.



7781 Fancy Blouse, 34 to 42 bust.



7763 Girl's Norfolk Dress, 6 to 10 years.



7778 Child's Tucked Plain Guimpe, 2 to 6 years.

The Children of the Forest
A TRUE STORY OF A TEACHER'S EXPERIENCE.

By M. Blanche Boyd.

Chapter 4.

TRIALS.

The first trial that arose was over my bicycle, which had been brought to the village by a Mr. Black who had gone to church, and kindly offered to bring it out as we had no room in the back-board. Someone had informed me that most probably I would be able to ride, but it was surprising how anybody could possibly entertain such an idea when he had himself seen those roads. Well this Mr. Black kept my wheel at his place for a week, when he and his mother (a very stout woman) learned to ride on it—on Nipissing roads of all places in the world—sandy, rocky, stumpy, hilly roads. Needless to say it was broken hopelessly in seven places and the trustees were compelled to send on purpose for it, and it was then left in the shed one day without a word. Upon learning for certain how it became broken, after being told no end of stories about it, I wrote concerning the matter. The man impudently replied that he never touched my old wheel, and if I accused him of breaking it he would take "the law off me." Having been informed by the McDonalds that it would be useless to settle matters, as the settlers would turn from one side to the other of the case, it had to drop and so did the money, which had just

been spent on two new tires as well as the freight.

Scarcely had two weeks elapsed before a long-to-be-remembered event took place which time alone will efface from my memory.

As yet the McDonalds had told me very little that was detrimental to their neighbors, preferring that I should find them out myself, which did not take long to do.

One Saturday Mr. McDonald took his horse and wagon over to the Cameron's opposite, as he had kindly offered to go into the village with this man to bring out some second-hand furniture that had arrived from Toronto. It was half past nine and all the chores were done at our place, but it seems Mr. Cameron had done practically none of his. Out he came, muttering sullenly to himself and saying he "hated to be hustled." Mr. McDonald informed him that there was no hurry, when all at once that seemed to irritate him, for he seized Mr. McDonald by the throat, threw him out backwards on to the road, whacked his head up and down against a pile of rails, sat on and punched him with his fists. To say the least this was a most cowardly thing, especially as he was a tall, powerful man and a prize boxer, whereas his opponent was taken suddenly and had no fair play at all.

Hearing a noise I ran to the window and there were the two men facing each other, Mr. Cameron's wife crying and Mr. McDonald's wife endeavoring to be peace-maker. Mr. McDonald, wild with rage, flew at his enemy, and a desperate struggle ensued, both men hanging to each other like leeches, and rolling around on the dusty road. Then they faced one another again and Mr. McDonald stooped to pick up a rock to throw, but his wife stayed his hand. He called to his youngest son to kill Cameron, whereupon the boy took a rail and belabored the coward until he was forced to stop; he had in the meantime thrown Mr. McDonald again and had him by the throat.

At length, however, a neighbor appeared who helped to put an end to the combat, and Mr. McDonald came up to the house a sight to behold, with his face cut and streaming with blood, his clothes torn and smeared with blood and dust, his eyes all blood-shot. A perfect volley of oaths issued from his mouth, and he was unable to walk, talk or stand straight. As he was cursing everybody who came from Toronto, I sat nearly paralyzed with fear and trembling from head to foot, not knowing what his passion would lead him to do.

After washing his hands and face he got ready and started straight for the magistrate's home to get a warrant for the arrest of his assailant for assault, battery and attempt to murder. The local magistrate, however, refused to give him one so he started for headquarters, viz., North Bay, and there obtained it. After hearing the facts of the case he was informed that should the trial come off, Mr. Cameron would have twenty years in jail, \$200 fine with the costs of the court to pay.

In the meantime Mr. Cameron and his family started to get a warrant for Mr. McDonald's arrest, and again the magistrate refused to grant one, but was compelled to do so when a revolver was levelled at his head. Early in the evening this man was bold enough to come to the door and hand Mrs. McDonald this warrant.

It is impossible to realize with what dread we waited for the master of the house to return. To make matters worse, his uncle and a neighbor, "scenting some fun," came to the house and tried to urge him to go over and shoot his neighbor. Acting upon their advice he snatched his rifle from the wall, loaded it and started, but his wife called him back to have his tea first, as he had just returned from North Bay. The case was bad enough without murder being added.

In a day or two, when he had cooled down, he informed us that at the trial we must all appear as witnesses, but my being a disinterested (most decidedly so) party my evidence would have more weight than the others. We, therefore, set to work and wrote out all the facts, and made sure that each other's evidence did not contradict. It was awful to think of being instrumental in sending a man under such a penalty

especially after having just arrived in the neighborhood,—and think of a wife being left helpless with two little children!

The fight, of course, was the talk of the day, and was found most interesting—"It sort o' livened up things now and again." When we went calling at a neighbor's house one Sunday she said to me, "If ever you get into a fight just take off your stocking, put a big stone in it, and whack them around the head with it. That is what I always do." (I wondered what the other person would be doing while you were doing that!) "One time," she said, "there was a row at a dance and I just tuck a man by the beard and hung on till I pulled a good part of it out by the roots." When I expressed my horror at such conduct she replied, "We are too rough a people for you to live amongst; you have been brought up in a good home."

Not long after this fight occurred an invitation was sent over for me to go across the way, as they thought of sending their little boy to school and wanted to see me first, but although I was there an hour and a half they never mentioned him. We called this house the "White House," and the owner "the President," as his house outside was whitewashed. It would never do to shun these people, and the McDonalds told me they did not wish their quarrels to interfere with my intercourse among the people, so I went. Just as we expected, the reason for my being invited was to find out how much of the fight I had seen, and what I should witness. Over and over again they begged me not to appear as witness, but upon my stating that, should the trial come off, it was absolutely necessary for me to do so in spite of my wishing to have nothing to do with it, this did not satisfy them in the least, and they tried to persuade me to leave out certain things, but I firmly told them that I should tell to the best of my ability exactly what I had seen.

Not being able to obtain evidence in his favor, Mr. Cameron's next plan of attack was to get all the neighbors to swear that Mr. McDonald was a dangerous character and, therefore, should not be at large, having levelled his revolver at one man's head and being supposed to have murdered a woman, etc., but, of course, that had nothing to do with the matter in question.

Two years before Mr. McDonald had had Mr. Cameron in his power to send him to jail for seven years for shooting one of his animals, but had taken pity on his wife and let him off, and had since helped him greatly with his farm work, and this was the thanks he got. Gradually, however, the light of passion dimmed and Mr. McDonald gave up his thirst for revenge, but vowed never to lift a finger to help him again in any way, as they were better apart. So once again we breathed more freely as the angry clouds rolled away before the storm burst.

Chapter 5.
THE MENU.

You must not suppose that it was all dark and dreary; on the contrary we had many happy times. We were up at five in the summer, breakfasted before six, had dinner at half past ten, tea at half past three and supper at half past eight, the latter meal consisting of bread and milk. On account of school hours, however, I dined at 12.15, and had tea at 4.15 alone.

The meals were all very much alike. As I heard a missionary once say they had "tea and fish for breakfast, fish and tea for dinner and both for tea," and so it was with us. The bread and butter was very nice (except when the stove caused the former to become sour), we had also boiled potatoes with skins on, and fried meat; at first two pigs were killed so we had fried pork three times a day until that was finished, then one of the cattle was killed and we had fried beef three times a day until that was gone, then a deer was killed and we had fried venison three times a day until that was gone, and lastly they caught sixteen dozen suckers so we had fish fried three times a day until they were all gone—it was a wonder we were not fried ourselves. Sometimes we had boiled eggs, but having no egg-cups we were obliged to hold the hot eggs in our hands while eating

them, which was not very comfortable. Occasionally we had raisin, fig or vinegar pies and very often cookies. The only kind of cake was the far-famed "Johnny cake," which was very nice, and another kind which was generally pretty heavy and had some raspberry jam on top for icing, which would dry and leave nothing but seeds. A large pail of syrup would be bought and this was used at each meal till it was gone, and then a pail of blackstrap would share the same fate. I foolishly told them how fond I was of doughnuts, which I ever regretted. Being fond of them also, they kindly thought it would be a treat, and made a large quantity of them. These were made out of the bread dough in twists about five or six inches long and fried in grease, and were, therefore, tough as leather and tasteless, and made one feel decidedly uncomfortable after partaking of them. With strong, green tea added to the menu you will see that we had plenty to eat, and having been brought up to eat what was set before me or go without—the climate helping me to have an appetite—it was satisfying and generally relished.

One dreadful dose we were forced to take (may it never be my lot to take another!) will always be remembered, Mr. McDonald shot a skunk one night outside the "milk-house" where all the winter's butter, flour and meat were packed, and all of this food was tainted. It was very hard to enjoy one's meals then, but as they gave me the best they had, we always managed to laugh instead of making wry faces, which we felt more like doing.

After this had gone on for some time and when the stoves refused to bake well, Mr. McDonald said to his wife, "Aw, Jinny, I'll have to get another wife that will cook me something decent to eat." "It would be more wise-like if you got me a new stove," she replied. (Two more of her expressions were, "a most tremendous bother to get the stove to bake well," and "I feel very onrestless.") Now, that stove should have worked well, for it was none other than "The Prince of Wales," but in this instance, at least, we are tempted to say, "What's in a name?"

From November until February we had no milk, which was a great loss, but we managed to thrive well on our "fried" meals. Occasionally a "partridge" (as Mr. McDonald used to call it) graced the table, but that was the case of "two bites to a cherry."

In this part of the country it seemed extremely difficult to grow fruit or vegetables, owing to the summer season being so very short, the frosts very early and the climate cold and changeable. Why the weather might be several different things the same day, and one could scarcely tell in the morning what the day was to end like. If everything else failed, however, we would not die for want of potatoes, for there were over a hundred bags stored in the cellar (a large hole dug in the earth underneath the house with no particular size or shape), which served for our own meals as well as the animals, for they as well as we had them three times a day. A trial had been made to grow onions and corn, but was unsuccessful, so we had to rely upon our one vegetable.

Fruit was not grown either. True, there were a few apple trees sown from seed several years ago, but they never grew to any height nor bore fruit. We were obliged to content ourselves with what the forests provided, viz., wild raspberries, cranberries, and blueberries. The former had not been very plentiful that year, and none of the settlers seemed to care for gathering cranberries, but on Labor Day a neighbor invited us to go blueberry picking. It truly was Labor Day—in more ways than one.

A young American, who was exceedingly fond of hunting, had visited this spot where the berries grew and seen a bear and young cubs in the neighborhood, and also he had found an immense moose that had been torn to pieces and partly devoured by either bears or wolves, so he warned us against going. This made it all the more exciting, but it was not long after my arrival in the place, and I was anxious to see as much as possible.

It was a beautiful, bright warm day when, about 11.30 a. m., two women, three small boys, a young girl and my-

self began our three-mile tramp to the blueberry patch. Never shall I consider those berries dear—except, perhaps, if compelled to buy them—at any price. On we went over sandy hills, stumpy clearings, boggy brushwood and dense forests, in many places having to walk along an immense trunk of a tree high in the air, an exploit which needed all one's "nerve" not to slip on the bushes below. In many places the brush was so dense that it was impossible to see a couple of feet away, and we could only follow each other by sight and hearing if we kept very closely behind one another. Our leader was one of the women, and it was wonderful how she led us so well, as her only guide in the forest was a twig broken off here and there (the same guidance the Indians use in their tramps through the forests). At last, after many scratches, we reached the brule where the berries were in plenty.

The fruit grows in little tree-like bushes about a foot from the ground and really looks quite pretty. At the end of each twig would be a berry, so that one could pick several at a time and sit down on the ground while doing so, thus clearing a little circle around, and then one would move on to another place.

As described before, a brule is a place where the forest fire had left its traces, and consequently the ground was covered with burnt logs, and it was not long before our clothes were almost as black as the logs. Coarse brush is always to be found in these places too, so you can have some idea of the wildness of the berry patch, with a background of forest on all sides. The ground had somewhat the appearance of a bed of English violets, such a deep blue it was, and looked very pretty. When Mrs. McDonald preserved these berries she evidently did not put enough sugar to them, and they fermented. I defy anyone to eat fermented blueberries; they are like bitter aloes.

Our American friend followed us with his rifle for fear we might meet with some danger, but although we saw many tracks in the soft, wet sand, we saw nothing to alarm us, especially as we went home early in order to reach home before dusk, for many people are lost and it was no uncommon sound to hear a man shooting to obtain an answering shout from one of his neighbors to guide him home.

Chapter 6.

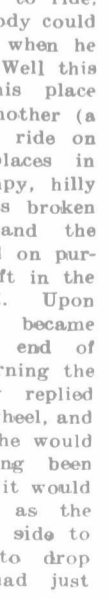
PASTIMES AND PETS.

During the summer we got up at five o'clock and in the winter our usual hour was four o'clock, so there was considerable time for work before school. Stockings being very expensive in the village, I bought some very coarse and black wool and Mrs. McDonald kindly showed me how to knit them, so I made eight pairs, some for the pupils as well, for the poor children were nearly perished for the want of them. Next she showed me how to make mittens and I made three pairs of those,—one for my "fireman," who was delighted.

Not being able to use the machine, it kept me busy making some clothing out of flannelette, by hand, for myself and some of the scholars, for several of them were unable to come to school because they had not the clothes to wear.

By way of variety I made two fine netted doilies, two sets of dinner mats, some crocheted lace, a sailor-collar of Battenburg work, crocheted ties and needle-books of the brilliant in several shades, and many crocheted articles such as bead collars, shirts, booties, and knitted balls, to show Mrs. McDonald how to do them; in this way we were able to exchange ideas, which made it pleasant for both.

On Saturdays there was mending and darning to be done, as also the washing. It was my desire to learn how to do my own washing and ironing while the opportunity was offered, as my time at home had been taken up too much with studies to allow for much housework. About seven in the morning I would take some pails down the hill to the creek, dip them in to the water and carry them up the steep, rocky incline, and put the water in the potato pot to get warm. In the winter it was necessary to plough through two or three feet of snow to the creek, and with an old axe break the ice to obtain the water, for up there nobody had a pump



or even a well, and, in some cases, the people were obliged to walk over half a mile for every drop of water that was required for drinking or other purposes. In this respect we were fortunate, as the spring was not a quarter of a mile from the house.

When the clothing had been duly washed and hung out to dry, I brought it in and ironed it. This was not easy work as the irons were very old and rough, and cooled very quickly, which made it almost impossible to do the clothes very well at best.

Every Saturday night our mail came. The magistrate at the post office (for he held both positions) would drive eight miles to the village, bring the mail to his place, sort it, and one of our neighbors would go and fetch that for the "mountain" and our district, stop at a certain house on the way home to leave the mountain mail, and bring the rest to his place, then some of the pupils would walk this mile and a half and bring it to our place, so, as may be imagined, the mail very often went astray. Letters sent out shared the same fate in many cases, and it was most annoying, though not an uncommon occurrence, for one's letters to be opened and read.

As the day drew near I used to get quite excited, longing for mail time to come, and wondering what it would bring. For mischief the boys would sometimes be as long as possible coming home with their father's paper, "The Star," in which were two continued stories that interested him greatly; and also teased me the same way by withholding my letters. The remainder of the evening would be spent in the perusal of the contents of the letters. Friends from home kindly sent me "The Free Press" (which was a week old by the time it reached me), "The Parish Visitor," "The Christian Herald," "The Quiver," "The Ladies' Home Journal," "The Ladies' World," etc., which were ever welcome. With these magazines and my box of books which I took up with me, I formed a circulating library, lending a book each time the last was returned. This gave great pleasure to the people.

When it became too dark in the house for sewing and not dark enough to light the lamps, for something to do I would go out where the cows were being milked in the lane and there learned the art, myself, of milking, and often the whole family would be collected for a quiet talk. The cows were so gentle that frequently I would stand beside them and switch the tantalizing flies from them with a branch of a tree, or sit on the backs of those that were lying down and pet them while they blinked their eyes and seemed to thoroughly enjoy being petted. It was not long before the eight of them and the little calves would follow me all over the field.

The horse and young colt, Paddy, also wanted their share of petting and would expect a piece of sugar at least from my hand, but at last they became so friendly that more than once they followed me in to the summer kitchen and tried to enter the living-room, but were prevented. Paddy had required a great deal of attention when a little colt, so, at a year and a half old, although nearly as big as his mother, he still expected petting. His mother had not been able to bring him up in the way good colts should go, as he learned to kick and bite for mischief; many a "one" he got in return from her, but it did not seem to make him more obedient. He would follow me down to the bars, or come to meet me when I was returning from school to try to take off my cap with his sharp teeth. Paddy kicked poor Norman and killed him, not long after my return home.

Then there was "Gyp", the black and white Collie. Faithful old dog, she would come twice every day down to the bars to meet me, and was quite rewarded when she received a good petting and a few kind words, and would dance around me so excitedly and lick my hand to give me a welcome home. One peculiarity she had was that, when petted, she used to roll over on her back, which at times was rather annoying. Whenever she saw anybody with a whip in his hand she would crouch down and slink away as if in terror. She was a great help to the boys when they went for the cows, and would drive

them home with a very proud air. If the boys went to the post without her, she was greatly distressed and would whine piteously.

Among the pets were no less than three cats. Tom, a poor old brownish-grey cat, with large saucery eyes that resembled those of a wild-cat, was rather stiff, and, having been caught in a trap set for a mink, had broken nearly every tooth in his head in his frantic endeavor to escape, to say nothing of his poor paw which made him lame for many a long day. Consequently the poor old cat was not spry enough to catch many mice, and, indeed, it took him a long time to eat his food. The way he caught birds was very clever. He would roll on his back with his feet turned up to the skies feigning to be dead, when any careless bird who dared to molest him, he would snatch with his paws. One could only pet him for a short time, as he preferred dozing behind the stove or basking in the sun.

Next came Harry, a young, though very large cat, with a wide stripe of the tiger shape down his back, and the rest white. He was a splendid mouser, having keen green eyes, sharp ears and great strength. One day we heard a mouse in the wall beside the window, but could not even see the paper move. Both cats rushed to the spot, but Harry, being active, made a spring, caught the mouse through the coarse, brown paper and brought it down again, a distance of seven feet. Now, that was what one might call a clever feat, especially for a cat.

Last, but certainly not least, came my "Pushie," a dear little white cat, with a black "saddle" on its back and a round spot on either side, and yellowish eyes. Doubtless you will be amused at the idea of describing each animal so minutely, but if you ever take the trouble to interest yourself in animals you will be surprised at the difference in appearance as well as character.

The older cats had had their ears frozen off, as, indeed, all the cats there have. Old Tom had a broad serious-looking face and stubby nose; Harry had a long, pointed nose and a powerful, stolid-looking face; while Pushie had a saucy, mischievous-looking face, and was as quick as lightning. As soon as she saw a stick or whip in anybody's hand, in about a second all you would see of her was the white tip of her tail. It was really ludicrous to see that little animal scuttle around. She was a stray cat which we thought must have been left by some Frenchmen who were camping not far away. When I found her in the yard behind a stump one day, by dint of coaxing I captured her. After considerable petting she became a great favorite with all in the house, myself especially. Mrs. McDonald said she always seemed to know when twelve and four o'clock came. She would run to meet me, and before I was able to get my things off she would spring upon my shoulder, curl herself around my neck and purr as contentedly as possible. No matter what I was doing—reading, writing, or sewing—Pushie would curl herself around my neck and actually go to sleep there (rather an uncomfortable place one would think). Should you dare to take her down she was quite insulted.

Being a little rough in her play one day I administered a gentle cuff, which so highly offended her that she stood up, put back her ears and cuffed me back, and then ran into the corner and sat with her face to the wall, and no amount of coaxing would bring her out. She made friends again, however, on my return, when she ran purring to me, and jumped upon my shoulder in her old place. Whatever I should have done without her I do not know, for no matter what troubles arose to sadden me, Pushie was always the same gentle little purring friend; she meowed piteously when I came away.

Gyp objected strongly to my having another pet, and howl at her, but mistress Pushie returned the compliment, leaped upon Gyp's back and hung on tight while the poor dog went howling across the field. He was always glad to leave her alone after that.

Besides these domestic animals there were three very pretty turkeys, of a soft-brownish color, that wore bells around their necks to keep the foxes away during their pedestrian expeditions

through the woods. There were also a few hens in a house, the size of a dog's kennel, and two "friends of the sty." The five little white and black calves lived in the shanty which had been the home of the family before they had built their present home.

Gradually the weeks went by, and the holidays were at hand.

(To be continued.)

The Windrow.

Mr. H. S. Montagu, under Secretary for India, stated recently in the British House of Commons that India is prepared to revise the treaty of 1911, so that no more opium will be sent into China.

A "poor man's motor car," a one-seated motor costing only \$275, has been put on the market in England. Judging by the attention the invention is attracting, there is likely to be a great demand.

In "The Westminster" for July appears the opening instalment of "White Man's Canyon," a story by a new Canadian novelist, Bryan Grant. The number also contains the first of a series of articles, "Parliament, Press and People," by William MacKenzie, for thirty years a member of the Press Gallery at Ottawa.

Miss Gwynette Marjorie Bobb, having passed all the examinations required in England for law, is fighting in the courts her right to be recognized as a "person," and so qualified to act as a solicitor.

Nearly 200 cases of geological specimens, plants, etc., from Captain Scott's ship, the Terra Nova, have been placed in the South Kensington Museum. One box filled with fossils was found on a sledge at the hut in which the bodies of the ill-fated explorers were found. The publication of Captain Scott's diary, under the title of "The Uttermost South," began in the July issue of "Everybody's."

Earthquakes are more common in Japan than thunderstorms are with us, and in Tokyo people talk of them as we do of the weather. Nearly 1,400 are recorded annually in the Empire, and in Tokyo alone there are, on an average, fifty earthquakes that can be felt during the year. In consequence of the frequency of the tremors buildings are made earthquake proof, so that, although they sway, they do not fall.

Dr. Henry Van Dyke is to represent the United States at the Court of the Netherlands. His appointment marks that of the fourth man of letters chosen by President Wilson for the diplomatic service. The others are: Walter H. Page, author, Ambassador to England; Thomas Nelson Page, author, appointed to Rome; and Meredith Nicholson, author, to Lisbon, who, however, asked that his nomination be withdrawn. In addition, Maurice Egan, college professor and writer, has been chosen as Minister to Denmark, but refused; Jacob Schurman, President of Cornell University retains his position as Minister to Athens, while editors Pleasant Stovall and William Gonzales have been named for Switzerland and Cuba, respectively.

The Department of Agriculture of the United States reports more than 30,000 new vegetables and fruits imported for testing in this country; and already a very large part of these have become acclimated, and adjusted to the soils of different parts of this country. The Independent recently noticed the dasheen, as a possible substitute for the potato, or, at least, supplementary to that important tuber. It looks like a striped potato, a trifle hairy and rough. It can be boiled or baked or fried, and makes a splendid stuffing for meat. It has a nutty flavor something like a chestnut, which will add greatly to its culinary value. It can be relied upon for 400 to 500 bushels to the acre. One of the very earliest of these new vegetables to come into use is the patsai, reaching us

from China. It is nothing more than what the housewives call "greens"; but it is ahead of anything else of the kind in our gardens. It runs up tall leaf stalks, something like the stem of a beet leaf, or Swiss chard, and something also like a cabbage stem. It is said by all who have used it to be delicious. The tungshu nut also comes from China; looking something like an onion, and pretty likely to win its way to great popularity. It has a delicious flavor, is very nutritive, and can be grown with the utmost ease. The list is a long one, at any rate, and our bill of fare for the common man's table is being enormously enlarged. It will cost no more to grow these things in our gardens, and in many cases will displace coarse and indigestible vegetables. Mr. Fairchild, who is at the head of the plant importation bureau, insists that the human appetite needs rotation of food a good deal as the soil needs rotation of crops. Both of these ends are accomplished by the adoption of some of the better importations.—The Independent.

Miss Emily Davidson's intimate friends among the militant suffragettes were not surprised, says the Literary Digest, when she threw herself in front of King George's horse on the Epsom track recently and was fatally injured. It is said that she had held for some time that a woman's life would have to be sacrificed before the women of England would get justice. For several years she was regarded as one of the most daring of the militants. "She was a little mite of a thing," says Mrs. Mary Freeman, mother of Miss Elizabeth Freeman, the American suffragist, "but she didn't know such a thing as fear." "She died for women," said Miss Christobel Pankhurst to a Paris correspondent of the London Daily Sketch on the day following the incident; "the Government's refusal to grant the vote drove her to make protest." Mrs. Freeman has been in England much of the time since the militant movement began, and is familiar with the career of Miss Davidson. In an interview printed in the New York Tribune she describes some of the exploits which made the girl conspicuous:

Emily had pluck. Once when she was in Holloway jail—she was in a number of times, and subjected to forcible feedings on at least four different imprisonments, as the badges she wore showed—well, this time she made up her mind she just wouldn't be forcibly fed. She took the two plank beds in the cell, for though there was only one prisoner there happened to be two beds—just planks they were, twelve inches wide. She put the end of one against the door, and the end of the other against the window, which opened inward and was opposite the door. That left about a foot's space between the two plank-ends in the middle of the room. She put a stool between them, and sat on it.

The jailers battered at the door and threatened her, but she wouldn't move. Then they broke a hole in the window and with the fire-hose played a stream of cold water on her back for nearly an hour. At last they broke in. Emily had pneumonia after that, and they had to release her.

She is the girl who in 1910 got into one of the towers of the Houses of Parliament on a Saturday, and stayed there concealed all that night and Sunday, with only a bottle of milk and a few crackers. And then, Sunday night, the watchman heard a bit of plaster dropping when she stirred in the narrow place where she hid; and she was found and put out.

She got into St. Stephen's Chapel once, too; that is the chapel under the Houses of Parliament. While she was hidden there she heard a lady who was being shown through the chapel say to the watchman: "Aren't you afraid to stay here, with all the dead buried under these stones?" Emily stayed there all night, and she wasn't afraid, either.

Once in 1909, she climbed to the roof of a hall in some suburban town—I forget the name—where a political meeting was to be held. She waited there for hours in the snow, and when the meeting began she let herself down through a skylight, and, hanging there out of reach of the stewards, heckled the speakers through a megaphone.

The Ingle Nook.

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

The Child Who Balks.

"But my boy positively will not study," exclaims a disappointed mother, "I simply cannot keep him at it."

Here, truly, is presented a complication, and one that is distractingly common. Willie and Johnnie and Tommy; yes, and Jennie and Kate, too, want to play all the time. They don't want to settle down to books, nor to concentrate attention upon them even when they are at them,—all of which may be somewhat ruinous to Willie and Johnnie and Katie and Jennie as future responsible humans.

Well, disappointed mother, have you called upon all your resources to meet the difficulty? Have you exercised thought and imagination and patience in dealing with these refractory young colts of yours? Or have you simply "barged" at them to get their lessons done and let it go with that?

Perhaps there is some definite reason at the back of the refractoriness. Possibly you have been attempting to keep Johnnie at his lessons too long at a time. Some brains, you know, seem to require very frequent rest in order that they may do their best work. The eminent Herbert Spencer, for instance, when composing the first part of "First Principles," by a Highland loch, used to row half an hour, then work half an hour, and so on, so long as brain-fog was threatened. Just here it may be mentioned that Spencer, like Voltaire, believed in versatility. He could paint with water colors, was musical, and quite skilful as a mechanic, and held that the rest periods spent on any of these occupations prepared him all the better for the heavy thinking and writing that made up his life-work.

To return—have you spent time with Johnny over his lessons trying to really interest him in them? Do you know much more about them than Johnny does?—for, if not, your efforts to interest him may be rather futile. Really, in these days of cheap books on every subject under the sun, there is little excuse for any really earnest mother who neglects to equip herself with the necessary information on the subjects taught in the public schools. It is not hard to keep ahead of a child.

Have you used your imagination in thinking out how you may best present the subject to enlist Johnny's interest and co-operation?—If not, you have not the slightest idea as to how much you may accomplish in this way.

—But everything of this kind has been patiently and skilfully tried, and Johnny still balks.

Here but one conclusion is possible: Either Johnny has a scatter-brained head or an obstreperous will. And so comes up the question of discipline, one of the hardest that teachers and parents have to face.

"When all else fails, welcome haws."—When all else fails, welcome compulsion. Johnny has balked at every trial. He refuses to study his lessons; he refuses to do anything he is told, for that matter. Probably he was spoiled to begin with; he was let drift into shiftless and wilful ways; he was not "begun upon" soon enough,—the fact remains, he is a balker now and something has to be done.

In such cases, punishment of some kind—deprivation of some privilege, perhaps. In a few isolated cases, actual whipping—may have to be resorted to, but it should be wisely exercised.

Try reason first. Do not demand anything unreasonable. Do not insist on blind obedience,—but insist, in the end, on absolute obedience. Occasionally the child must be taught that he has to do a few things that he does not like to do. He must, indeed, grasp this truth if he is ever to develop a "backbone" instead of a wishbone,—as a noted Ontario educator is accustomed to say.

Do not punish a child when you are in a temper yourself. If you do, you are only likely to make an exhibition of yourself, to forfeit his respect for you, and harm his character. He should always be made to feel that punishment is a grave and deliberate thing, only resorted to in an extreme case, and as an inevitable result of misdemeanor. "Effect must follow cause,"—the sooner he realizes this truth the better.

Punishment, too, should be severe enough to be effective, and to be seldom needed. It should never become a joke.

Above all things, avoid the too-common practice of threatening, threatening, threatening, and never carrying out a single threat. Very soon the child, unless he is an absolute stupid, sees through that and presumes upon it. "Oh, mamma, you know you'll not do it," said a little girl recently, and many a thousand other children have said the same thing, or thought it. Children so treated invariably "do as they like," and cause endless confusion and trouble. Moreover, they are sharp to notice the discrepancy between word and deed, and quick to lose confidence in the parent's word. It is rather difficult, too, for the child-mind to differentiate between such laxness and actual lying. Clearly, for the sake of her own reputation and standing in her home, the mother should have strict regard for the absolute carrying out of her promises. If she is too tender-hearted to execute, then she should not threaten.

To conclude, if you have a child who really tries hard to study, but cannot apparently get along fast, do not be hard with him. Be patient. Take the will for the deed, and do not impress it upon him that you are disappointed in him, and that you think he is a good-for-nothing. Do not take the heart out of him, and kill the few smouldering sparks of interest and ambition that he may possess. Don't you know that your boy's case may be but one of those spoken of among educators as cases of "retarded development"? At fourteen or fifteen he may make a start that may surprise you. Many a man who has attained eminence—it is only necessary to mention Montaigne as an example—began thus slowly.

Be more painstaking and patient with this child than with the others,—if possible more kind and gentle. His condition is not his fault.

Try to find out if he has a real aptitude for anything. It may be that he is really and permanently dull and slow intellectually in most things, but that he has a strong bent and genius for some one thing. Try to find out if this is so. If you succeed in finding the hidden talent, then you may be jubilant, for you may have discovered that which, when encouraged, may transform your boy.

No matter what he is now, remember: "A youth should always be regarded with respect. How do we know that his future may not be superior to our present,"—a saying well worthy of being smoked in the pipes of most grown-ups. JUNIA.

(To be continued.)

The Summer's Tan.

I saw a statement the other day to the effect that by far the bulk of the letters sent to the largest Chicago newspaper are from women asking for beauty recipes. I don't know whether country girls and women are as interested as city women in acquiring the arts of beauty or not, but I imagine they are not, because, perhaps, they have found so many other things to be interested in. I know this, that comparatively few letters asking for beauty hints come to this paper,—perhaps, once or twice in a year, an innocent little letter or two, modestly asking what will remove tan or freckles.

At the same time, country folk, while not prepared to go to the extremes resorted to by people of fashion, desire to make the best appearance they can, and so, with this in mind, I had a chat with the chemist of a large institution the other day, and asked him a few questions. He has analyzed many of the beauty remedies so highly recommended in advertisements, and says that the most of them are almost totally useless, made of cheap materials, and sold at a

It's easy to keep cool if you drink

"SALADA"

Iced Tea. It will quickly remove that drowsy feeling.

Allow the tea to steep for five minutes and then pour off into another vessel to cool gradually. Never use artificial means of cooling until ready to serve; then add sugar, ice and lemon.



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Advertisement for St. Lawrence Sugar, showing three types of sugar (Fine Grain, Medium Grain, Coarse Grain) and their respective benefits and prices.

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REV. J. J. HARE, PH.D., Principal.

The "Right" Start Spells "Success"

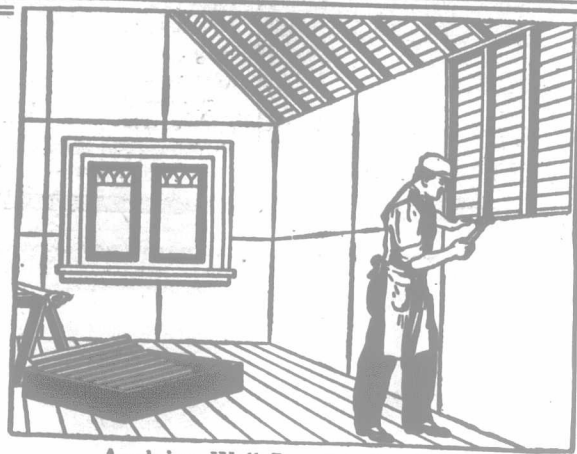
Give your boy an opportunity of acquiring a college education under proper conditions. We emphasize the conditions governing education because they are far more important than the education in itself.

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is a Christian college home as well as an educational institution of national importance. It offers Intellectual, Manual and Physical training—all conducted with a thoroughness and an efficiency very beneficial to the student. The climate and situation of the college are both ideal. The buildings are substantial—the class-rooms and dormitories cheerful, well lighted and comfortable.

Write the Principal for Calendar. College re-opens Sept. 2nd.

A. T. MacNeill, B.A.
Woodstock College Woodstock, Ont.



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For a Better House—At Lower Cost—In a Month Less Time—Use

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Bishopric Wall Board is made in sheets 4 x 4 feet by imbedding dressed laths, under 500-lbs. pressure, in one side of a sheet of hot Asphalt-Mastic and surfacing the other side with sized fibre-board. It comes to you in crates of 16 sheets, ready to nail on the wall, and any handy man can put it on in far less time than skilled workmen can apply lath and plaster.

Bishopric Wall Board goes on DRY, so that you can move into the house the day it is finished, without weeks of waiting for it to set and dry.

On account of the lath (and Bishopric is the only Wall Board made with lath) it makes a flat, rigid, substantial wall. On account of the patented Asphalt-Mastic it makes a moisture-proof, rat and vermin proof, fire-resisting wall, warm in winter and cool in summer. On account of the surface of sized fibre-board it makes a wall that is easily painted or papered.

The first cost of Bishopric Wall Board is less than that of lath and plaster—it never falls off, so costs nothing for repairs—and it saves on the fuel bills every winter.

If you are building or remodelling, write us—a post card will do—it will bring you information of real dollars-and-cents value. Address Dept. "L 13."
Working Plan for Bishopric Model Home—Send six cents to cover cost of mailing to our office in Ottawa, and we will send you architectural plan for building, etc.

BISHOPRIC WALL BOARD CO., LIMITED
Room 44, Canada Life Building. OTTAWA, ONTARIO.

perfectly ridiculous profit.—Now, please don't write asking information in regard to any specific preparation, because I can't give it to you.

There are, however, many simple remedies which people may resort to, to make themselves "better looking." Perhaps the most efficacious of these is the daily bath. "People who want to have a good complexion," said a very beautiful woman to me once, "should take a bath every day, and wash their feet twice a day." As a supplement to this, the hair must be washed at least once a month—some hair requires washing twice a month—to keep it soft and fluffy. Clean soft water should always be used for the face and hands; indeed, for the whole bath; if possible, and always for the hair. The face should always be rinsed once, and the hair at least twice, in clear, soft water, without soap.—One more point,—none but a very mild soap should ever be used on either skin or hair. Pure Castile is as good as any for face and hands, and tar soap for the hair. As a rule, avoid highly scented soaps of any kind, especially if cheap; the perfume is usually added to cover up the odor of inferior grease, etc., used in making the soap.

Anyone who lives on a farm has two invaluable beauty aids in buttermilk and cucumber juice, either of which may safely be applied as frequently as desired, the buttermilk mixed with lemon juice. Both will help to remove tan, while pure sweet cream will soothe and heal red, "angry" sunburn.

No better whitener for the hands is known than pure glycerine in various mixtures: glycerine and lemon juice; glycerine and rose-water, with a few drops of carbolic acid, citric acid, or tincture of benzoin added; even glycerine and buttermilk.

If the skin is very dry, any of the good cold creams sold in the drug store may be found of benefit. The best plan is to find one that suits the skin, and keep to it.

After all, however, good health and pleasant thoughts are the best beauty-nostrum. It is impossible to look one's best if ill or over-tired. Of course, one may often keep from becoming ill by paying strict attention to the conditions upon which good health depends—pure air, good food, rest, exercise, plenty of sleep, plenty of pure cold water to drink,—but when all personal care fails, a physician's help may be necessary to re-instate the robust strength which alone can create clear, healthy color, and bright eyes.

Have you ever thought, too, what a beauty-aid becoming clothing is? Of course we all make mistakes at times,—we all get things that we "just hate" in two weeks' time,—but perhaps this is because of our fondness for venturing on new and, it may be, unbecoming colors. It might be well for the most of us to observe a little what colors, shapes of hats, etc., are most becoming to us, then keep to those, even though we may long to launch out on something else. My own Waterloo is hats.—I don't get a hat that I like more than once in a "blue moon"—but perhaps that is because I haven't time to "look" much. I have come to the conclusion that every woman who can possibly do so, should absolutely squander time whenever she buys a hat. Nothing else seems to count for so much.

Well, with it all, the most of us can't be beauties. At most, we can only hope to "make the best of ourselves," but even that is worth something. As a very good man said, one day, "We should all strive to look our best for the sake of our friends."
JUNIA.

P. S.—I have just been thinking of a few men I have seen who were very careless about their teeth and nails. If there is such a one in your house, make him a present of a tooth-brush and nail-file. Before six weeks, if he is the right kind, he will be feeling quite advanced beyond the "fellows" who do not own such things.

LETTER FROM "PANSY."

Dear Junia,—Your kind reply to my letter was certainly a great help to me. Your suggestions are good, and I am trying some. Since writing to you I have been very ill, over-doing, the doctor said, and am only able to do a little each day now. But I have a good girl

at present, and life seems more worth living.

I have oilcloth on dining-room and two bedrooms down-stairs, and have always done as you suggest about the ironing.

"Floe's" letter, of Bruce County, was just what I needed, and many thanks to her as well as yourself, dear Junia. Your columns are certainly a great help to us poor mothers.

I have just read Forget-me-not's letter in this week's issue, and am glad to know there is one farmer's wife ("who hasn't always lived on a farm") who is entirely "at home" on the farm. I did not intend for anyone to think I had never raised chickens or turkeys, for I have raised large flocks of both, and this year have fifty chicks, but I cannot say that they delight me as Forget-me-not's do her.

My home is about twelve miles north of Lake Ontario, and twenty-five east of Cobourg.

Hoping to hear again from some of the Ingle Nook friends, I will close with a few recipes that may be a help to someone.

Rhubarb Jam.—Cut into pieces about an inch long. Put a pound of syrup to every pound of rhubarb, and leave till morning; pour the syrup from it and boil till it thickens, then add the rhubarb and boil gently fifteen minutes. Put up as you do currant jelly, in tumblers. It will keep good a year.

Gooseberry Jam.—Take what quantity you please of ripe gooseberries; take half the quantity of lump sugar, break them well, and boil both together for half an hour, or more, if necessary. Put into jars and cover with paper.

Floating Island.—One tumbler currant jelly, 1 pint powdered sugar, 5 eggs. Beat whites stiff before putting in jelly; then beat well. Add sugar gradually, and beat stiff. Chill it on ice, and serve in a glass dish half filled with cold milk. Cover it with the "island" in spoonfuls standing in peaks. It is to be eaten with cream.

Northumberland Co., Ont.

A BEWILDERED ONE.

Dear Junia,—I have seen so many denunciations of perfect housekeepers and women who were hard workers, lately, that I am bewildered. I have also been haunted by a sentence that appeared in one of the Ingle Nook letters some time ago, where the writer said, "That the worst thing she could wish a man would be that he would marry a woman who kept the big books on the little books, and always had the meals on time." This seemed to me, a struggling beginner, a delightful state of affairs. Please tell me just how far you think a woman of this type is wrong.
M. H.

Dear M. H., I am perfectly delighted that you wrote this letter, only please do not use the word "denunciations." Everyone must act according as she sees clearly herself, and far be it from any of us to "denounce" anyone else, no matter what she thinks or does in regard to such matters. The articles which you have been reading, no doubt in other papers as well as ours, have merely been expressions of opinion on the part of some who have come to see a few things in a—to them—very clear light. All may not, of course, see "at one" with them.

Now, the whole question resolves itself into this: "Shall a woman be a home-maker or wholly a housekeeper?"

It is quite easy to resolve to be wholly a housekeeper. One has just to decide to spend every ounce of energy and time in housekeeping in the old-fashioned way. For example, here is the house furnished, as were those of our grandmothers, with tacked-down carpets, furniture upholstered in velours, and a multitude of hangings and bric-a-brac,—little vases and baskets, and ornaments of all kinds. Moreover, it is likely to be a very inconvenient house to work in. Everything must be done with the greatest possible number of steps, and the equipment in utensils for working is just of the old-fashioned order—pots and pans enough to squeeze along with, but little more.

Now let us begin. Every inch of this house must be kept in immaculate order, and that means much scrubbing with a scrubbing-brush, on one's knees (for the floor isn't painted), and much sweeping with a broom, and much dusting with

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A BOON

for which every woman afflicted with an abnormal growth of hair on the face, neck and arms will give deep, if silent, thanks.

We have four expert operators who are busy most of the time removing

Superfluous Hair

permanently, not for a few days only, but forever, by our reliable and anti-septic method of Electrolysis. Don't cut or pull the hairs or spend good money on worthless depilatories that will increase the growth, but have the hairs properly removed by Canada's premier dermatologists, who assure satisfactory results in each and every case. Twenty years of success. Arrange to come during summer if you live out of town.

Moles, Warts, Red Veins, etc., also permanently destroyed. Booklet "F" mailed free on request.

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State age, color, exact height in inches, sire and dam's sire, and whether registered in Canadian, Scotch or American Stud books; lowest price.
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nicely-ironed dust-cloths. There is incessant "wiping up," too, for, beside the dish-washing three times a day, the separator things have to be washed and scalded twice a day, and all this must be done in the kitchen, because there is neither porch nor dairy. And that kitchen stove, how hard it is to keep it glittering, but then in an old-fashioned kitchen of this kind it must be kept so, for it has always been the fashion in the family to keep the kitchen looking like a little "sitting-room."

Wash-day is, of course, a dread, for there is no cistern, and water has to be carried from the rain-barrels and from the pump, and then the old-fashioned way of washing, two rubbings on the board, and a boil, is so tedious. But, after all, wash-day is nothing to ironing-day, for there are so many things to iron, stockings, and tea-towels, and frilled petticoats, and light-colored work aprons, and dainty dresses for the children,—they do look so lovely in "light."

And then the cooking and baking. John loves cakes and pies and rich puddings, and preserved fruit. We have never used raw fruit, nor salads, so everything has to be cooked and sealed.

And so the days go. There really isn't any time to read much of what is going on in the world, because every minute is taken up with housekeeping. . . There isn't time to keep in touch with literature and art. Sometimes when people come who are interested in those things, it is a little awkward not to be able to talk about them, but it can't be helped. . . There isn't time to teach the children anything. . . We couldn't go to that picnic on Monday because that was wash-day. . . Nor for that long drive with John on Friday because that was sweeping-day. . . Ah, well. . .

One day the house is sold and into it comes a modern woman, a "new woman"—that isn't a nice word now because it has been so travestied, but unquestionably the really modern woman IS new.

She takes in the whole situation at a glance. She sets her brains to work. . . Zip! Whirr!—up go shelves here, on goes a cupboard there, in goes a cistern, and at the back door appears a broad porch,—homemade, maybe, but none the less effective. A pulley clothes-line makes its appearance next, and presto! steps have been lessened by half.

Paint goes on the kitchen floor,—perhaps only yellow ochre, linseed oil, and turpentine,—which is cheap. Rugs are thrown down in the other rooms instead of carpets, and the floor-borders around are painted—there will be no worry of taking out tacks, then tacking and stretching at next house-cleaning. In comes the furniture—no velours—a number of pieces of wicker, though, and plain wooden chairs and tables of good design, but with no carving, and, so, easy to dust. You will note that there is very little bric-a-brac,—very little dusting of this kind will be needed—but the two or three good pictures on the wall, and two or three fine jardinières and rose-bowls, somehow seem to make up for all the little ornaments and photo-frames. There are sash-curtains, too, no draperies to drag around the floor and get dirty.

Watch the kitchen equipment as it is unpacked,—a good washing-machine and wringer, a self-wringing mop of best pattern, a dustless broom and duster, a bread-mixer, an ironing-board, and ever so many other work-savers.

"I'd rather have a kitchen well supplied than a parlor finely furnished," says the lady, "but then, you know, we really never have a parlor. We just have a living-room, and you don't need so many grand things for a living-room. We put the extras into the kitchen and into books.

"Know how to save work?—You may bank upon it that I do! I've STUDIED the matter. We live out of doors chiefly in hot weather. At our last place we had a screened back veranda where we just lived all summer. We worked out there, sat out there, and ate out there—had an old cupboard fixed up near to hold the dishes, and an old stove in the back shed for cooking on. You've no idea how much work it all saved. You see we were never in the house to muck it up. The veranda was a double-decker, too, so we all slept on the upper deck,—had cotton partitions

to divide it off at night, you see. We'll have this one fixed the same before long.

"Oh, no, I don't fuss much over rich pastry, but I do have well-balanced meals. I've studied that, too.—That fruit garden is going to be a treasure.—Strawberries, raspberries, red currants, plums,—why, we'll have fresh raw fruit from June till October. . . Yes, I have a fireless cooker, a good one; it's so nice when I want a half-day off. I haven't an oil-stove yet, but I shall have one next year if I have to go without a new gown to get it.—Don't I see it in my dreams!—a three-burner, blue-flame one, with a detachable oven!

"Don't I find the ironing hard?—To tell the truth, I don't iron so very much. We haven't many furbelows, and I just "drain" quite a few things straight. I put strips of oilcloth over the table-cloth, too, under the children's plates.

"You see, I like to have time to go to the woods with the children, quite often. We take books along, and have tea there, and John likes it as well as any of us. We use paper and green leaves for plates for most of the things, and so much dish-washing is saved. . . Oh, we're a happy lot, on the whole. We try to really live as we go.

"Yes, we all read a great deal, and we study together as much as we can. The boys like studying with us about birds and flowers and insects and farming. In winter we read travel, and stories, and history. We all enjoy it."

So, now, M. H., has your bewilderment vanished at all? Do you see the difference between housekeeper and homemaker? Madame Home-maker, you must recognize, keeps things just as sweet and clean as does Madame Housekeeper, but she goes about it differently, that is all. By refusing to become a slave to routine, by using her "head" and exercising a little ingenuity, she saves time for the most important thing, happy, healthful and intelligent living.

I should like very much to have other opinions on this subject.—J.

To Drive Away Ants.

I have been asked more than once this season how to banish ants, and have recommended the carbon bisulphide and sugared sponge methods. Here is another just received from the University Extension Press of the University of Minnesota.

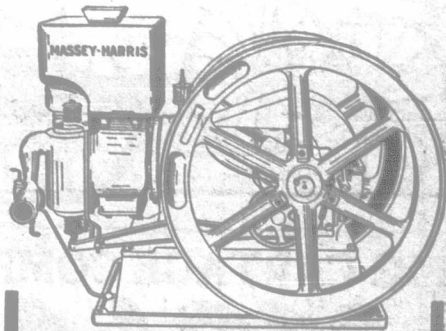
"The following is a tried and true recipe for driving away ants of all kinds: Equal parts of tartar emetic and sugar. Mix dry, then moisten with water to the consistency of syrup, and put on a dish in the runway of the ants. They will eat very freely of it and fail to return for a long time, or perhaps for the season. The dish may be set away when dry. When again needed add water and a little more sugar, and it is ready for use. The one dish may be used several times. Great care should be observed in order that children do not get at the tartar-emetic preparation, as it is poisonous."

Keeping Food in Summer.

The Department of Agriculture at Washington, D. C., recently issued the following practical suggestions in regard to keeping food and drink in hot weather, with a view to helping the public to avoid sickness from eating spoiled articles of diet:

"While people should be careful about the condition of the food they eat at all seasons of the year, they should be particularly watchful during the summer months. In hot weather, bacteria multiply far more rapidly than in cold weather, and produce chemical changes in some foods which greatly lessen their nutritive value, and often make them unfit for human consumption. Unfortunately, there is no quick, absolute, simple, practical way of determining the presence of furtful bacilli in foods, or of obtaining positive evidence of the existence of ptomaines. The average family does not have the delicate apparatus needed for these tests, nor the skill to detect these micro-organisms.

"The housewife will find eyes and nose the safest practical detectives of bad food in hot weather. If any article has any suspicion of an unusual odor or looks abnormal, it should be avoided.



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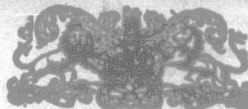
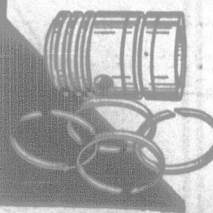
THEY are always ready in all kinds of weather, Winter or Summer, and they not only develop their full rated horsepower, but they do it on the least possible consumption of gasoline—for every gallon of gasoline you use, the Engine gives you all the power the gasoline is capable of developing.

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MAIL CONTRACT

SEALED TENDERS ADDRESSED TO the Postmaster-General, will be received at Ottawa until noon, on Friday, the 15th August, 1913, for the conveyance of His Majesty's Mails on a proposed contract for four years, six times per week, over Rural Mail Route from Granton (South-west) (Middlesex, N. R.), Ontario, from the Postmaster-General's pleasure.

Printed notices containing further information as to conditions of proposed contract may be seen, and blank forms of Tender may be obtained, at the Post Office of Granton, and at the Office of the Post-office Inspector at London.

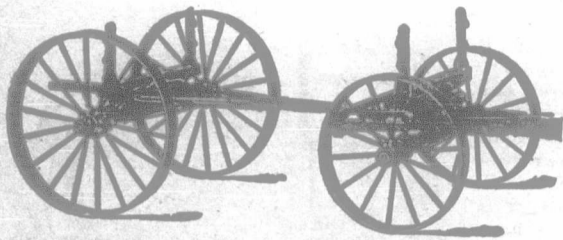
G. C. ANDERSON,
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Post Office Department,
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Ottawa, July 8rd, 1913.



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Dear Sirs—I have much pleasure in recommending your "MOLASSINE MEAL" which has been used by this Company for several years with good results.
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Swish! Biff! BANG! Another Milk Pail Gone To Grass

DON'T blame the cow when the flies are holding a convention on her hide. She can't stand still with every nerve on edge and every muscle braced to resist. Under such circumstances you are lucky to get half the usual quantity of milk, for she simply will not let it down unless she's comfortable.

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will drive away the flies and keep them off. It is safe, sure and easy to use. Does not taint the milk or cause the hair to mat. Used on horses, cows and hogs, it prevents ill-nature and ensures perfect health during the trying summer season.

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send 10c to cover postage, wrapping, etc., and we will mail you Pratts "Pointers on Cows, Hogs and Sheep"—172 pages—or "Pointers on Horses"—163 pages—both books for 20c. Use the coupon.

Coupon "B. 1"

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BEST RESULTS ARE OBTAINED FROM ADVOCATE ADVERTISEMENTS.

People eating in doubtful restaurants should be particularly careful about meats or fish cooked with a highly-spiced or aromatic sauce which might disguise a bad taste or warning odor. Only sweet-smelling, clean food, should be eaten. Spotted, green, slimy, or frothy raw meat, or meat which is soft in spots, also should be regarded with suspicion. Taste, of course, is a supplementary test, but one to be used after eyes, nose and fingers. A mother, before she allows her child to eat anything, should examine it carefully in a good light, smell it, and finally taste it.

"Milk particularly deteriorates rapidly under summer heat, especially if it already contains bacteria. Housewives, therefore, should see to it that their milk does not stand for any length of time on a hot, back porch or stoop, before it is put in the ice-box. Milk bottles should be kept closed, both in the ice-box and out of it. If there is any doubt at all as to the excellence of the local milk supply, pasteurize all milk.

"All foods should be kept covered or wrapped, and always out of the reach of flies, which are deadly carriers of typhoid. All vessels, pitchers, etc., in which food is to be stored should first be scalded. Food should be handled as little as possible. The ice-box, especially its drain-pipe, should be cleaned thoroughly and frequently with boiling water and washing soda, and given an occasional airing. A persistent battle should be waged against flies in all parts of the home.

"Uncooked foods as a general proposition should be avoided. Children should not be allowed to eat the skins of fruits, especially fruits which have been exposed to flies or street dirt on un-screened stands or push-carts.

"Those who go away for vacation should not get the idea that everything in a summer resort or strange city is necessarily pure and wholesome. The danger of typhoid fever in country resorts is very great. Many of the cases of typhoid fever recorded in the fall in cities where the water is pure, had their origin in water or contaminated substances drunk or eaten at some summer resort. Insist on boiled water. If you absolutely cannot get boiled water, make very sure about the reputation of springs, wells, or tap water. Refuse absolutely to take any water that comes from a source near an outhouse or stable, or in a neighborhood where fever is at all prevalent.

"Boiled water can be made just as palatable as unboiled water. The flat taste which boiled water has soon after it has been boiled is due to the fact that boiling drives out of it the air which it held in solution. If the water, after boiling, is put in scalded, shallow, open pans, and allowed to stand for 24 hours where flies or dirt cannot get at it, it will regain its air, and have its usual taste restored by the second day.

"Finally, it is particularly important in summer that people should not be misled into believing that the label, 'Guaranteed under the Food and Drugs Act,' on cans and packages, means that the Government has tested these foods and pronounced them pure and desirable. The Government does not make the guarantee. The guarantee is made wholly by the manufacturer, and means no more than when your own corner grocer guarantees that the sugar he weighs out for you is all right. Examine goods labeled 'guaranteed' just as carefully as any other kind."

Drinks, Ices and Custards for Hot Weather.

Mulled Buttermilk.—Heat 5 cups buttermilk. When it comes to a boil, stir in 1 tablespoon flour rubbed smooth with half a tablespoon of buttermilk. Stir the one way, and keep boiling until cooked. Set on ice to cool, and serve with sugar and cinnamon. A good harvest-field drink.

Soda Water.—Take three quarts of water, boil it, and allow it to grow cold. Beat up the whites of two eggs. Take one and a half pounds of loaf sugar and two ounces of tartaric acid. Mix all these with the water, and add one and a half teaspoonfuls of essence of lemon. Mix all well, and bottle the liquid for use. For a drink, put two tablespoonfuls in a tumblerful of cold

water with a quarter of a teaspoonful of carbonate of soda, which latter will make it effervesce.

Raspberry Ice.—Sprinkle 1 quart berries with 1 cup sugar, cover, and let stand 2 hours. Squeeze through cheesecloth, add 1 cup water and enough lemon juice to flavor, then put into a mould to freeze, making a freezing mixture of 3 parts ice to only one of powdered rock-salt.

Macaroon Ice Cream.—Put 2 dozen stale macaroons or 1 dozen stale cookies through the food-chopper. Now add 1 cup sugar to 1 pint sweet, double cream, and whip until it is stiff. Beat in another third cupful of sugar and the powdered macaroons, turn into a covered mould and leave three hours to freeze. This needs no stirring, and the mould may be placed in any tight, wooden box, if one has not an ice-cream pail. Pound the ice fine in a stout-cotton bag, and mix it with one-third as much salt. Leave the moulds in the ice to chill a few minutes before packing, then rinse with cold water before putting the macaroon mixture in.

Fruit Parfait.—One pint double cream and 2 tablespoons or more of sugar, whipped stiff. Add 1 cup fruit pulp of any kind, and, if you like, a few drops of almond extract. Freeze as above.

Cold Banana Pudding.—Blend 2½ table-spoons cornstarch in a little milk and pour into 2 cups boiling milk. Cook for eight minutes, stirring all the time. Let cool. Slice 2 bananas into a glass dish, sprinkle with 1 tablespoon sugar, juice of a lemon, and one-half of the rind grated. When the custard is cool, pour it over this mixture, and when set, sprinkle over with sugar and serve with cream. Any kind of soft, raw fruit, or cooked fruit, may be used instead of the bananas.

Raspberry Sponge.—Soak ½ a package of gelatine for 2 hours in ½ cup water. Mash 1 quart of the berries and add to them ½ cup sugar. Boil another ½ cup sugar with 1 cup water for 20 minutes. Add the gelatine to the water, and remove from the fire at once, then add the berries. Place all in a pan of very cold water, ice-water, if possible, and beat 5 minutes. Add the beaten whites of 4 eggs, and beat until the mixture begins to thicken. Pour into moulds, and set away to harden. Serve with sugar and cream.

Iced Tea.—Make a pot of tea in the morning as follows: Pour a pint of fresh boiling water slowly on 3 heaping teaspoons of tea, cover tightly, and set on the back of the range, or anywhere where it will not boil, for three minutes, then pour off and set on ice. When wanted, add a little more water, and serve in glasses with a slice of lemon, and sugar to taste.

When You Don't Like Meat.

People who have to work hard should have meat at least once a day, even in hot weather. It is a valuable food, rich in protein, which is needed for the up-building of the body, and, if there is a repugnance to hot meat, cold meat, temptingly served, should be provided. If, however, owing to some personal idiosyncrasy, one simply cannot abide the sight of meat in any form, one should take care to make good the deficiency, as far as possible, by the use of other foods also rich in protein, cheese, milk, eggs, beans, nuts, etc. It should be remembered that mixtures of these foods lose nothing in value. Custard, for instance, is a very valuable food, containing, as it does, both milk and eggs. Those who do not care for plain custard may make all sorts of permutations and combinations of it by the addition of fruit. Other suggestions are gelatine jellies to which nuts have been added, salads with eggs and nuts, bean salads, and cheese and potato mixtures. Lentils are particularly nutritious. They are not very expensive, resemble split peas somewhat, and may be bought at any good grocery store.

The following recipes may be suggestive:

Lentil Croquettes.—Wash 2 cups lentils and soak them over night. In the morning drain and set on the stove well covered with fresh boiling water. Cook for an hour, and drain again if necessary. Mash through a sieve and add 2

tablespoons cream, 1 tablespoon chopped parsley, 1 teaspoon onion juice, and salt and pepper to season. Mix well and form into croquettes. Dip each in beaten egg, then in breadcrumbs, and fry. Serve with tomato sauce.

Cheese Croquettes.—Melt 3 tablespoons butter and stir in $\frac{1}{2}$ cup flour. When it begins to thicken, pour in $\frac{1}{2}$ cup milk, and cook till thick. Cool slightly and add yolks of 2 or 3 eggs. Mix all well, and then stir in 1 cup or more of grated cheese. Stir over the fire, and remove just as soon as the cheese is melted. Add salt, white pepper, and a dash of cayenne. Pour into a pan in a thick layer and put in the ice-box. When ready to fry, cut into cubes, roll in crumbs, then in egg, and again in crumbs, and fry at once.

Cheese Fondue.—Butter a baking-dish and pile in it, log-cabin fashion, strips of bread which have been thinly buttered. Sprinkle all thickly with grated cheese. Measure enough milk to cover the bread, and add to it one or more eggs, according to quantity needed—an egg to a cup of milk is a good proportion. Pour the mixture over the bread, and bake in a moderate oven. Cook slowly. All cheese dishes need slow cooking.

Cheese Souffle.—Make a sauce by mixing 2 tablespoons butter with 3 of flour, and cooking in $\frac{1}{2}$ cup milk. Season with salt and cayenne. When partly cool, add yolks of 3 eggs well beaten. Add $\frac{1}{2}$ lb. cheese cut into small cubes. Beat the whites of the eggs until stiff, then fold into the mixture. Pour into a buttered baking-dish, and either bake for $\frac{1}{2}$ hour in a slow oven, or cook over hot water for one hour.

Potatoes and Cheese.—Mash 6 or 8 hot potatoes, add pepper and salt to taste, 1 small cup milk, 1 dessertspoon butter, and $\frac{1}{2}$ cup grated cheese. Mix well, put into a greased earthen dish, sprinkle another $\frac{1}{2}$ cup grated cheese over the top, and brown in the oven.

Lentil Soup.—Wash 1 lb. lentils well in several waters. Put 2 dessertspoons dripping into a stewpan, and when smoking hot add 3 onions, sliced, and brown them. Add the lentils, also 3 large potatoes, 1 large carrot, and $\frac{1}{2}$ a small turnip cut into bits, also $\frac{1}{2}$ teaspoon sugar, and a bit of celery if you have it. Pour in $1\frac{1}{2}$ quarts cold water and boil all for 2 $\frac{1}{2}$ hours, stirring from time to time. When the lentils are quite soft, rub the soup through a colander, adding a little boiling water if necessary. Re-heat, season, and serve with biscuits or bits of buttered bread toasted in the oven. Split peas or beans, previously well soaked, may be used instead of the lentils.

The Scrap Bag.

CANNING VEGETABLES.

String beans, carrots, and young beets, may be canned in sealers as follows: Cook first exactly as though for the table, then put in sterilized jars and proceed according to the directions given for canning peas in a recent issue.

DRIED PEAS.

Shell young peas and throw into a kettle of boiling water. Boil rapidly two minutes, drain, and spread in a thin layer on granite pans. Dry in a moderate oven, shaking the peas often, pack in boxes lined with waxed paper, and keep in a dry place. Soak at least one hour before using. —Pictorial Review.

SOFTENING WATER.

Sometimes during summer the soft water becomes exhausted, and how to do laundry work with hard water becomes a problem. Geo. W. Walker, of the University Farm, St. Paul, gives the following method for softening it: Add $\frac{1}{2}$ lb. quick-lime to 125 gallons hard water. If still too hard, add a little washing soda.

The professor was delivering the final lecture of the term. He dwelt with much emphasis on the fact that each student should devote all the intervening times preparing for the final examination.

"The examination papers are now in the hands of the printer. Are there any questions to be asked?"

Silence prevailed. Suddenly a voice from the rear inquired:

"Who's the printer?"

Extensive Clearing Sale of Used Cars

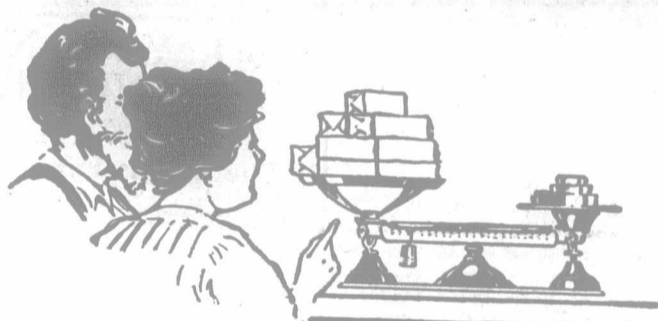
Must be cleared out by August 1st---the end of our year.
No reasonable offer refused.

The cars offered were taken as part payment on new Knight Models. They are in good repair, with first-class equipment.

1. A FULL LINE OF HIGH-CLASS CARS for pleasure, to be sold at a sacrifice. Particularly suitable for farm and country service—an excellent opportunity to own a high-grade car at a very low price.
2. ALSO SEVERAL COMMERCIAL TRUCKS of 1,500 lbs. capacity, in splendid shape. Excellent for conveying produce to market, and will soon earn their cost and more by speedy deliveries.
3. TWO AUTOMOBILE ENGINES, 4-cylinder. Suitable for motor boats.

All must be sold before August 1st, as this stock cannot be carried into next year. Full description and prices sent on request.

RUSSELL MOTOR CAR COMPANY, Limited
100 Richmond Street West, Toronto



That's better!

It pays, for sure, to keep Cows in a clean Stable. Give them clean stalls and lots of pure air, which they need just as much as pure water and good food, and they will give more milk, more cream, more butter.

19

Canadian Potato Machinery Co., Limited, GALT, ONT.

O.K. CANADIAN STALLS AND STANCHIONS

Our little book "The Proper Housing of Cows" will be sent free to Dairy Farmers. Write for it to-day.

THE PREMIER CREAM SEPARATOR



Three points to consider when purchasing a cream separator:

**Efficiency
Simplicity
Durability**

In these particulars, as in many others, the PREMIER is vastly superior. A free trial will prove to you its many advantages.

Write for further particulars to:

THE PREMIER CREAM SEPARATOR CO.
St. John, N.B. Toronto, Ont. Winnipeg, Man.

BEST RESULTS ARE OBTAINED FROM ADVOCATE ADVERTISEMENTS.

News of the Week.

CANADIAN.

"Agriculture" is to be added, as an optional bonus subject to the curriculum of studies for Ontario High Schools and Collegiate Institutes. Each institution will be required to have a plot of ground for experiment and demonstration.

The Methodists of Canada are undertaking to establish a chain of educational moving-picture theaters across Canada.

One hundred and seventy-one children, under five years, died in Montreal during the past week. The causes of such mortality, as listed by a physician of the city, were improper feeding, unsanitary dwellings, and the ignorance of parents.

Estimates just completed show that the damage to Northern Ontario forests during the recent fires is much less than was feared.

Explorer Stefansson's ship, the Kariak, reached Nome, Alaska, on July 10th.

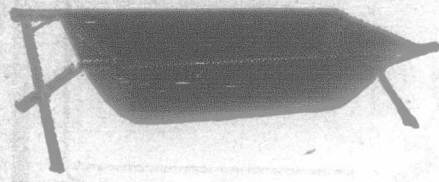
BRITISH AND FOREIGN.

After two weeks of strenuous fighting against the Greeks and Servians, the Bulgarians are anxious for peace, and have appealed to the Powers to arrange it.

Gossip.

The firm of Hodgkinson & Tisdale, Beaverton, Ont., write under date of July 11th: "We have just received word from E. C. H. Tisdale, who has been in France the past month, that he has finished buying his stallions, and is busy looking up some mares. He reports that he has five aged stallions weighing over 2,100 lbs. each, and two two-year-olds that beat the ton, besides a number of useful horses ranging in weight from 1,850 to 2,000 lbs. Among the lot are three Paris prizewinners. These horses will be shipped from France on July 24th, and will all be shown at the Toronto Exhibition this season. This shipment is considered to be far the best lot of Percherons that have ever been bought in France for shipment to Canada."

A Boon to the Country Home



CAN you think of anything more refreshing or satisfying after a hard day's work in the field than a bath? Thousands of Country homes are now enjoying this privilege through our Folding Bath Tub, and we want you to do so. This bath tub is 5ft. long, 2ft. wide, 18 inches deep (inside measurements), and weighs only 15 pounds. Each tub carries a guarantee for 5 years.

Price, delivered anywhere in Ontario \$7.50, and after a fair trial, if you are not perfectly satisfied, return at our expense, and your money will be cheerfully refunded.

Folding Bath Tub Co., Ltd.
Gananoque - Ont.

"1900" Gravity Washer

sent free for one month's trial. Write for particulars.

1900 WASHER COMPANY
357 Yonge St. Toronto, Ont.

COLUMBIA DOUBLE DISC RECORDS

DOUBLE VALUE FOR YOUR MONEY



Condensed advertisements will be inserted under this heading at three cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties desiring good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisements inserted for less than 50 cents.

TWO hundred yearling S. C. White Leghorns (Cyphers' bred-to-lay stock) for sale cheap, to make room. C. S. Wilson, Tambling's Cors., London, Ont.

WANTED—Poultry man who thoroughly understands running incubators, dressing and general care of poultry for private place. Must be Protestant and temperate. Married man with not more than two children, one of which is old enough to assist with poultry. House on plant to live in. Apply to Box 436, Cobourg, Ont.



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

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

ALL kinds of farms. Fruit farms a specialty. W. B. Calder, Grimsby, Ont.

FOR SALE—Sable and white Collie puppies. Males only. \$4 each, ship at 6 weeks, July 31, from working strain. George Bilton, Hagersville, Ontario.

FOR SALE—Three quarter sections, 3 miles from Melita, Man; good buildings, beautiful location on Souris River; ideal mixed farm, the farm of the future. Owner is 62 years of age, has lost his wife and only daughter; not to sell cheap and on good terms. For particulars, apply I. T. Lennox, Melita, Manitoba.

FARM FOR SALE—212 acres rich clay; 190 under good cultivation; balance bush and pasture. Barn 60x90, cement foundation; cement pigery and henery; cattle-shed outside; Straight fences; commodious 11-room brick house, furnace; two acres orchard; plenty hard and soft water. Situated along side of a good town, population 1,200, high and public schools and churches; 1/2 mile from G. T. R. station. Apply, Drawer 276, Bradford.

HELPFUL literature for Bible students free on application. Secy. International Bible Students' Association, 59 Alloway Ave., Winnipeg.

POSITION wanted as farm manager; Canadian; married, capable, reliable, energetic. Good wages wanted. Write: Box 480, Brampton, Ont.

WE will pay you \$120 to distribute religious literature in your community. Sixty days work. Experience not required. Man or woman. Opportunity for promotion. Spare time may be used. The International Bible Press Co., 180 Spadina Ave., Toronto.

WANTED—Thoroughly capable working farm foreman. Must understand feeding and caring for dairy stock and mixed farming in general and be a good milker; also be of good moral habits. Apply to Edwin A. Wells, Edenbank Farm, Sardis, B. C.

Improved Yorkshires bred from prize-winning stock. This is a good time to start the hog business. Have a choice lot of the true bacon type. Write for prices. JOHN KENNEDY & SON Agincourt, Ont.

Good Roads Pay for Themselves.

The direct effect that changing bad roads into good roads has upon land value, and the general economic welfare of a community, is shown in several concrete illustrations gathered by the U. S. Department of Agriculture. The Department has just issued a statement on the subject, based upon a mass of information gathered by the Office of Public Roads, which is making a special study of the economic effect of road improvement in the country. According to data gathered, where good roads replace bad ones, the values of farm lands bordering on the roads increase to such an extent that the cost of road improvement is equalized, if not exceeded. The general land values, as well as farm values, show marked advances, following the improvement of roads.

Among the illustrations cited by the Department are the following:

In Lee County, Virginia, a farmer owned 100 acres between Ben Hur and Jonesville, which he offered to sell for \$1,800. In 1908 this road was improved, and, although the farmer fought the improvement, he has since refused \$3,000 for his farm. Along this same road, a tract of 188 acres was supposed to have been sold for \$6,000. The purchaser refused the contract, however, and the owner threatened to sue him. After the road improvement, and without any improvement upon the land, the same farm was sold to the original purchaser for \$9,000.

In Jackson County, Alabama, the people voted a bond issue of \$250,000 for road improvement, and improved 24 per cent. of the roads. The census of 1900 gives the value of all farm lands in Jackson County at \$4.90 per acre. The selling value at that time was from \$6 to \$15 per acre. The census of 1910 places the value of all farm lands in Jackson County at \$9.79 per acre, and the selling price is now from \$15 to \$25 per acre. Actual figures of increased value following road improvement are shown.

As the roads in no way affect soil fertility or quality of the farm, advances are due essentially to the decrease in the cost of hauling produce to market or shipping point. Farms are now regarded as plants for the business of farming, and any reduction in their profits through unnecessarily heavy costs for hauling on bad roads, naturally reduces their capitalization into values. With reduced costs for hauling, profits are increased; with the result that the farm plant shows satisfactory earnings on a higher capital value.

The automobile also has begun to be an important factor in increasing rural values where good roads are introduced. Immigration is particularly marked where road conditions are favorable; in fact, the figures of the Department seem to indicate that good roads indirectly increase the demand for rural property; and the price of farm land, like that of any commodity, is ruled by its relations between demand and supply.

Gossip.

HAMILTON'S FALL IMPORTATION OF PERCHERONS.

R. Hamilton & Co., of Simcoe, Ont., wrote us, under date of June 30th, from France, where they had been for the last ten days, having nearly finished buying their fall importation of Percheron stallions. They are well pleased with their success in securing a number of very large three- and four-year-old horses. Several of them will weigh over a ton, and have just come off the stands from making the season, and their new owners are satisfied that these horses will finish around 2,100 pounds. They have a number of beautiful-colored dapple-gray horses of different ages, also some good blacks, and feel safe in saying that no better lot ever crossed the Atlantic for Canada. Some of the horses were prizewinners at the great Paris Show, and several were well up in the big country shows. Messrs. Hamilton expected to sail on July 5th, and to have their horses home between the 15th and 20th of July, ready for inspection by all interested in the Percheron horse. There are several types, and prices and terms will be made satisfactory.

"The crops in France look very well,"

FOR YOU—The more important consideration may not be the College course, but the **CONDITIONS** under which your daughter pursues it. There are in Canada a number of good Colleges for young Ladies.

You are respectfully requested to consider the advantages offered by

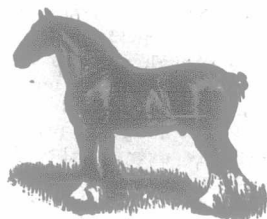
Alma (Ladies) College

A CHRISTIAN HOME as well as an educational institution of real merit. MORAL and PHYSICAL training combined with INTELLECTUAL development. Individual instruction in chosen course by experienced educators. Climate invigorating—large campus—collegiate buildings. Social care, expert health lectures, physical culture system markedly effective.

WRITE FOR PROSPECTUS TO
Principal Robert I. Warner, M.A., D.D., ST. THOMAS, ONTARIO

I will again arrive in London during the middle of August with a very select shipment of

CLYDESDALE FILLIES and one or two STALLIONS



These will either be sold privately or by auction as arranged and advertised later. This shipment will rank among the best to Canada this year and has been picked up throughout Scotland by myself, and I have paid great attention to the wants of Ontario farmers namely: size combined with quality and good blood. Anyone wishing any particular kind of animal would do me a favour to drop me a line on the appearance of this ad, and I will attend to their wants on a small commission.

Ben. Finlayson

Throok, Stirling

Scotland

DO YOU NEED FURNITURE?

Write for our large photo-illustrated Catalogue No. 7—it's free to you.

The Adams Furniture Co. Limited. TORONTO, ONT.

Cream Wanted

We guarantee highest Toronto prices, full weight and prompt returns. Our 15 years' experience ensures satisfaction. We furnish cream cans and pay express charges. Write: Toronto Creamery Company, Limited Toronto, Ontario

HORSE AND CATTLE INSURANCE

Against Death by Accident or Disease
Specialties of Stallions, In-foal Mares, Track Horses, Transit, etc. Liberal policy issued by a Company operating under Federal Insurance Department's supervision.

WRITE FOR FREE BOOKLET
The General Animals Insurance Company of Canada
Head Office: 71a St. James Street, Montreal, Que.

If you want value for your money insist on

Rice's Pure Salt

Best for table, dairy and general use.

North American Chemical Co., Ltd., Clinton, Ontario

Milk Wanted

For milk route in Windsor.

WALTER N. KNIGHT
20 Aylmer Ave. Windsor, Ont.

GINSENG

For the season of 1913 we are offering one-year-old roots, two-year-old roots, stratified seeds and new seeds at greatly reduced prices. Write for Price List.

I. E. YORK & Co., Waterford, Ont.

they say, "and in some sections they are now cutting wheat, which promises to turn out well. The weather during June was rather on the cool order, with plenty of rain. "We trust," they add in conclusion, "that all interested in the Percheron horse will try to make us a visit when we land, and look over our stock, which we think will surprise them in quality and size."

Questions and Answers.

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

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In Veterinary questions; the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

Eczema.

Have horse with bad attack of eczema. Please give remedy. H. P. N.

Ans.—Purge with 10 drams aloes and 2 drams ginger. Follow up with 1 1/2 ounces Fowler's Solution of Arsenic, twice daily, every alternate week for four weeks. Wash well with warm soft-water soapsuds, and rub a little of the following lotion well into the affected parts twice daily, viz.: Corrosive sublimate, 40 grains to a quart of water. Feed on grass or first-class hay, rolled oats and bran, with a little linseed meal daily. Give regular exercise. High feeding must be avoided on account of the skin trouble. Don't feed corn, wheat, or barley.

Trade Topic.

BLOW OUT THAT OLD STUMP.—How many times more will you be content to plow around, disk around, harrow around, drill around, reap around, mow around, rake around, drive around, and walk around, that tough old stump in the lower field? There is a first-class, easy, and very effectual way of getting rid of such stumps at a moderate cost, at the same time securing a quantity of rough wood for sap-boiling, threshing, or silo-filling. Stumping powder will do it, and make a clean job. Write Canadian Explosives, Ltd., Montreal, P. Q., or Victoria, B. C., referring to their advertisement in this paper, and asking for free booklet. Write to-day.

The Best Man—"Who was the best man at the wedding?"
"The minister."
"How was that?"
"He got the only thing worth having—the fee."

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Try this Thirsty Flour

A very thirsty flour. Absorbs a lot of water. Because it contains so much gluten. Manitoba wheat is wonderfully rich in sturdy gluten.

And, think of it, FIVE ROSES is milled exclusively from the very cream of the Manitoba wheat berries.

So FIVE ROSES must be awfully thirsty, don't you see.

In your mixing bowl it greedily absorbs more water.


So you get more loaves than usual without using more flour. You use less.

Your flour lasts longer, doesn't it? Less trips to your dealer's.

That's how FIVE ROSES saves money. Actually saves YOU money.

Use this economical flour.

Five Roses Flour

Not Bleached  Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

Questions and Answers.
Miscellaneous.

Abattoirs.
Being an interested reader of your valuable paper, I thought I would ask you for information on the following questions. I am out from England, and am hired to a farmer here, but will have to find a situation for winter. I am a butcher, and a good slaughterer, and I would like to go to an abattoir or meat-packing firm.

1. Where are the chief abattoirs and packing-houses in Ontario?
2. What are the wages paid to slaughterers or butchers?
3. What is the best time to apply for a situation?

A. H. E.

Ans.—It is ridiculous to ask such questions of a paper. Make personal inquiries and find out for yourself.

Mucilage—Photographing Children at School.

1. How is the gum prepared that is on envelopes and postage stamps? I would like to know this, because it would be handy to paste labels on veterinary preparations.
2. Is it lawful for a photographer to go around to the schools and photograph the children without asking anybody, or must he ask the trustees or the teacher?

S. K.

Ans.—1. We are not in possession of the prescription for making official postage-stamp gum, but would suggest that you buy a five-cent bottle of ordinary mucilage at a drug store or book store.

2. It would be distinctly against the law for him to trespass during school hours for this purpose without the consent of the trustees, but unless for good cause, we hardly think he could be prevented from photographing the children during recess or noon hours.

Nursing Parents.

Subscriber wishes to know if he can put in claim for his wife waiting upon her sick parents, leaving her home to do so. They recover and outlive her. This was done some years ago. Can claim be put in now? The estate has to be settled shortly. Please state length of time back it can be claimed.

C. H. K.

Ans.—We think not successfully. Unless the circumstances are special, it seems very small to entertain such a desire.

Rats.

Can you suggest some way of getting rid of rats? We are overrun with them. They are killing our little chicks and ducklings. They will not eat poisoned meat or bread, and are too wise for traps set in the ordinary way.

R. J. M.

Ans.—Get several good she cats around, female cats being the better workers. Feed them enough new milk to keep them in good condition, and you will soon notice a marked diminution in the rats. Sometimes it pays to hire someone with a ferret to clean them out, and a good terrier often plays havoc among them, but taking one case with another, cats are the best reliance.

Feed and Butter-fat.

Is it possible to force cows to give a richer quality of milk while on grass by feeding bean meal or Swede turnips in the winter months? Can we vary the per cent. of butter-fat in milk very much by the quality of feed we give them?

A READER.

Ans.—No permanent effect upon the percentage of fat in the milk can be accomplished by the selection of any particular kinds of feed, except that very succulent feeds, such as fresh grass, tend (for a time at least) to the pro-

duction of milk with a slightly larger percentage of moisture than normal, and a correspondingly reduced percentage of fat and other solids. On this principle, the use of turnips in winter would tend to reduce, if anything, the percentage of fat in the milk, though by increasing the churnability of the cream, as all succulent feeds tend to do, it might increase the amount of butter made in dairies where imperfect methods of creaming and churning prevail.

An Alfalfa Weed.

Find enclosed a wild plant of which I would like to know the name. I found it in first crop of alfalfa, and it was the only plant of the kind I found in the field, and to me it looks like a bad weed. It must have come in the seed, as it never was on the place or in the neighborhood before that I know of. Please tell me what it is, and the nature of reproduction, and the best means of getting rid of it. Will it grow from the root if the top is cut off? Kindly give me all the information you can about it.

J. C. R.

Ans.—The weed is a European one, the seed of which is sometimes found in alfalfa seed imported from that continent. It belongs to the star-thistle family, and is known as Centaurea calcitrapa, or caltrops. Pull out all specimens found. It is reproduced from the seed.

Gossip.

COUNTRY LIFE AND AGRICULTURE.
There is substantial agreement as to the desirability of having a large percentage of the population living in the country, engaged in agriculture and other rural occupations. Four chief considerations are urged in that behalf:

- (1) Country life contributes to the

virility of the race in body, mind and morals.

(2) Agriculture is a means of creating wealth annually out of the resources of nature without necessary exhaustion of the fertility of the soil. Countries where agriculture is centuries old, such as England, Scotland, France, and Germany, report yields of crops higher on the average per acre than at any previous time in their history.

(3) Successful farming maintains a basis for prosperity in manufacturing, transportation, and other business; and affords stable support to all prudent national undertakings.

(4) The increased cost of living in towns and cities is a pressing problem. A larger production of food in Canada might not at once reduce materially the retail prices; but the further organization of producers and consumers, for doing business closer together, would reduce the amounts which are absorbed during the progress of the food products from the farm to the consumer's table.

The chief forms of satisfaction which any worker seeks to obtain by labor are possession of material things, opportunity for social enjoyments, and pleasure from doing the work itself in addition to the wages or money returns from the product. Whatever enables the rural population to obtain worthy satisfaction in these respects is to be sought for their benefit, and likewise for the advantage of the country as a whole.

Nothing can be done by legislation to compel people to stay in the country, but much may be done by education to cause them to prefer to stay there. The saying: 'Where there is no vision the people perish,' was never truer than at present in its application to the movement from the country and the attenuation of rural life in Canada.—[From the report of the Royal Commission on Industrial Training and Technical Education.]

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ON THE BOX.

Questions and Answers. Miscellaneous.

Liver Complaint—Canker—Roup.

1. Hen, fat, apparently healthy, will suddenly become lame, and comb will, in some cases, droop and turn color. On killing and opening, liver is found to be very much enlarged and spotted, and intestines have small, yellowish balls attached to them.

2. Hen, when noticed first, was holding mouth partly open. On looking at her mouth several yellowish, cheesy scabs were found, which, when scraped off, leave a raw surface. There is a discharge similar to catarrhal roup, and a very bad odor. Are we mistaken in supposing this to be diphtheritic roup?

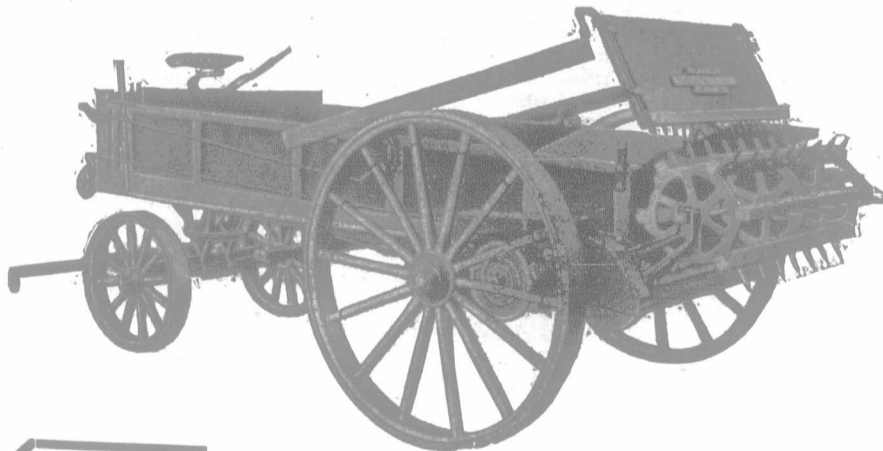
3. Still another hen: One side of head will swell; seems to lose power of eyelids and get dumpish. White foam or matter gathers in eyes. Have not noticed any other discharge. All hens are fed on wheat, oats, barley and corn. They are given coppers to drink in their water occasionally. Will drink water off of the manure rather than come to troughs for drink. Fowl roost in an open shed since first of May. Would like to know as soon as possible as we have lost quite a few hens.

L. A. W.

Ans.—1. Your hen is troubled with liver complaint. Give all the flock a dose of Epsom salts at the rate of 1 lb. to the 100 hens, and the affected birds a Carter's little liver pill.

2. Canker. Take the bird and pick off all the scabs and apply to the sore parts a caustic pencil. In all probability it would be better to kill birds

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Made by oldest manufacturers of Manure Spreaders in the world. Draft one horse lighter than any other Spreader built. Strongest Spreader built.

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BEST RESULTS ARE OBTAINED FROM ADS. IN "ADVOCATE."

badly infected, and watch closely for reappearance of the trouble, and use pencil on your cases. In the meantime disinfect the poultry house, clean out all the dirt, use a 10-per-cent. creolin or carbolic wash, and see that every place is perfectly clean and sweet.

3. Probably a case of severe cold or roup. Kill infected birds, disinfect as in number two, and by keeping hens free from draft, giving them plenty of feed and fresh runs, there should not be any more of this trouble at this time of the year.

F. C. ELFORD.

In-breeding.

Would it be advisable to use for breeding purposes a boar bred from sow and boar of same litter, all being pure-bred?

A. F. C.

Ans.—It might prove, all right, but we would not advise taking the chance.

Highway Allowance.

1. What is the lawful width of a public highway?

2. (a) Will the law allow one half of a rail (worm fence) fence on the road allowance? or (b) has a land-owner to build fence all inside his corner stake, that is to say, all on his own land?

3. Would the owner of a fence outside of corner stakes, say, on road allowance, be liable for damages if an accident should happen on account of fence being placed there?

X. Y. Z.

Ans.—1. It varies. See the Consolidated Municipal Act, 1903 (Ontario Statutes), Chap. 19, and especially Sections 630 and 631. It ranges, ordinarily, from 66 to 100 feet.

2. (a) No. (b) Yes.

3. The Municipal Corporation would probably be liable in the first instance, and have a remedy over against the fence-owner.

Questions and Answers. Veterinary.

Canker, etc.

1. A year ago mare went lame. An examination revealed the frog and heel decayed. It has partially healed occasionally, but always breaks out again.

2. Where can I procure an impreg-nator? F. H.

Ans.—1. All the horn of frog and heel that is partially or wholly detached from the sensitive parts must be removed. Then dress the parts twice daily with 1 part iodoform to 6 parts boracic acid, pack with oakum or aseptic cotton, and put on a beet to keep dirt out. Do this until healthy bone grows.

2. From any dealer in veterinary instruments. Your druggist will get one for you. V.

Luxation of Patella.

Yearling colt, pasturing on rough ground, went lame. When walking, he could not lift feet or fetch it forward. He now walks fairly well, but is not quite right. H. D. K.

Ans.—The patella (stifle bone) became dislocated, and the colt's efforts to move caused a reduction or replacement, but the joint is still weak, and the dislocation is liable to recur. Get a blister made of 1 1/2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces vaseline. Clip the hair off the front and inside of the joint. Tie him so that he cannot bite the parts. Rub well with the blister once daily for two days. On the third day apply sweet oil and turn loose in box stall. Keep quiet, and oil every day until the scale comes off, then tie up and blister again, and if necessary blister the third time a month later. V.

THE LOCK JOINT

IN a Sheath Rod the Copper is put on the outside of the Rod, where the current goes. This is the best practice in building a Lightning Rod. To make a Sheath indestructible it must be waterproof. You don't want water to get inside the sheath and freeze, and bulge the Rod open. The "Lock Joint" is the secret. It locks the Sheath TIGHT SHUT.

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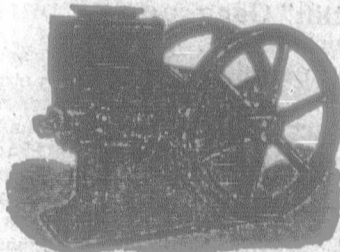
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Miscellaneous.

Ox-eye Daisies—Killing Neighbors' Sheep.

A neighbor on an adjoining farm has his sod fields, also fence bottoms, full of ox-eye daisies, which he allows to go to seed every year. Some parts have been in sod for over ten years, and grow more daisies than grass. We pick the daisies that each year find their way into our field, but as part of his farm is higher than ours, the water washes the seed into our field, and if something is not done to stop their seeding, it will be impossible to keep them from spoiling our farm.

1. Can I compel him to cut the daisies on his farm instead of leaving them to go to seed?

2. Who are the proper authorities to look after such matters?

3. Is a man liable for damages who allows his line fence to get out of repair so that his neighbor's sheep get into his field, and then sets his dog on them and kills some of them? I have had two lambs killed in this way.

Ans.—1. Yes. It is his duty to cut down and destroy all ox-eye daisies, and all other noxious weeds, growing on his land as often in every year as is sufficient to prevent the ripening of their seed, if such cutting and destruction does not involve the destruction of the growing grain. He is liable to a penalty of from \$5 to \$20 for contravention of the foregoing provision of "The Noxious Weeds Act" (Ontario Statutes, 1912, Chap. 68).

2. The Inspector, if any, appointed by the Council of the municipality pursuant to the Act mentioned. But you, yourself, if no such Inspector has been appointed, could prosecute.

3. Yes—for so unlawfully killing the sheep by means of his dog.



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MAKE the crop profitable and you will at the same time increase the value of your farm. If you bring up its productiveness to grow 40 bushels of wheat to the acre your land will be worth twice as much as your neighbor's who doesn't fertilize and therefore grows less than 20 bushels per acre. There is no money in poor crops and run down farms. We furnish many different compositions of plant food, to fit the requirements of all kinds of soil and all conditions.

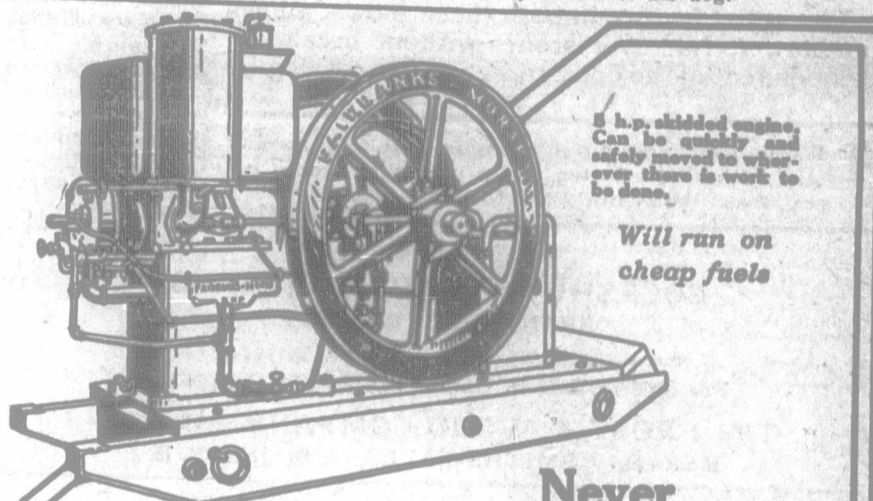
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If all the farmers knew Homestead Fertilizers as they ought to know them not enough could be manufactured to supply the demand.

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Will run on cheap fuels

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Send for this booklet—"49 Uses for a Farm Engine." It is full of valuable information for the farmer, and is free. Fill in the coupon and mail now.

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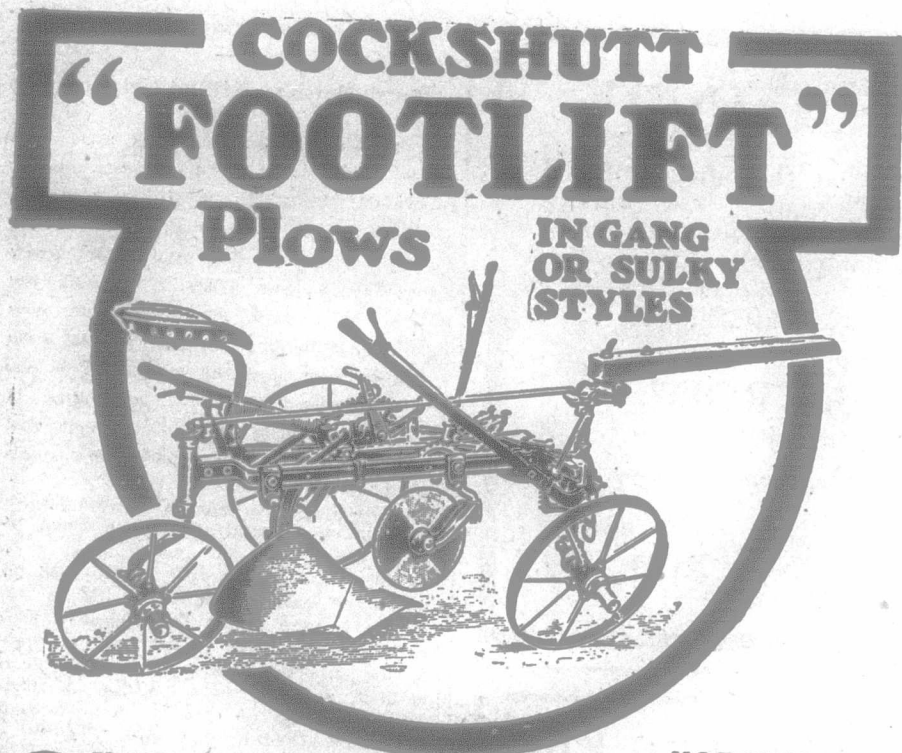


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The relief feature in both these plows, allows the plow to rise over stones without breakage, independent of the operator. See our catalogue.

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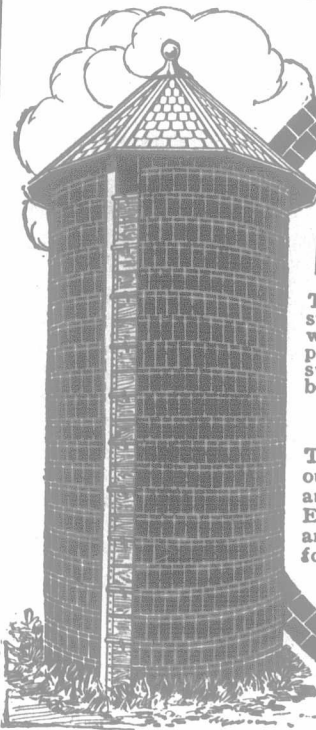
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Book Review.

FARM MANAGEMENT.

Under the simple title, "Farm Management," Prof. G. F. Warren, head of that department in the New York State College of Agriculture, has presented in a recent book published by The Macmillan Company, a fund of information covering 600 pages, arranged under twenty chapters, that might not inaptly be described as an encyclopaedia. A farmer and farm manager himself, with special opportunities for arriving at conclusions regarding the principles and practices of American farming in order to secure the largest continuous profit, Prof. Warren has completed a work that will prove valuable both to farmers and students. Its appearance when so many are disposed to embark in farming with little experience, makes it timely. The first forty chapters discuss the question: "Shall I be a Farmer?" and the book embraces the actual records of a large number of successful farms in New York State where it has been found that the most generally successful farms are those that combine some other cash crops with dairying. In the judgment of the author, farming affords particularly good opportunities for all-round development in those who adopt it as a life work. He also intimates that approximately 300 acres is approaching the limit of the most profitable size of farm, and nearly five times as many of the sons on small farms in the State were found to be leaving them because of the lack of continuous profitable occupation, as in case of the large farms. Prac-



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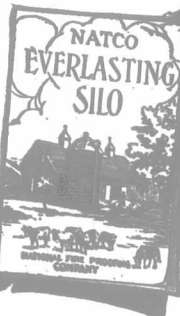
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Professor Van Pelt

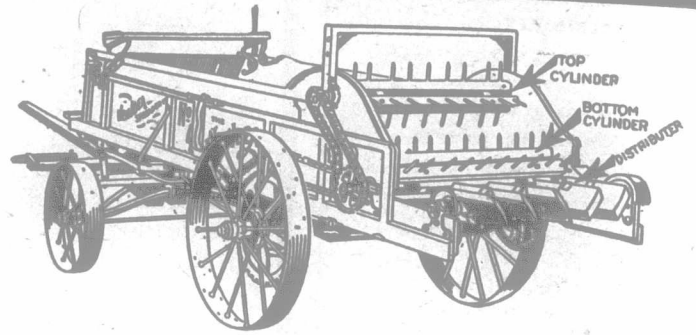
The famous cow judge, has an article in our Silo Book. So has Valancey E. Fuller and other authorities on feeding stock. Every stock owner should get this book and read it. Send for copy today, asking for catalog 6

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comprised of wooden slats. The New Idea has a steel and malleable conveyor. Your spreader has a "nest of gears." The New Idea has a gearless direct chain drive. Your spreader is likely high. The New Idea is low-down. Your spreader is undoubtedly heavy draft. The New Idea is light draft. There are six special reasons why it is lighter draft than any other spreader. Our catalog gives the particulars. Every progressive farmer is welcome to a copy. Write for your copy to-day.

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tically every aspect of farm management, including different types of farming, the layout of farms, labor, keeping farm accounts, is presented in a sensible, practical way, though it is not to be regarded as a "guide book" to success on the farm. Under varying conditions, men must exercise their own judgment and initiative. Postage paid, copies of the book may be obtained through this office, at \$1.95.

Co-operation.


Some weeks ago a movement was begun at Saskatoon to lower the cost of living by bringing producers and consumers closer together and thereby eliminating the middleman.

A recent report says that fifty farmers, representing all sections of the Province, formed a Farmers' Co-operative Society. The society's purpose is the purchase of binder twine and other agricultural supplies at the lowest possible cost, and to remove, as far as possible, the profits taken by the middleman. Hon. W. C. Sutherland was elected president. The society speedily got into action, and accepted a manufacturer's tender for a large supply of binder twine, of which there was a shortage last season. Tenders have been also called for coal, flour, barbed wire, and other farm necessities.

Inventor (at quick-lunch counter)—Eureka! The perfect auto tire at last. Give me the receipt for these doughnuts—they're puncture-proof.

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I will go anywhere in Canada to castrate ridglings, horses and old stallions. Write for price and circulars.
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Questions and Answers. Miscellaneous.

Cows Chew Bones.

Whenever my cows come near an old bone or piece of rotten wood, they pick it up and chew at it. They get plenty of salt, and good water and grass, and seem to be in a good, healthy condition. Are milking well.
 M. J. M.
 Ans.—See reply to similar question by J. H. M., page 1245, issue July 10th.

Hens Ailing

Hens' combs have turned black, and they have stopped laying. Have been feeding oats and buckwheat. The building is well, ventilated and dry. Can you tell me the cause, and how to treat the infected hens? Only four out of a flock of sixty have the disease.

SUBSCRIBER.

Ans.—There are many diseases which cause hens' combs to turn dark. Give the hens free range. Isolate diseased birds. If very thin and weak, destroy them. Disinfect the pens and runs. Give the poultry plenty of opportunity to get green feed, and give skim milk or buttermilk to drink.

Working Hours.

I am a German, and I beg you to tell me how it is about the working time in the Province of Quebec. I hired a man for twenty dollars per month. Now he is going to work only ten hours per day, although it is the custom here to work from 5 a. m. to 7 p. m., and in the haying still longer. How much time is a man, hired without an agreement, obliged to work per day?
 A GERMAN SUBSCRIBER.

Quebec.
 Ans.—There is no well-settled rule, excepting that if the custom you mention is a well-established one, the parties would be legally taken to have included it in their contract—nothing, having been stipulated to the contrary.

Possibly Eczema.

I have a mare that has a kind of itch: she rubs herself raw sometimes. I have washed her with _____, but it is of no use. I think it must be in her blood. What could I do to cure her? She gets grass when not working. She rubs the hair in her tail out quite often.
 H. W.

Ans.—This is either eczema or lice. In either case it will be better to clip her, then give a thorough scrubbing with warm soap suds and rub with cloths until dry. Then dress, once daily, until the itchiness ceases, with a warm solution of corrosive sublimate 1 1/2 drams to a gallon of water. Purge her with eight drams aloes and two drams ginger. Follow up with one ounce Fowler's Solution of Arsenic night and morning for two weeks; then cease a week and repeat if necessary.

Gossip.

Agriculturally, the exhibition held at Lethbridge, Alta., June 24 to 28, was a great success, notwithstanding the fact that threatening clouds and a rainfall of over three and a half inches did their best to mar proceedings. Crowds were not large, but exhibits were good, and with a clear sky and a return of Old Sol from his hiding on the last day of the show, a success was recorded. Horse classes were not too strong, Clydesdales furnishing the most competitors, but quality was outstanding in Shires, Percherons, and Belgians as well. Scotland's Time won the championship in Clydesdale stallions for A. L. Dollar, High River, Alta., who took the major portion of the money offered for the breed. A. C. Shakerley, of Pekisko, Alta., made a strong showing of Shires; Jos. F. Suys, Wetaskiwin, Alta., showed some exceptionally high-class Belgians; C. J. Eckstrom, Lethbridge, had forward a typical Suffolk-Punch, and J. C. Drewry's great string of Percherons creditably upheld the honor of the breed, his great stallion, Jureur, and his typical mare, Flossy, being much admired, along with the rest of his good things.

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 We have for sale, Scotch- and English-bred Shorthorns. A few bulls of improved breeding on big milking lines; also other pure Scotch and heifers of both breed lines.
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Cobalt, Ont., May 9th, 1913.
Troy Chemical Co., Toronto, Ont.:
Dear Sirs,—Enclosed two dollars—send to me at once one bottle, with directions, for..... etc., etc.

I have just used your Spavin Remedy on a bone spavin, and received good results.

Yours truly, J. F. PRESLEY.

Never mind past failures. Don't rest satisfied until you learn about Save-the-Horse. Write, and we will send—BOOK—Sample Contract and Advice—ALL FREE to (Horse Owners and Managers—Only).

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a big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Stifle, Knee or Throat.



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Good size, to lease for \$50.00 per year. For particulars, apply to
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In Shire stallions and fillies, from the best studs in England, we are offering some rare animals at rare prices. Scotch Shorthorns of either sex or age, of highest breeding and quality. John Gardhouse & Son, Highfield, Ont. L.-D. Phone

Aberdeen-Angus of Show Form and Quality. For this season my offering in young bulls and heifers, are toppers, every one. Show-ring form and quality and bred from show-winners. T. B. BROAD-FOOT, Fergus, Ont., G.T.R. and C.P.R.

CEDARDALE SHORTHORNS
All bulls sold out some time ago, but have still several fine heifers and good cows for sale of rare value, Scotch-bred and of good individual type. Heifers in calf and being bred to our superior stock bull. DR. T. S. SPROULE, Markdale, Ont.

Clover Dell Shorthorns—Bargains in both sexes, especially the yearling bull Humber Mac = \$7668 = Ivanhoe (imp.) at head of herd.
L. A. WAKELY, Bolton, Ont.

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NONE SO EASY

Questions and Answers.
Miscellaneous.

Mites.

I would like to know what would banish mites on fowl, and also in henhouse. I have used cleanliness. The henhouse is a new one; clay floor; cement foundation. The upper part is a frame structure, tar papered on inside and shingled on outside. I feed birds twice a day on buckwheat and oats mixed, and mash and lots of sweet milk and water. I have lost several. They are heavy and fat.

W. E. T.

Ans.—Whitewash the premises as outlined in answer to J. S., in this issue, and use insect powder on the birds.

Green Manuring with Buckwheat—Depth of Plowing.

1. What effect would it have on a 30-acre farm of light soil if it were broken and sown to buckwheat, to plow under, for two successive years? Would it add much to the fertility of the soil, and would it be a difficult crop to plow under? I should imagine that the vines would clog on the coulter. How much should be sown to the acre?

2. Would you advise plowing light land deep or shallow, and about how many inches?

3. Is it advisable to roll light land?

R. D. R.

Ans.—Buckwheat is not nearly so good a crop to enrich the land as peas or clover, but probably you could not grow these. Plowing under buckwheat would put into the soil nothing of value but what it had taken from it, though it would improve the physical condition and increase the organic matter, and the available fertility. We should hardly advise plowing under two successive crops of green manure for fear of souring the soil. Sow three pecks to a bushel per acre for green-manuring purposes on poor soil. With a sharp colter and a chain, you should have no special difficulty in turning under the buckwheat likely to grow on a poor piece of land.

2. Not too deeply, unless there is good soil beneath. About five inches is usually right.

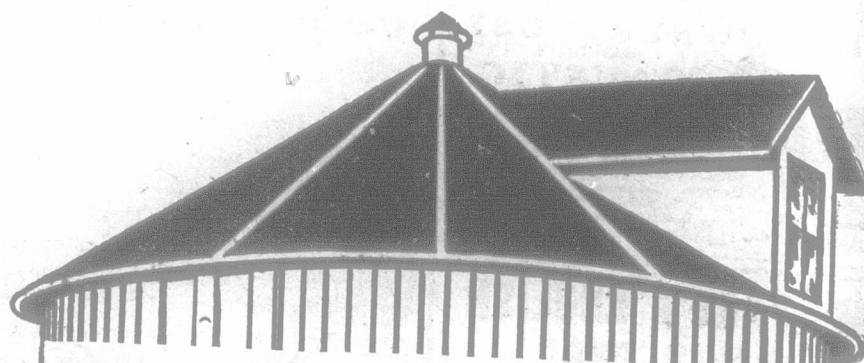
3. In many cases, yes.

Hens Have Tuberculosis.

My hens have tuberculosis as described in last week's "Advocate," but I cannot plow up yards or treat as you advised, as I have been keeping them under the barn with other stock, and they have the liberty of the sheds belonging to the whole barn. Do you think there is any danger of their affecting the other animals? You speak of using a disinfectant. Please tell me what is the best thing, and just how to use it in cleaning up a big barn and stone stable, with sheds and yards which must be used by other stock. Also, please tell me if it would be really necessary for me to stop keeping hens altogether to get rid of the disease, and for how long? Also, give the best way to get rid of lice and vermin on poultry. Also, if you think ducks and turkeys would take the disease from the hens?

J. S.

Ans.—It is not likely that the disease will affect the other animals. It might attack other birds on the farm. For a wash for the stables, take one-half bushel of lime, slake with boiling water, make into a milk, and then strain through a fine sieve. Add to this a peck of salt dissolved in warm water, three pounds of rice boiled to a paste and stirred in while hot; half a pound of Spanish whiting, and one pound of glue previously dissolved in a gluepot over a slow fire. To this mixture add five gallons of hot water, stir it in well, cover, and let stand for a few days. This mixture is best applied hot, and a pint will cover a square yard. To this may be added 1 part of carbolic acid to 500 of the mixture. This will, if properly applied, rid the place of vermin. Dust the birds with a proprietary insect powder advertised in these columns. It would likely pay you to get rid of all your hens, thoroughly disinfect your pen and premises, and restock with healthy stock next spring. Of course, if only a few of the birds are affected, by killing and destroying them, and cleaning up the premises as advised and placing the hens outside on a new run for the summer, good results might follow.



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5 bulls from 8 to 15 months—3 roans and 2 reds. Females of all ages. 11 imported mares—4 with foals by their side, 5 three-year-olds, and 2 two-year-olds; all of the choicest breeding. Catalogue of Clydesdales mailed on application.

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I STILL HAVE FOUR YOUNG BULLS FOR SALE AND MORE COMING ON. Several heifers that are bred right and that will make great cows; some of them in calf now to my great breeding sire, Superb Sultana—75413—perhaps the greatest son of the great Whitehall Sultan—55049—that was imported by me and used so long in Mr. Harding's herd. I sell nothing but high-class cattle, but the price is within the reach of all. A few Clydesdales, Shropshires and Cotswolds always on offer. Local and Long Distance Telephone.

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MEADOW LAWN SHORTHORNS OF RICHEST AND MOST FASHION-ABLE SCOTCH BREEDING, and of high-class type and condition. I can supply young bulls and heifers—Glares, Roan Ladys, Mildreds, Stamfords, etc. L.-D.-Phone F. W. EWING, R. R. No. 1, ELORA, ONTARIO.

5 Shorthorn Bulls 5—We have for sale at moderate prices 5 Scotch Shorthorn bulls, including one of our herd bulls also a number of high-class heifers and heifer calves.

A. J. HOWDEN & CO., COLUMBUS, ONT.
Myrtle G. T. R. & C. P. R. Long-distance phone

SHORTHORNS—Records show that cattle bought from the Salem herd won numerous ribbons the past season; we have others. Several young bulls are priced reasonably.

Springhurst Shorthorns Four of the first-prize Shorthorns at the late Guelph Show, including the champion and grand champion fat heifer, were all sired by bulls of my breeding. I have now for sale ten young herd heads of this champion-producing breeding. HARRY SMITH, HAY P. O., ONT. Exeter Station. Long-distance Telephone.

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There is no case so old or bad that we will not guarantee Fleming's Spavin and Ringbone Paste to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of Fleming's Vest-Pocket Veterinary Adviser. Fifty-six pages of veterinary information, with special attention to the treatment of blemishes. Durable bound, indexed and illustrated. Make a right beginning by sending for this book. FLEMING BROS., Chemists, 75 Church Street, Toronto, Ont.

Shorthorns, Cotswolds, Berkshires

In Shorthorns, am offering a number of cows and young calves. In Cotswolds, have a lot of extra good lambs coming on for fall trade. Nothing to offer at present in Berkshires.

CHAS. E. BONNYCASTLE
P.O. and Station, Campbellford, Ontario

Spring Valley Shorthorns

A few of the best young bull prospects we ever had. They will please you. Will sell females too. Visit the herd; we think we can suit you. Particulars on application.

KYLE BROS. - RR. No. 1, Drumbo, Ont.

SHORTHORNS!

Bulls of useful age all sold. Would appreciate your enquiry for females. Catalogue and list of young animals.

N. Cargill & Son, Cargill, Ont.

Oakland - 50 Shorthorns - Dual Purpose. Red Baron - 81845 - is for sale. He is one of our stock bulls, three-year-old, and of an excellent milking family; also a good one 20 months; both red in color; good cattle and no big prices.

JNO. ELDER & SON, Hensall, Ont.
P.S. - Scotch Grey = 72692 = still heads the herd.

The Manor Shorthorns

No bulls, except calves, for sale. Have ten of those, from 7 months to a few days. Also heifers got by, and cows in calf to, one of the good bulls of the breed. Inspection solicited.

J. T. GIBSON, --- Denfield, Ont.

Spruce Lodge Shorthorns & Leicesters Present offering: Young bulls and heifers from grand milking dams. Also a choice lot of Leicester rams and ewe lambs, and ewes of all ages bred to imp. rams. W. A. Douglas, Tuscarora, Ont.

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The Maples HOLSTEIN Herd

Headed by Prince Aaggie Mechthilde. For sale at present: Choice bull calves, from Record of Merit dams with records up to 20-lbs. butter in 7 days. All sired by our own herd bull. Prices reasonable.

WALBURN RIVERS, FOLDENS, ONT.

Glenwood Stock Farm 2 YEARLING BULLS FOR SALE, out of big milking strains; at low figure for quick sale. THOS. B. CARLAW & SON, WARKWORTH, ONT. Campbellford Station.

DON JERSEY HERD Offers young bulls and heifers bred to Eminent Royal Fern. D. DUNCAN, DON, ONTARIO. Phone L.-D. Agincourt. Duncan Stn., C. N. R.

High-class Ayrshires - If you are wanting a young bull out of a 50-lb.-a-day and over cow, imported or Canadian-bred dam or sire, write me. Females all ages. Prices are easy. D. A. MACFARLANE, Kelso, Que.

Dungannon Ayrshires - For high-class sell mature cows, heifers, heifer calves, and one 4 mos. old bull calf; also the unbeaten stock bull, Chief of Dungannon 27159, and Yorkshires. W. H. FURBER, Cobourg, Ont. L.-D. Phone.

Questions and Answers. Miscellaneous.

Horse Hard to Hold.

I have an imported Clydesdale filly which has a strong mouth. We have been using a straight bit, but I know if she should get frightened at anything I would be unable to hold her, and I would like if you would tell us what sort of bit would be best to use. Of course, I want one that would be comfortable on her while working.

YOUNG BREEDER.

Ans. - Get a double-ringed bit, or if she is very hard to hold, a double-twisted, hinged, wire bit.

Witholding Pedigrees.

Would you kindly advise me what action to take in the following case? Last February I bought a cow and calf at a combination sale of pure-bred cattle. I settled for them the same evening. They were shipped to me, and I got them in fair condition the second day after the sale. Then, some weeks after, I wrote the manager for my certificates and transfers. He sent my letter on to the party who contributed them to the sale. They each wrote me a letter, which was satisfactory for the time, but sent no papers. Since then I have written, alternately, twice to each of the above parties. The manager answers in a gentlemanly way, but the contributor has ignored me. As an advertiser, I am unable to sell them as registered cattle, which I might have done in the meantime; as it is, they only stand for me as beef cattle. Your esteemed advice will be gratefully accepted.

OLD SUBSCRIBER.

Ans. - We would advise that you again write, asking that the certificates of registration and transfers be forwarded to you at once. If they do not then come to hand, notify the consigner of the stock and the manager of the sale that unless they are received before a certain reasonable date, legal action will be taken to adjust the matter. The consigner can be sued in the Division Court for damages for breach of contract. If the consigner is a member of a breed association, the matter may be taken up by the association, and he may be expelled for conduct prejudicial to the interests of the association if he fails to produce certificates and transfers.

Poultry Queries.

1. Have a cellar which has a strong odor of mice, often being whitewashed. What can I do to remedy this? I cannot make it airtight to disinfect.
 2. How many eggs should a hen lay in a year to pay for her keep?
 3. For scaly leg, I used a wash of strong, hot suds, followed by an application of coal oil. Is this too severe, or what is the best remedy, and does scaly leg injure the fowl for table use?
 4. Is water on bread injurious to turkeys or other young birds?
 5. How often in the day should young fowls be fed?
 6. Send cure for corns. D. M.
- Ans. - 1. Use some commercial deodorizer, several of which are advertised in these columns.
2. This depends largely upon care, feed, and housing. About five or six dozen, at ruling prices, should cover cost of feed, with eggs selling at 25 cents per dozen. It costs somewhere from 10 cents to 13 cents per month to feed a hen. Of course, where the hens have free range on a farm, and pick up a great deal of food which would otherwise go to waste, the cost would not be so high.
3. Kerosene is never as satisfactory as to wash the legs well in soap and water, using a good, stiff brush to brush it in, then grease with lard and sulphur, a teaspoonful of sulphur to a teaspoonful of lard. One thorough washing, and two or three applications of the grease, say, two weeks apart, should remove the trouble. It will probably take from one to two months before the scales return to normal conditions. The trouble is caused by a mite under the scales, and further than to injure the appearance of the birds affected, does not injure them for table use.
4. We don't see how it could be.
5. Three or four times daily at first, lessening the number as the birds grow older.
6. Get some corn plaster.



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How much of your fertile land is occupied and wasted by stumps and boulders. Why not blast them with CXL STUMPING POWDER

The cheapest, quickest, best method known to-day for clearing land. Write at once for our Free Booklet.

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LAKEVIEW HOLSTEINS

Herd headed by Count Hengerveld Payne De Kol, by Pieterje Hengerveld's Count De Kol out of Grace Payne 2nd. He has 12 daughters already in the Record of Merit, and many more to follow. Junior sire - Dutchland Colantha Sir Mona, by Colantha Johanna Lad out of Mona Pauline de Kol (27.15 butter) the dam of one daughter over 30-lbs. and one over 27-lbs. also the dam of the World's champion junior three-year-old for milk production. A few bull calves for sale.

FAIRVIEW FARMS HERD

REMEMBER: - Pontiac Korndyke sired the bull that sired the new 44-pound cow. Do you want a sire to use that has such transmitting ability? If so secure a son of Pontiac Korndyke, or Rag Apple Korndyke 8th, the strongest bred Korndyke bull in the world.

SUMMER HILL HERD OF HOLSTEIN CATTLE

Do you realize that you must have another servicable bull soon? Better go down to Hamilton right away and see those well-bred fellows with high official backing, that you can buy well worth the money from

D. C. FLATT & SON, R. R. No. 2, Hamilton, Ont. 'phone 2471.

Holsteins Fine 2- and 3-years heifers, bred; also a few YORKSHIRE PIGS, ready to wean.

A. WATSON & SONS, ST. THOMAS, Ontario. L. D. 'PHONE FINGAL VIA ST. THOMAS.

Come and Inspect, or write, should you want stock that are great producers in milk and high percentage of butter-fat, combined along with show-ring conformation. No bulls of any age for sale at present.

Oxford Co., G. T. R. M. L. HALEY & M. H. HALEY, Springfield, Ont.

Evergreen Stock Farm High-class Registered Holsteins

For sale: A few choice young bull calves and females, all ages; good enough for foundation stock. A. E. HULET, Norwich, Ontario.

BRAMPTON JERSEYS

The spring trade is on; we are doing the largest business we ever did, chiefly with our old customers; young bulls and heifers from sires with tested daughters. Several imported cows and bulls for sale. Canada's Greatest Jersey Herd. B. H. Bull & Son, Brampton, Ont.

City View Herd of Record of Performance AYRSHIRES

One two-year-old, one yearling, one calf, males only, for sale, from R. O. P. cows, and sired by bulls from R. O. P. dams. Eggs from R. C. and S. C. R. I. Reds, 75 cents per 15 after June 15.

R. R. No. 1 JAMES BEGG & SON, ST. THOMAS, ONT.

Stonehouse Ayrshires

Of choicest imported stock and with imp. sires and dams. I am offering young cows, 3, 4, and 5 years of age; a grand bunch of imp. yearling heifers, and a particularly good pair of young bulls. L.-D. 'Phone. HECTOR GORDON, Howick, Que.

75 Hillcrest Ayrshires

Our Ayrshires are selected and bred for big production, and show-ring quality. Many of the heifers we are offering are grand-daughters of the two Ex-World's Champions, Jean Armour, Rec. 20176 lbs., and Primrose of Tanglewyld, Rec. 16195 lbs. F. H. HARRIS, Moss, Egin P. O., & S. S.

Ayrshires and Yorkshires

Bulls for service, of different ages; females all ages. Calves of both sexes. All bred for production and type. A few pigs of either sex ready to ship. ALEX HUME & CO., MENIE P. O., ONT.

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Winnipeg, Manitoba.

Farnham Oxfords and Hampshires

Our present offering is a number of superior OXFORD DOWN YEARLING AND RAM LAMBS for flock headers, by our imported Royal winning rams. Also ninety field rams and eighty ewes, either by imported sires or g. sires imported. Also fifteen yearling HAMPSHIRE ewes.

HENRY ARKELL & SON,
Phone Guelph 240-2. ARKELL, ONT.

Alloway Lodge Stock Farm

ABERDEEN-ANGUS CATTLE
SOUTHDOWN SHEEP

Now is the time to select your sire for use this fall. The first choice is guaranteed to those ordering now. Send for circular and prices to

ROBT. McEWEN, Byron, Ontario
R. R. Sta. and Tel., London.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, Buena Vista Farm, Harristown, Ont.

There was a sound of revelry by night. The Bloggses were giving a party.

Mr. Bloggs had just obliged with the touching ballad, "Tis Love That Makes the World Go Round," and Master Bloggs seized the opportunity to sneak behind a screen with his father's pipe.

Shortly afterwards it was observed that the boy wasn't well. His face was pallid and his eyes stood out.

Cried Mrs. Bloggs: "Goodness, child, what's the matter? I do believe you have been smoking."

Willie feebly shook his head. "Taint that, ma," he replied, untruthfully. "If it's true what father's been singing about, I—I—must be in love."

"Before marriage I used to sit up until midnight wishing he would go home."

"Yes?"

"Yes, and since we are married I sit up until midnight wishing that he would come home."

YOUR WIFE WILL

appreciate it when you bring home a can of SNAP. For cleaning her hands, after filling the lamps, milking the cows, peeling the potatoes and onions, there is nothing to equal

SNAP

It leaves the skin smooth and soft. Order from your dealer to-day.

Snap Company, Limited, Montreal.



Questions and Answers. Miscellaneous.

Foal Stifled—Skim Milk for Mare.

1. I have a foal about two months old, and I just noticed last week that it is stifled. Its stifle slips out and in at times, and is a little puffed out at the front, about the size of your hand, and is quite soft, as though there might be matter in it, but is not sure, nor is she lame when walking. Sometimes it leans over on its toe. What would be the best thing to do with her?

2. Is skim milk good, to give the mare while the foal is sucking her? C. P.

Ans.—1. Repeated blistering of the stifle is the only hope of cure. Keep the colt in a comfortable box stall, allow no exercise more than she takes in the stall, clip the hair off the outside and front of the stifle joints and blister every month with a mixture made of 1½ drams each of biniodide of mercury and cantharides, and 2 ounces vaseline. Rub the parts well, and in 24 hours rub again. Have her tied so that she cannot bite the parts. On the third day wash off and apply sweet oil. Let loose now and oil every day until the scale comes off.

2. Sweet skim milk could do her no harm, given in reasonable quantity. Many give a little to the colt.

Noxious Weeds, Summer Pruning, Tent Caterpillars, White Grubs.

1. Is there a law compelling your neighbors, who do not clean their farms of noxious weeds, to keep them down, as our farm is very carefully looked after regarding growth of weeds?

2. I thought the law provided for a fine on seedsmen who claim to have Government-tested grass seed, and I seeded down fields which were free of weeds and we got a bad dose of shepherd's purse in last year's seeding, also wild mustard. If one says anything about the weed seeds, their only excuse is, your land is dirty. I wish there were stricter steps taken towards clean seed.

3. Can any subscriber inform me if it is an injury to fruit trees pruned in June? Let me know as soon as possible.

4. What do the caterpillars, which have been cleaning and eating leaves of trees this spring, turn into; or, what becomes of some that are left, and are about two inches in length now, as there were lots of them this year?

5. Has there been, up to the present time, anything found to kill white grubs? They ate an acre of our oats and I re-sowed it again, and they are eating that also. Now, what can I do to them, or would it be best to let it alone?

J. J. E.

Ans.—1. Yes. Revised Statutes of Ontario, 1897, Chapter 279, the Act to Prevent the Spread of Noxious Weeds, and of Diseases Affecting Fruit Trees; the Consolidated Municipal Act, 1903, empowering municipal councils to pass by-laws for preventing the growth of Canada thistle and other weeds detrimental to husbandry, and for compelling the destruction thereof; the Ontario Statute of 1904 (Chapter 27), to amend the law respecting the destruction of noxious weeds; the Ontario Railway Act (1906), 6 Edw. VII., Chap. 30, Sec. 105. See especially Sec. 2 of the Revised Statute above referred to.

2. Seeds sold must come under the Seed Control Act.

3. Many prune in summer to promote bearing.

4. The caterpillar referred to is the tent caterpillar. It builds large webs in the trees in spring. The worm pupates, and turns to a small, dull, yellowish or reddish-brown moth, with two transverse, whitish, or pale-yellowish lines on the fore wings. The moths lay their eggs in early summer, in a single, ring-like cluster around a twig. The eggs remain there about nine months, covered by a protective substance. These eggs hatch in early spring, just before leaves appear. Early-hatched larvae feed upon the unopened buds till the leaves expand.

5. The most effective means of fighting white grubs is by a short rotation of crops. In the United States, good results have been reported from treating the crop with nitrate of soda. This is a stimulant, and rapidly rushes the growing crop over the period of attack.

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J. A. CERSWELL, BOND HEAD P.O., ONTARIO
Bradford or Beeton stations Long-distance 'phone

Shropshires and Cotswolds My importation of 60 head will be home August 1st. In both breeds, I also have 50 home bred yearling rams and ewes, and a fine lot of ram and ewe lambs. Will be pleased to hear from you if interested in sheep as "No business no harm" is my motto. JOHN MILLER, Broughton, Ont. Pickering Stn., G.T.R. 7 miles. Claremont Stn., C.P.R. 3 miles.

Tower Farm Oxford Downs—16 shearing rams, (1 imported) 3-year-old ram, ewes, rams and ewe lambs; all from imported and prizewinning stock. A quantity fitted for show.
E. Barbour, Erin P. O. and Stn. L.-D. 'phone

Duroc Jersey Swine and JERSEY CATTLE
Grand stock, either sex, constantly for sale. Price reasonable. MAG CAMPBELL & SONS, Northwood, Ontario.

Large White Yorkshires
Have a choice lot of sows in pig-boars ready for service and young pigs of both sexes supplied not akin, at reasonable prices. All breeding stock imported, or from imported stock from the best British herds. Write or call H. J. DAVIS, Woodstock, Ont. Long-distance 'phone. C. P. R. and G. T. R.

HAMPSHIRE SWINE
Both sexes and all ages, from imported stock. Prices reasonable.
C. A. POWELL, ARVA, ONTARIO
Four miles north of London.

Morrison Tamworths and Shorthorns
—bred from the prize-winning herds of England; have a choice lot of young pigs, both sexes, pairs not akin; and also the dual-purpose Shorthorns. Satisfaction guaranteed.
C. CURRIE, MORRISTON, Ont.

PINE GROVE YORKSHIRES
Bred from prizewinning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs not akin, to offer at reasonable prices. Guaranteed satisfaction. Joseph Featherston & Son, Streetville, Ont.

Prize Chester White Swine—Winners High-class in type and quality, bred from winners and champions. Young stock both sexes, any age reasonable prices.
W. E. Wright & Son, Glanworth P. O., Ont.

Woodburn Berkshires
are founded on the famous old Sally tribe, noted for big size, length of body and strength of bone. We can supply pairs and trios not akin. Show stock a specialty. Also high-class Cotswolds, ram and ewe lambs, shearings.
RIDGETOWN, ONT.
E. BRIEN & SON

Poland-China Swine and Shorthorns—Choice young stock, either sex, both breeds, to offer. Pairs not akin. Prices easy.
GEO. G. GOULD, Edgar's Mills, Ont. Essex Co.

SWINE OF ALL BREEDS FOR SALE
Yorkshires, Tamworths, Berkshires, Hampshires, Chester Whites, Poland-Chinas, and Duroc-Jerseys. I have constantly in hand both sexes of all ages. Show stock a specialty.
JOHN HARVEY, Frelighsburg, Que.

ELMHURST LARGE ENGLISH BERKSHIRES
Present offering: Select sows. Choice boars, ready for service; also younger stock the get of Duke of Somerset, imp., and out of imported dams. Satisfaction and safe delivery guaranteed. H. M. VANDERLIP, Breeder and Importer, Gainsville, P.O. Langford Station. Brantford and Hamilton Radial.

Cloverdale Berkshires—Present offering: Sows bred and others ready to breed; also younger stock of both sexes. Price-reasonable.
C. J. LANG, Hampton, Ont. Durham Co.

Registered Tamworths—6 weeks to 4 months old. Both sexes. Write for prices.
T. & G. OWENS, Ingersoll, Ont. R.R. No. 3.

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Suppose one of your horses dropped down with Colic? What would you do? What could a Veterinary do after you got him? Colic often kills in an hour—30 minutes delay means a valuable horse lost.

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International Colic Cure

Cures in ten minutes Spasmodic Colic, Gas Colic, Founder. It neutralizes the acids in the stomach—expels gases from the intestines—instantly reduces bloating—stops the spasms of pain—and renders the stomach and bowels clean and antiseptic.

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Do you know of the many advantages that New Ontario, with its millions of fertile acres, offers to the prospective settler? Do you know that these rich agricultural lands, obtainable free, and at a nominal cost, are already producing grain and vegetables second to none in the world.

For literature descriptive of this great territory, and for information as to terms, homestead regulations, settlers' rates, etc., write to

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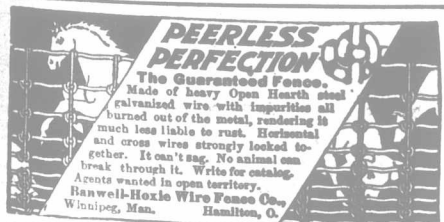
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PATENTS procured everywhere
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Registered Attorney, Dep. E. Temple Building,
Toronto. Booklets on request, 20 yrs. experience
When writing mention **Advocate**

Gossip.

J. E. Arnold, Grenville, P. Q., left for Europe July 11th, for another importation of stallions and mares, principally Percherons and Belgians.

Saskatchewan, according to J. C. Smith, Live-stock Commissioner for that Province, has so far imported from Ontario this season, 12 carloads of dairy cattle, consisting mostly of grade Holstein and Ayrshire females, from two to five years of age. These have been distributed in the Regina, Oxbow, Tantalton, Wadena, Lloydminster, and Langenburg districts, as well as along the C. P. R. Arcola line, and have so far given every satisfaction to the purchasers. "It is extremely probable that ere the work of the season ceases, we shall import about six more carloads of this class of stock. We endeavor as much as possible to supply the one class of stock to the one district, in order to establish community breeding as much as possible, and generally include bulls of the same breeding to avoid deterioration of the stock. These animals are supplied to purchasers at their actual cost price to us. Each purchaser is supplied with an itemized statement as to the cost price of the animals, and the additional expenditure incurred for freight, feed, and attendance to destination."

DUNGANNON AYRSHIRES.

The high-class herd of show-calibre and profitable-producing Ayrshires now constituting the Dungannon herd at Cobourg, Ont., were found, on the occasion of a visit by a representative of this paper a few days ago, in prime condition, and showing every indication of their ability to again, this year, repeat their unbeaten success at several of the leading county shows in Central Ontario. The splendid producing ability of the herd, which averages about 10,000 lbs. for the year, is not by any means their limit, as no extra shoving is done. The stock bull in service, Chief of Dungannon 27159, is now five years old. His heifers are of breeding age, and he is for sale. He is sired by Imp. Lessnessock Royal Monarch, and out of Imp. Gardrum Mearns. His breeding is unexcelled, and his individuality of show-ring quality. He has been shown many times and has never been beaten, while as a sire he has few equals. The offering for sale includes mature cows, heifers calves, and one four-months-old bull calf, sired by the stock bull, and whose dam in April gave 961 lbs. milk; May 966 lbs., and June 1,111 lbs. Parties wanting Ayrshires should get in touch with the manager, W. H. Furber, Cobourg P. O. There are also for sale a number of young Yorkshires of both sexes.

OXFORD DOWNS OF QUALITY.

The old and ever-popular flock of Oxford Down sheep, owned by J. Cousins & Sons, of Harriston, Ont., are surely stronger this year than ever before. The present stock ram, Imp. Langford Jewell 10th, bred by J. P. Reading, is proving a veritable wonder as a sire, and if individual merit and an unbroken show-ring record counts for anything, his great breeding ability is only what might be expected. Before coming to Canada he was first at the Royal and Bath and West of England Shows. He also as a lamb won first at Toronto, London, Syracuse, and Detroit, and as a yearling he won first at Winnipeg, Brandon, Calgary, and Regina, also championship at the latter. From such a sire as this, and out of daughters of imported prizewinning rams for several generations, is the kind of breeding this firm is offering for sale this year. Lately, nine shearing ewes and one ewe lamb have been sold for the Western shows, and nine shearing rams for flock-headers. Orders are now being booked for later delivery. At the head of their big milking herd of English Shorthorns is the splendid bull, Cecil Grey 86824, got by Waverly, and out of a heavy-milking Bates-bred daughter of Imp. Ben Lomond. This is the kind of breeding people are looking for these days. There are also for sale a number of young Yorkshires of both sexes.

"The hog is the best money-maker I have on the farm."

THIS is how Mr. John J. Strong, of Breslau, Ont., finished up an interesting letter to us recently, telling of the results he obtained in an experiment with his hogs. He also said, "I have been using

HARAB Digestive Tankage

for the past seven or eight months, and find it to be a very valuable food for hogs, if used the proper way. Since I have been using it I have been turning out my hogs at

30 to 40 lbs. per Hog Heavier

at the same age as I did before I started to use it."

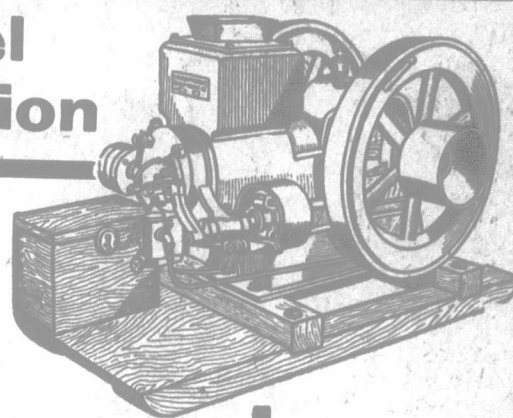
Mr. Strong's experience is by no means exceptional. Many of the leading hog raisers in Ontario are also using **Harab Digestive Tankage** with identical results.

Harab Digestive Tankage is moderately priced, is economical to use, yields a bigger profit to you.

It will pay you to investigate. Write for folder showing cost and giving tables for feeding. FREE on request.

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So satisfied are we of the low cost of running our engines that we guarantee the lowest possible fuel consumption on gasoline or kerosene.

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are built in one of the most modernly-equipped engine factories in America. They are neat, simple, strong and reliable. So easy to start and control that a boy or girl can run one. A big, strong company stands behind Barrie Engines and guarantees everything about them.

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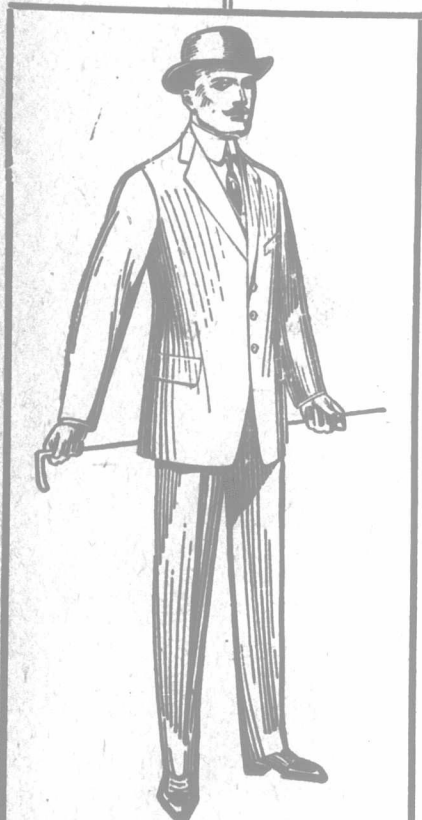
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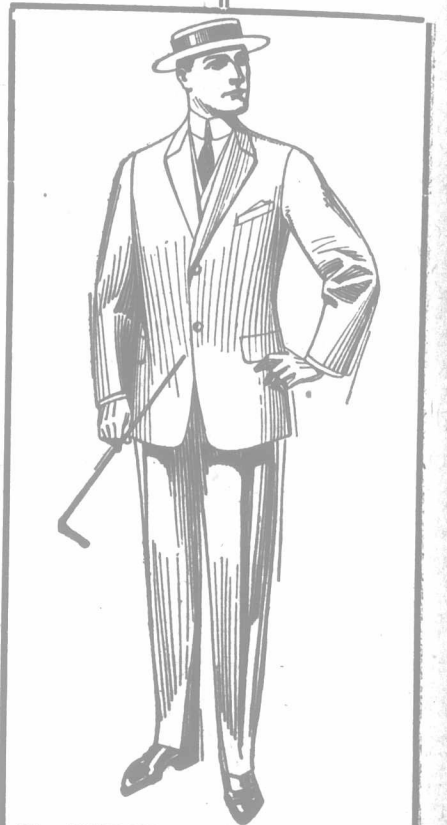
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The "ANDOVER" is the fashionable type of single-breasted, two-button suit that is now being worn extensively in London and New York. You will be delighted with it.

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If these coats are made double-breasted style 75c extra. Duty Free and Carriage Paid.

LEARN why. Your local tailor buys goods in single suit lengths. Four profits come out of the cloth before it reaches his hands. You pay these four profits when you buy from him.

You save these profits when you buy from us, because we buy all our suitings direct from the mill, and give you the benefit of our tremendous buying power.

Here's a fair offer: Send us your name and address on the coupon below, and we will mail you, absolutely free, 72 pattern pieces of the finest English suitings you ever saw. With the patterns will come a booklet telling all about the successful Catesby "made-to-measure" tailoring system.

Read it. You'll understand why hundreds of shrewd, well-dressed Canadians buy their clothes direct from us in London, and save half of what they would otherwise have to pay their local tailor.

Don't put this matter off—you'll soon be needing a suit. Send now, while the thought is in your mind.

Remember, your suit comes right to your door, all carriage and duty charges paid by us. And that every suit is guaranteed to give absolute satisfaction.

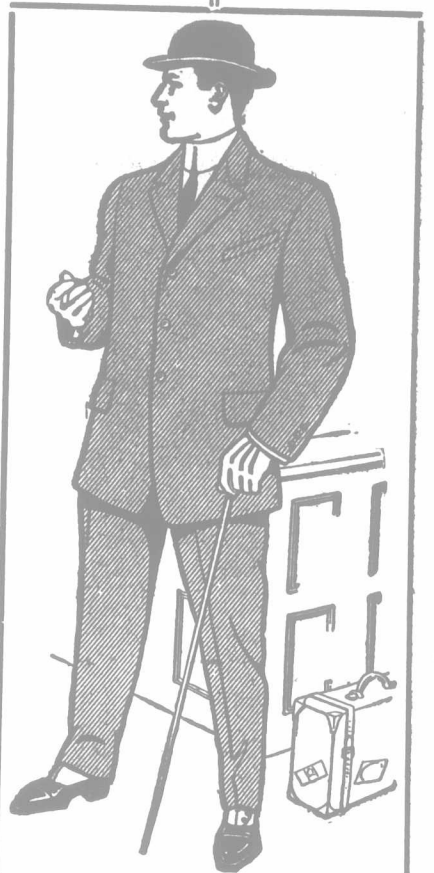
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