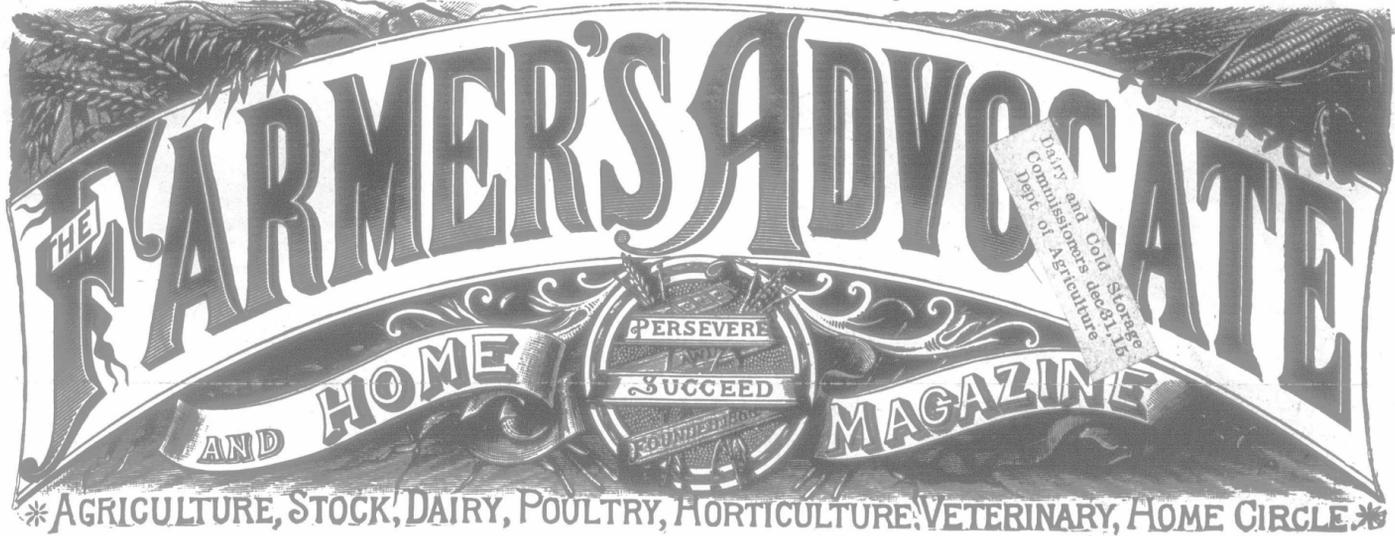


AUGUST 19, 1915

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



VOL. L.

LONDON, ONTARIO, AUGUST 19, 1915.

No. 1195

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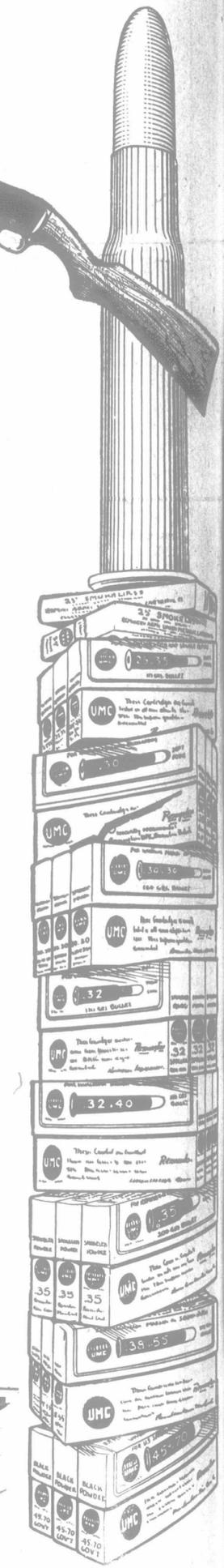
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2. Your oven is always clean, bright, sanitary and rust proof. You can wash it like a dish. REASON: It is built of nickelled steel.
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4. You broil or toast things better on a Pandora Range with less trouble. REASON: The capacious broiler door permits using the largest toaster and placing it close to the fire.
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6. You'll be delighted with the reservoir in the Pandora Range. REASON: It is enamelled pure white, seamless (stamped from one piece of steel) and clean enough to use in cooking and preserving.
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THE sole head of a family, or any male over 18 years old, may homestead a quarter-section of available Dominion land in Manitoba, Saskatchewan or Alberta. Applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the District. Entry by proxy may be made at any Dominion Lands Agency (but not Sub-Agency), on certain conditions.

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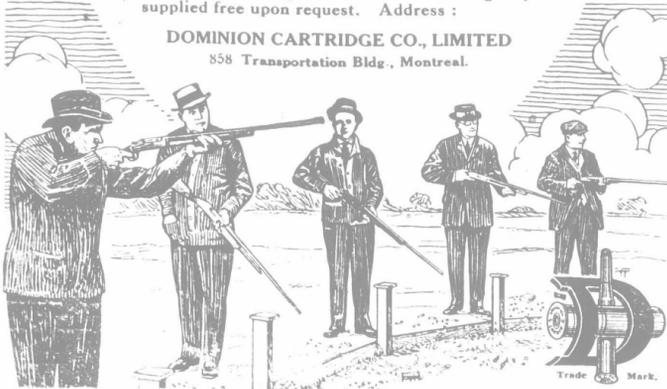
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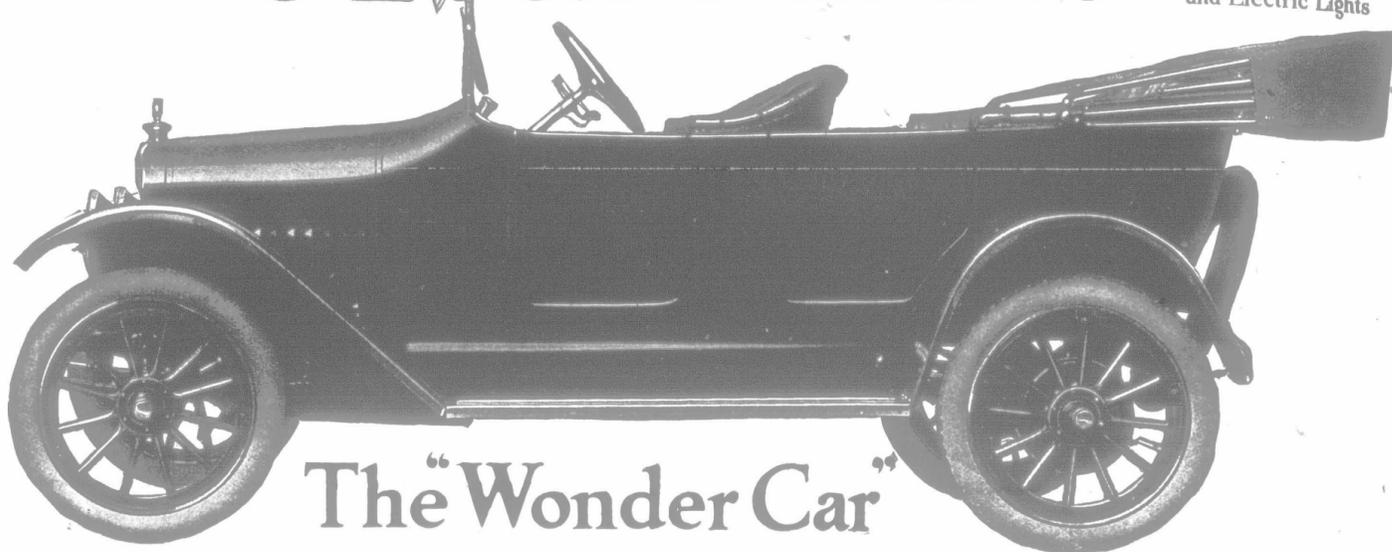
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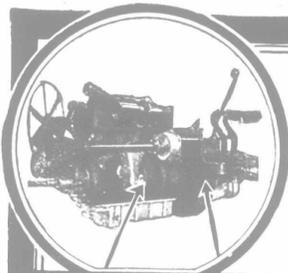
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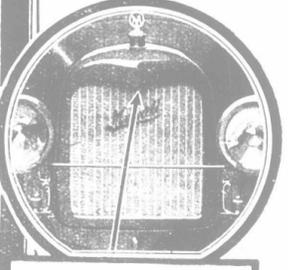
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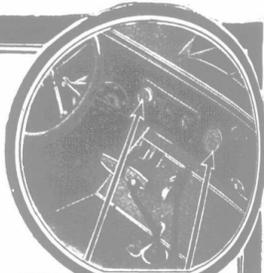


Demountable Rims are regular equipment of the 1916 Maxwell.

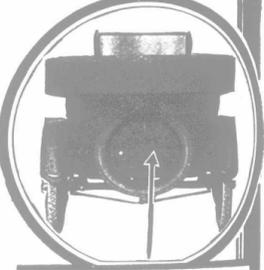


Front view showing the handsome lines of the new radiator and hood.

Built complete by the three gigantic Maxwell Factories



Speedometer, fuse box, ignition, lights, battery regulator, all mounted flush on instrument board.



Note the compact arrangement of spare tire carrier, tail light and license bracket.



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including Electric Starter
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The Farmer's Advocate and Home Magazine

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VOL. L.

LONDON, ONTARIO, AUGUST 19, 1915.

No. 1195

EDITORIAL.

Remember the soldiers when canning fruit.

Carelessness is responsible for many losses.

House the farm machinery each night in so far as at all possible.

Ontario will remember August 1915 as a month of moisture.

Keep down late weeds in the garden and there will be less trouble next year.

It is time to begin the finishing touches on the stock for the fall fairs.

Will the Kaiser try Calais next and sacrifice thousands more of his troops?

More rain more roots, but corn does not benefit so much by having wet feet.

Push the stockbreeding business. Grain growing is sure to fail if persisted in—stockbreeding, never!

Uncle Bije says about the best service lawyers can render people is to keep them out of litigation.

Because the clover has grown rapidly in the nurse crop is no reason that it should be closely pastured this fall.

Kill off the old hens. They will never pay for high-priced feed this winter. Fill their places with early-hatched pullets.

Since the wet St. Swithin's Day some folk have been wondering which is most disturbing, the war news or the weather news.

The Teutons took Warsaw but the press had all the people prepared for its fall, and nobody seemed to be upset by it.

In preparing for winter wheat work the land down to a solid seed bed. Use the roller, and then the cultivator and harrow.

Pigs will fatten on sprouted wheat, so that if the buyer shows the price down too low the man with the live stock still has another chance.

In times of stress everyone looks to the farm to meet the situation, but some are not ready to do their part in helping the farmer harvest his crop.

Canada's horse market is still quiet. The only bright spot is the assurance from the other side of the Atlantic that prices must go up and demand increase.

"Did you ever hear of a sitting hen getting fat?" Keep going! The man who is busy in wet weather preparing for dry weather is generally well ahead with his work.

An unmistakable proof of efficiency in farming is capacity to deliver the land from an excess of water at one time, and at another to have plenty of it to grow a profitable crop.

The Voice of the People.

"The people have risen and said plainly that men in public life must be honest." So spake Sir Douglas Cameron on the night of the political landslide in Manitoba last week. Was it a "political" landslide? Not exactly, for both sides realized that it was not a party victory. The people, voting on principle and laying aside their party affiliations, came out strongly for cleaner government. Whether they get it or not depends upon the men now in power. But the recent election should serve as a reminder to all governments that the people are thoroughly sickened of grafting and looting, and are gradually and unmistakably renouncing the party as the first and foremost consideration in the affairs of the country.

We hold no brief for either party. The experience of the past has been that either party is capable of managing the affairs of the nation until they permit too many hang-ers-on to pull them down, or until, in fear of losing power, they begin to loot and bribe in a dying effort to retain the reins for a few years longer. Both parties have been corrupt. Obviously, then, the thing for the sovereign voter to do is to see to it that no party stays in power too long. All that is necessary is for the public to make itself familiar with the doings of the Government. Too little attention is paid by the man on the street and the man in the harvest field to the affairs of the state. Public questions should be understood by the public, and the farmer should be among the first to make himself cognizant of the doings of the men he selects as his representatives at the head of affairs. There has been too much "submarine" government in the past. The facts of many a costly party move have been kept dark. It is when they are brought to light that the people speak out. There should be no need of hiding the business of the country from the people who live in it and are taxed to maintain it, and the results in Manitoba point to a desire for an open, straight-forward administration of the business of the people. The Liberals were not elected because they were Liberals. Neither were the Conservatives defeated because they were Conservatives. The new party came in and the old party went out because the old party had been looting the public treasury and these facts were brought to light, and the people, having no more confidence in these men, decided to give others a chance, and at the same time a gentle hint of what will happen to them if they attempt any such "underground" government.

This is just what "The Farmer's Advocate" has been recommending for years as the cure for the political disease which has spread in Canada. We do not require a third party. It would soon become contaminated with the same affliction. But independence within the party, and a clear understanding of political affairs by every voter, after he has forgotten that his father was a Liberal or a Conservative as the case may be, will elect and reject governments according to their records, and these records will soon be a great deal better than they have been in the past. Let every voter find out all he can about the doings of parliament, and then let him act according to his own honest convictions, laying petty party politics aside. If the men in power deserve to remain vote to sustain them. If they are rotten with corruption turn them out. A good example has been set. It will be a fine thing for both parties, for the country, and for

the individual if it serves as a lesson to governments and people alike. The voter should know what his representatives do in parliament, and he should act according to his honest convictions on polling day. A start has been made. Governments take notice!

There is Work on the Farm

It is reported that many men are still idle in the larger cities, and apparently not willing to go to the country to do work which awaits them. For every 200 applications received at the Immigration Offices in Toronto for men for farm work less than 100 are available, while men roam aimlessly about the streets. Applications from farmers for men average 200 weekly. A man, if he is any good and needs work, will do anything that he can. Surely some of the big, able-bodied fellows in the ranks of the unemployed could handle a hoe or a pitchfork. Who can blame the farmer for despising a man who will not accept employment because it means farm work? Surely working as a farm laborer cannot be as degrading as loafing on the street corners. The deserving should always be helped, but when it comes to aid for those who will need it next winter the able man who could get work on the farm and despised it may feel the pinch a little, and the farmer's sympathy for him may not be very manifest. It is about time the man out of work realized that any job that pays a fair wage and includes good board is a good job and grabs it up. Harvest weather has been bad, and men are urgently needed to garner in Canada's crops. The man idling on the street does not realize how much this year's crop means to Canada. It means the difference between good business and poor business. It means the difference between a job and no job. It means meals for everybody if harvested in good condition. It means harder times for the unemployed if allowed to waste for want of willing hands to harvest. The out-of-work may laugh at the farmer and his occupation now, but how about the winter which is coming? Many a willing man has gone from the city to the country this year and made good. More could do so if they would. All that is necessary is that the man show his readiness to adapt himself and his willingness to learn. The farmer is as considerate as any other employer, but he doesn't care for the fellow who "knows it all" and insists upon putting his lack of knowledge into practice when told to do otherwise. The good men get along in the country, and most men can be good men if they like. The man who has one eye on the loss and the other on the sun seldom makes good, but the man who makes the farmer's interests his interests, and goes ahead to learn and do, is valuable to the farmer and makes a success of the venture. This is no time for the unemployed to carry a high head and sneer at farm labor. It is rather a time for them to get a good job and go to work if such work offers. Real men are wanted in Canada's harvest fields.

Someone has hinted that the unemployed on charity should be forced to go to the country to work. Perhaps they should, but a man forced to work is generally a shirker and of very little value to his employer. Where is the spirit in the man who will accept charity rather than pitch wheat and oats at \$1.25 to \$1.50 per day with board and a good bed, or if it be in the West possibly \$2.00 or \$2.50 per day would be paid?

Speedometer, fuse box, ignition lights, battery regulator, all mounted flush on instrument board.

Note the compact arrangement of spare tire carrier, tail light and fender bracket.

Perfect-fitting, "one-man" mohair top, quick adjustable storm curtains, rolled up inside of top.

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THE LEADING AGRICULTURAL JOURNAL IN THE
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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.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
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12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (Limited),
London, Canada.

Two Requests.

We desire, in order to complete the old files of the first season of publication of "The Farmer's Advocate" to secure if possible from our readers any copies in their possession of the first issue, or later ones, during the latter part of the year 1866. For complete copies of issues in that year we will pay \$20 per volume, and for single numbers \$1.00 each. All must reach this office not later than Sept. 25.

We are anxious also to secure the names and post office addresses of the heads of families where "The Farmer's Advocate" was read from the first or second year of publication, and particularly of those where it has been taken continually from that time.

What is being done by our cheese producers to build up a market for Canadian Cheddar cheese after the war? At present the surplus goes to the soldiers, and the people in Britain are eating cheese made at home. Where will our market be after the war if something is not done?

Just how much agriculture is dependent upon the weather is brought home in a season when grain grows in the stook just as much as when everything dries up. The weather must always be reckoned with.

The Germans are now just one week over a year late in their visit to Paris. It will be remembered that Europe's War Lord promised to give a dinner to his leaders in Paris Aug. 11, 1914.

There are times when all weather signs appear to fail. Solomon was about right when he observed that farmers who spend their time watching the clouds will not reap.

Rain.

If St. Swithin greets, the proverb says
The weather will be foul for forty days.

Probably no subject is so commonly talked about and so little really understood as the weather. Largely beyond control, it is, yet the greatest factor affecting farm-cropping operations. Nothing causes so much fruitless complaining as the weather. Incidentally, dry periods help in weed killing, and compel us to study how to conserve moisture. Repeated flooding of the fields drives some people to draining who are not amenable to other reasons. Most of us rely on the phases of the moon to bring a change for the better in the weather, and if a new moon does not break the wet spell then the case is hopeless, but meteorologists agree that the idea of the moon exerting a controlling influence on the weather, especially at its changes, has no foundation in fact. If a marked change does occur with the new moon for instance, the weather scientist regards it as a coincidence. We need not look to astronomy for the science of the weather. If men could control it confusion would be worse confounded, for every individual or neighborhood would want a different brand. Meteors and the number and activity of sun spots are supposed to affect the supplies of heat received by the earth, and this in turn influences air currents and evaporation, which with the proximity of great bodies of water have to do with rainfall. If we may not forecast the weather by the moon's changes its appearance will afford a clue because that depends upon the state of the atmosphere and the clouds. Rings about the moon and a "pale moon" portend storms. Some rely on bees remaining in their hives prior to rain, and others discern its coming when cats rub their ears, due to the air being highly charged with electricity. In several counties of Western Ontario the abnormally wet period during July and early August recalled the old English St. Swithin's Day (July 15) legend of 40 day's rain, and set many people thinking as to the physical reasons for such heavy and persistent downpours. Our most trustworthy forecasts are the daily "Probs" worked out on international observations by the meteorological offices, but being prepared for such extensive areas these cannot hit it exactly for every place.

Simply defined, rain is the water vapor of the atmosphere condensed into drops large enough to fall upon the earth. The amount of water vapor which the air will hold depends upon its temperature. The moisture tends to condense about dust particles in the atmosphere, which radiate their heat rapidly. Clouds, thus formed, are said to consist of tiny particles of water-dust which cooling further coalesce into drops as rain. The amount of cooling requisite to produce rain depends on the quantity of moisture present in the air. The amount of cooling and the initial temperature also govern the intensity of rainfall. A long period of dry weather is succeeded by a corresponding wet, unsettled spell. Once the land becomes thoroughly saturated heat evaporates the moisture, and if not carried away by strong, persistent wind rain is produced as the saturated, warm air ascends and is cooled to the point where precipitation begins. Once it starts raining it is very easy to continue—just like sliding down hill. In the deluged area referred to these were just the conditions reported prevailing, with moderate winds continually alternating from southwest to east and northeast, and then back the same way. Meanwhile the sun kept on pumping up the water into the air which just as regularly spilled it down again, damaging some crops and benefitting others, most of all the aftermath and pastures. Normally it is said there is enough vapor in the air to cover the whole earth with water four inches deep, and an inch of rainfall on a square mile is estimated to mean one million cubic feet of water. We may growl at the erratic weather and the excess of rain which, as it usually comes, is a most indispensable blessing, causing the rivers to flow and the crops to grow. All the why and wherefore of it we may not comprehend. The wind bloweth where it listeth and we hear its sweep, but the whence and the whither of it who can tell? So with the rain,

but there are also certainties, and one of these is that the man with the leaky roof and undrained field is the chief sufferer, and he knows the reason why.

The Art of Keeping Young.

Editor "The Farmer's Advocate":

Peter McArthur, in a recent reminiscent mood, recalls for the probable self-congratulation of the present day boy, the boyhood chores of the past; the peculiar jobs, as he calls them, of old time importance; the once indispensable duties that have now disappeared with the days that had need of them. I quite understand that Peter did not in the least intend to enumerate exhaustively all bygone boyhood bugbears, but yet, he might have included in the category that he gave that which St. Beuve said that De Musset had, by dying in early life, bequeathed to his mourning contemporaries "the task of growing old." For that was the task "par excellence" of the passing generation, from the great-grandfather down to the littlest tot that thought, the idea dominated that the human being was born and existed almost for the sole purpose of growing old; and that the sooner one did it, that is the sooner the child grew into a man, and the man matured into the father, and the father ripened into the patriarch, the sooner and more worthily would one's destiny be accomplished, and the greater the reward both here and hereafter. It did not matter that the child was made to miss the most of childhood's merry delights, or that the youth, in snatching the fulsome flowers of a more forward period ere those of his own had scarcely budded, bridged over in ignorance the marvelous potentiality of his most expansive years; or that men and women in prematurely apprehending the duties of parenthood bequeathed to their offspring mostly but the accentuation of their own deficiencies. It did not matter that the whole course condemnably condensed life into mere existence and animalism. Nothing mattered but the speedy accomplishment of the pre-eminent and universal task—the task of growing old.

No one will deny, and I gladly recognize that Mr. McArthur does not, that modern boys work as hard as did boys of the past but they work with more of promise and remuneration. The boy of to-day has become so valuable an asset of the future that we can no longer afford to squander his time, ambition and vitality on the interminable and non-paying chores that we did of yore. We now think it cheaper to buy gates for the gaps, to build temporary fences for the cattle, to tear out an occasional hill of corn with a big cultivator than to waste our boys who have need of every waking moment of a too fast passing period of impressionable facility and dirigible enthusiasm to learn the antithesis of the task of growing old, which is the art of keeping young.

Many a word spoken in jest strikes home because of its pregnancy of earnest truthfulness and solemnity. When Dr. Osler passed sentence on all men of sixty and over, the words went around the world, not because they constituted a joke, but because they gave expression to a long-disguised truism of our time,—the truism that the old could no longer rule or teach or exhortate. In other words—that the day of patriarchal leadership had passed away.

Not that the aged are less loved and revered than they were of old but that they are no longer the guides of importance that they once were; and that chiefly for the reason that they have allowed themselves to stay far behind the present day trend of thought and sentiment. We respect their years and position but we resent bitterly and resist stubbornly their efforts to draw us in their direction. We admire their achievements but we adventurously desire to strike out in our own way. We know the worth of their opinion and judgment but we flout it constantly for the fresher outlook of the more youthful functionary. Not that old age has not yet its own peculiar value, but that it is no longer representative and directive. Above all it is no longer the objective point of existence.

For the World has at last realized that in the young it has the promise of the future fulfillment of all that the old have failed to accomplish, and for that reason the World, with all that it contains, has transferred its allegiance from the old to the young. The Church is now so busy in the interests of youth that the old sinner finds fair of a chance of dying in his own chosen way. The agricultural officialdom of the Dominion is likewise so taken up with the proper education and training of the farm boy that the old farmer bids fair of a chance to till his fields in his own unproductive fashion. Between day, Sunday, and vacation schools, between long and short, and intermediary courses your boy has so little time to spare that if you still need some one for old-fashioned chores you will have to employ an old fellow.

And the moral of it all is, that as the World has transferred its allegiance, as it has supplanted the old-fashioned task of growing old by the novel art of keeping young, so must we, if we would keep pace with the World, do likewise.

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of Keeping Young.

er's Advocate":
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and I gladly recognize that not, that modern boys work of the past but they work for a reward and remuneration. The value of the asset of the young can no longer afford to be measured by the ambition and vitality on the one hand, and the on-paying chores that we did not think it cheaper to buy gates for the temporary fences for the occasional hill of corn with us was our boys who have the moment of a too fast passionate facility and dirigible the antithesis of the task of the art of keeping young. I have spoken in jest strikes home many of earnest truthfulness. Dr. Osler passed sentence on old over, the words went around use they constituted a joke, gave expression to a long-remembered truism,—"the truism that the rule or teach or exhortate. In the day of patriarchal leadership.

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of it all is, that as the World's allegiance, as it has supplanted the task of growing old by the task of growing young, so must we, if we wish to keep the World, do likewise.

For being old we cannot compete with a World made anew every day. Being old we can only be in the helpless minority, and cannot force our influence on a majority that will have nothing but youth and the spirit of youth. Being old we are strangers to even our nearest and dearest, and as much isolated as if we were quite alone in the World. Being old we are out of fashion.

Being old we are only as old as we have allowed ourselves to become, for it is the spirit rather than the years that counts with age, the feeling within rather than the looks without. If you can still learn interestedly and laugh heartily; if you can still understand the recreative as well as the serious pursuits of your boys; if you can be the confident and companion of your girls, if you have acquired the art of keeping young, you are not old though your skin may be wrinkled and your hair as white as snow.

Carleton Co., Ont. MRS. W. E. HOPKINS.

Nature's Diary.

A. B. Klugh, M.A.

A tramp afield in early August is sure to yield some interesting observations to those who have eyes for the insect world. On such a tramp the other day I witnessed a combat which culminated in an unusual way. A large Orb-weaving Spider had spread its web between two branches of a Juniper bush and was waiting "with its fingers on the wires" for prey to strike the web. The first insect to strike was a Blue Mud-dabber, one of those steel-blue, thread-waisted Wasps that build the little nests of mud, and in a moment it was entangled. Out came the spider on the run and jumped on the wasp and there ensued a battle royal, during which the spider bit at the wasp and the wasp stung the spider. So fiercely did they struggle that the wasp broke free from the silky net and flew off with the spider. Its burden was evidently too heavy and it alighted on a branch of the bush where the struggle was renewed. After a few moments the wasp once again rose still clasping the spider, but as it flew it struck another web. From this web it soon broke free, but as it flew off it left the spider hanging by one leg from the web. The spider gave one or two convulsive twitches and remained hanging—stone dead.

In the short grass of a dry field I found young Red-legged Locusts abundant. This species is one of our commonest so-called "Grasshoppers." These young are termed nymphs, and in the early stages are very small, have no wings and have heads large out of all proportion to their bodies. All the stages of nymphs were present in this field from the smallest, recently hatched pale green and soft, to those with wings half grown, brown in color and with heads more nearly the proportionate size of the adults. On many of the grass-stems were the empty skins or exuviae from which nymphs had emerged. Insects which do not pass through a complete metamorphosis, that is, which do not go through the larval and pupal stages in their development, have a series of moults, and after each moult, they resemble more and more the adult form.

I next came across some Milkweed plants and on them were several Milkweed Beetles, scarlet beetles with four black spots on the head and four on each wing-cover. The larvae of these beetles feed on the roots and lower part of the stem of the Milkweed.

A little farther on were some poplar trees on the tips of many of whose twigs were large convoluted galls. These large galls, called the Vagabond Poplar Gall, were hollow and in the interior was a colony of aphids. The galls are formed by a coalescence of the leaves of a twig resulting from the secretions of the aphids. The egg is laid in the bud and the wingless aphid which hatches from this egg is the parent of the whole colony. Towards autumn all the aphids produced in the colony have wings and all leave the gall before winter, though the old, blackened galls hang on the twigs for several seasons. Those galls which I cut open contained both winged and wingless forms.

The most striking insect music was that of the Cicada. This shrill, long-continued "z-i-i-n-g" is a sound familiar to everyone, but is attributed to various animals, some declaring that it is made by a locust, others that it is a wasp, while some have the idea that it is produced by a snake. The Cicada is really one of the true bugs and is a blunt-headed insect, black and greenish in color and about two inches in length. The intense sound made by this species is produced by the rapid stretching and relaxing of a pair of parchment-like membranes, which are situated at the base of the abdomen by means of a pair of muscles attached to their centres. The sound-chambers in which these membranes are located are incompletely closed by a pair of semi-circular disks, which are opened and shut by movements of the body, thus giving the "song" its peculiar rhythmic increase and decrease in loudness. The common Cicada, which is closely allied to the famous Seventeen-year Cicada, lives for two years, the first year as a larva, the second as a pupa and adult. The pupa of this species is able

to move, and when it is time for the adult to emerge from the pupa case it crawls up a tree-trunk, the pupa case splits down the back, the adult Cicada emerges and rests on the tree until it is dry and hard enough to fly away.

Along the road the Carolina Locusts were very common. This species is from one and a half to two inches in length, pale yellowish-brown with black hind-wings with a broad yellow or yellowish-white margin. The males have the habit of hovering in the air a few feet above the ground and making a loud "clacking" sound by striking the hinder edge of the front wings against the front edge of the hind wings. When on the sandy road or on dried grass this insect is quite inconspicuous because its color matches that of its surroundings.

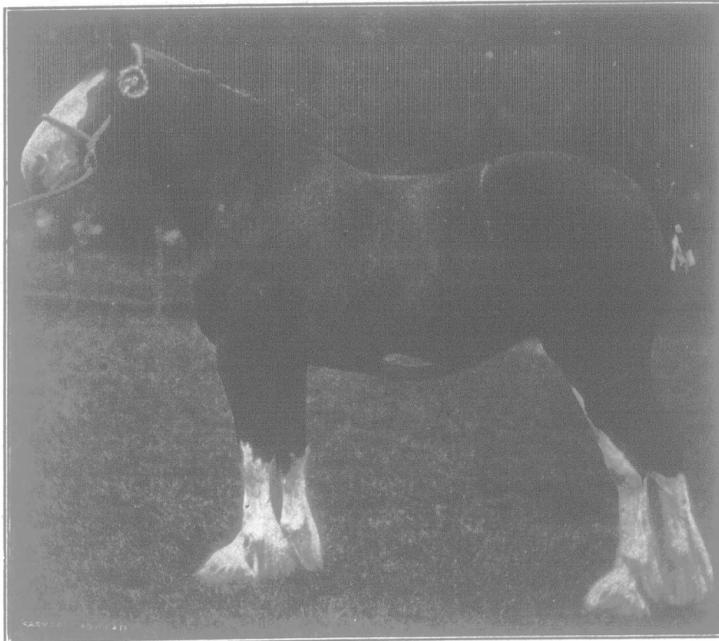
An Acre of Grain to the Cause.

Already 10,000 farmers on the prairie have signified their intention to donate one acre of wheat each for patriotic purposes. The estimate of the value of this crop is given at \$200,000, and the movement is yet in its infancy. Out West the grain growers are much better organized than they are in the East, and it was a comparatively easy matter to organize to handle such a donation. But it should not be a difficult matter for farmers in Eastern Canada to donate a part of their crop to the aid of the fighting men. If all agricultural Canada could donate one acre out of every hundred acres it would roll up a big fund for furthering the fight. Which one will you donate?

THE HORSE.

Will Horse Breeding Pay?

In view of the fact that horsemen in Canada are none too optimistic regarding the outlook for horsebreeding in this country some idea of conditions in the Old Country might tend to change our views of things. The following from the "Live Stock Journal" is certainly good reading for anyone having horses on hand for sale. It may pay to hold for a while rather than sacrifice at this time.



Lady Betty.

Clydesdale filly; champion at the Royal.

As this exceptional season advances and the number of show fixtures abandoned owing to the war increases, it is matter for congratulation that at the earlier exhibitions of the year horses were comparatively well catered for. All the spring horse shows were held, if in some cases the program was contracted, and at the Royal and other important outdoor exhibitions that have taken place horse-breeders have given excellent support and made displays that, under the circumstances, have surprised visitors by their extent and the excellent quality of the exhibits, particularly in the breeding classes. The industry was thus encouraged, and there never was a time when this was more necessary. One has, however, only to look down the list of summer and autumn fixtures that have been postponed to realize that many of the usual opportunities for the exhibition of horses will not be available in the later season, and to that extent the needed stimulus to breeding will be lacking. Fortunately, a few

important shows will take place, and at several of these the horse classes are always important and representative.

It is well known that other customary aids to breeding are in abeyance or much contracted, such as those which arise from racing, Polo and hunting. The chief encouragement to horsebreeding must therefore at present be looked for in the market demand, and this has rarely been better, while breeders may safely anticipate an unprecedented inquiry in the near future.

In the absence of many of the opportunities usually afforded to breeders for meeting together and discussing the situation, it may be useful to emphasize this point. The wastage of horseflesh in the war has already been enormous. It is a war in which many nations are engaged, and the horse-breeding resources of the whole world are being rapidly exhausted. In the siege operations in Flanders and the north of France the use of cavalry, it is true, has recently been curtailed, though at the outset this arm took its accustomed position of prominence and importance. The occasion for its use will come again on that front, and it has never been absent in the East, where, in their widespread and rapid movements the combatants (Russian, German and Austrian) must have used up an immense number of horses. So long as the Germans were operating from their eastern frontier, slightly in advance of their network of strategic railways, horses may have been dispensed with to some extent, but in the present huge advance away from these lines the waste of horses must be very great; and the Russians have always had to trust chiefly to their horses for mobility in places far distant from railways. Artillery and transport have also called, throughout the whole area, for many thousands of horses, and this has been a war in which the demands for both have been extraordinary in all the war areas.

No doubt motors have figured prominently for transport of men and material and for ambulance work, but it is quite evident that now, as in the past, horses are indispensable in warfare, and the wastage has never been anything like so great. What all this means in respect to the future of horsebreeding must be apparent. It is not only in the countries that are closely engaged that the horse supply is being rapidly depleted. Great Britain is being gallantly helped by Colonial and Empire troops—

Canadians, Australian, New Zealand, and Indian. The horses from these wide Dominions are also being used up in the war. Extensive purchases are being made wherever they can be obtained by all the combatant Powers, and a world's serious diminution of horses is not an improbable result. At the termination of the Franco-Prussian war in 1870 it was found that these two States had used up all the available surplus horses in their own territories, and many bought from other countries. Compared with the present conflict that was a war of restricted area and duration, but the demand on horses was such that the nations were impoverished for years. There is no doubt that the war of 1870 had unlooked for effects

on horsebreeding all over the world. In our own country the depletion caused a search into resources, and aroused the strong feeling that something must be done to preserve our valuable breeds. Prior to that time only one variety had a Stud Book, and none had a society watching and working for its interests. The solitary Stud Book was that for the Thoroughbred racehorse. One ultimate result of the scarcity was the establishment of numerous Breed Societies for horses and Stud Books which gradually extended until every distinct variety came under the influence of its breed organization, and was furnished with an official record of pedigrees. Much more might have been done here, and far more was done by the State in other countries, for horsebreeding. But under the voluntary principle which has always been regarded with so much favor in the United Kingdom, a great deal was accomplished. The numbers did not show a large increase, but without an adequate enumeration it

is impossible to say much on this point. There has been much said about the decline in numbers, but nobody has precise information, as complete figures have not been published. What is definitely ascertained is that while millions of acres of land went out of arable cultivation from 1880 onwards, and much of it was allowed to tumble down to grass, the horses on agricultural holdings, which alone have a proper census, have been fairly well maintained. This is partly due to the more extended use of, under these circumstances, machinery in harvesting and other operations, which has necessitated the employment of many horses, so that while the arable area has largely decreased that which remains in crop cultivation needs for its working a larger number of horses. It is also due to the extension of horse-breeding as an industry. The introduction of motors has, of course, led to a large decrease of horses in towns in recent years.

It is unquestionable that the demands of the war have already largely reduced the number of horses in this country, as well as on the continent and elsewhere abroad. To what extent the numbers in agricultural holdings have decreased in England it will not be possible to state until the Agricultural Statistics have been published. There has been some decrease in progress for some years, and in Ireland the preliminary figures for 1915 show a decrease of 20.8 per cent. in the number of unbroken horses, one-year-old and upwards, while agricultural horses have declined from 393,000 to 356,000. It is to be feared that these figures are only indicative of what has occurred all round.

In view of the great demand that will spring up for horses of all classes, it is to be hoped that breeders will do their utmost to meet the requirements by extending their operations. The curtailment of shows and other aids may tend in the opposite direction, but the enhancement of values which has already taken place, and which will become greater, should serve as an inducement to persevere in the work. Under existing conditions, it is specially satisfactory to hear that stallion owners consider that the travelling season has been a very good one, a circumstance which shows that an effort is being made to maintain supplies as far as possible. The superior quality and good numbers in the breeding classes at the shows that have been held afford further proof of this determination, which is thoroughly justified by the existing state and future outlook for the industry. There is, in fact, every prospect that at the close of the war the demand for horses will be on an exceptionally extensive scale, and that their value will substantially increase.

Fall Colts.

Many farmers are considering the advisability of breeding some of their mares this fall. This practice has much to recommend it, particularly on large farms where the brood mares do most of the work. On farms where from four to six brood mares are kept, if a pair are bred to foal in the fall, there is always a team fit for heavy work. On smaller farms where only two foals are annually raised, it is perhaps better to have both foal at the same season so that the foals may be company to each other while the mares are at work. A mare that has put in the summer at steady work under a careful driver is much more likely to produce a strong, lively foal than one that has spent the winter in comparative idleness. There is much more danger of abortion from accidental causes in the case of the mare that foals in the spring. Plunging through deep snow and slipping on ice often result disastrously to the mare advanced in pregnancy.

Early in October is considered the best time for the fall colt to arrive. The colt can usually be turned out to the fields for a few hours every day for a considerable time. Good aftermath or freshly-seeded clover makes splendid milk-producing pasture for the mare, and a short run each day on such pasture puts her in good condition for the winter. Throughout the winter both mare and foal should have a daily run in the yard. Bright, clean, clover hay, oats and bran make an excellent ration for the milking mare, particularly if roots, such as carrots or turnips, are added in moderate amounts. The same feeds are just as suitable for the growing colt.

The fall colt can be given more attention for the first few months than is usually given to his spring-foaled brother, but there is more danger of neglect during the following summer, as the younger colt should not be expected to rustle for itself entirely. Of course, it will do this and grow fairly well, but where maximum development is required it is better to continue feeding a little grain all summer. When flies are bad the colt will do better when stabled through the day.

Annual Meeting of Dominion Percheron Association.

During the Calgary fair the annual meeting of the Percheron Horse Breeders' Association was held, at which the breeders were very enthusiastic, animated by the inroads that the Percheron breed has already made and by the apparent prospects of the horse industry, caused by the European war and the lack of confidence in tractor power.

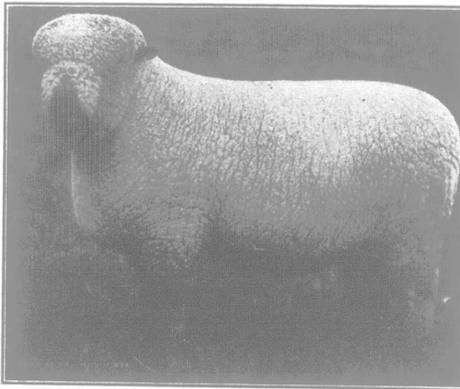
The officers selected were as follows: President, Geo. Lane, Pekisko, Alta.; Vice-president, A. E. Davenport, Acme, Alta.; Secretary, F. R. Pike, Pekisko, Alta. Directors: W. B. Thorn, Aldersyde; R. C. Upper, Calgary; Mr. Grant; W. H. Devine, Calgary; Allan Reid, Forrest, Man.; W. Thompson, Milestone, Man.; C. D. Roberts, Winnipeg, and E. C. H. Tisdale, Beaverton, Ont.

LIVE STOCK.

Digestive Diseases of the Ox V.

CHOKING.

Choking is probably more of an accident than a disease, but it is a pathological condition of the digestive organs, hence we may be allowed to class it in this series. It consists in blocking, or packing of the oesophagus or gullet with some foreign body. Symptoms similar to those of choking, however, arise from other causes, as injuries to the oesophagus from sharp bodies swallowed and also from disease of the pneumogastric nerve. Impaction of foreign bodies frequently occur in the ox, but not so frequently now that most feeders pulp the roots instead of feeding them whole as used to be done. Choking is usually caused by the lodgment in some part of the oesophagus of a portion of a turnip or other root or a potato, apple, etc., but may be



A Shropshire Nicely Covered.

by impaction of other food too greedily swallowed. When stricture of the oesophagus from any cause exists, choking is quite common, the bolus of food or piece of solid matter not being able to pass through the constricted tube, on the other hand, where dilatation of a portion of the tube exists choking is also common as the bolus when being swallowed, lodges in the dilated portion. This is followed by the lodgment of other boluses until the part becomes filled, when the symptoms of choking become well marked. Where no abnormal condition of the oesophagus exists, and reasonable care be taken to properly prepare solid foods choking is of rare occurrence. The foreign body that causes the trouble may be lodged in the pharynx (the cavity just behind the root of the tongue) or in the cervical portion of the gullet (that portion of it that is contained in the neck) or in the thoracic portion (that portion that passes through the thoracic or lung cavity).

SYMPTOMS.—The symptoms are readily recognized, the patient stands with muzzle protruded, coughs, champs the jaws, and there is a profuse flow of saliva from the mouth. Appetite and rumination are suspended, but ineffectual gulping efforts are made to complete the swallow. The eyes project and become bloodshot, the patient is uneasy and in many cases faeces and urine are frequently passed in small quantities. When any matter is swallowed or given as a drench it is returned through mouth and nostrils. If the impaction be in the pharynx the coughing is the best marked symptom and respiration is

interfered with. If in the cervical region an enlargement can generally be located by sight or by manipulation on the lower margin of the neck in the channel. This may be large or small, hard or soft, movable or immovable, according to the nature and bulk of the material and the condition of the oesophagus. If in the thoracic region, of course the obstruction can be neither seen nor felt. If fluid be given it appears to pass to the stomach, but it simply fills the passage up from the obstruction and is then returned by regurgitation. Bloating is usually soon noticed, except in cases in which, on account of the shape of the obstruction, the whole calibre of the tube is not filled and liquid or gaseous matters can pass it.

TREATMENT must be directed to the removal of the obstruction, either by the mouth or by causing it to pass downwards to the stomach. If bloating be excessive it should be relieved by puncturing as in case of ordinary tympanites. Then if possible the seat of the obstruction should be located. If in the pharynx it can usually be removed by hand. The patient's mouth must be kept well opened by the use of a mouth speculum, a clevice or other device, an assistant hold the animal and the operator passes his hand down to the pharynx, grasp the object and remove it. If in the cervical region the operator should endeavor to move it by manipulation. If it can be worked a little either downwards or upwards the exercise of a little patience may cause it to be swallowed or coughed up. If it be grain either whole or chopped or hay or straw too greedily swallowed, the mass may be broken up by manipulation and will pass down to the stomach. If relief cannot be given as above or the obstruction be in the cervical region efforts should be made to force it down. For this purpose an instrument called "a probang" should be used. The too common practice of using a fork handle, broom handle, whip, harness trace, etc., cannot be too highly condemned, as the opposing surface of the obstruction is usually irregular in shape and that of the instruments mentioned either round or oval the latter is very liable to pass to one side of the former, and rupture the oesophagus. In this case it is often thought that the object has been forced to the stomach, but the patient does not get ease, will neither eat nor drink and in a few hours the neck and throat commence to swell by reason of gases and that the animal may swallow filling up the areolar tissue and the patient will die in a few hours longer. A probang is usually made of about 5 or 6 feet of spiral wire covered with leather or gum elastic and having attached to the end a metal or horn disk of a cup shape, so that when it meets the obstruction instead of passing along side of it, it practically grasps or encircles it and when force is applied it is exerted upon the obstruction in the desired way. Many probangs have stilletts of whalebone or cane to stiffen them. Where a probang is not procurable a piece of garden hose answers the purpose fairly well, the hollow in the hose acting as the cup-shaped disk does in the probang. The hose can be strengthened by using a whip handle or other material for a stillet, being sure to not pass it quite to the end of the hose. In order to pass the probang a wooden gag with a hole through the centre, or other device is necessary to hold the mouth open. The gag extends a few inches out of each side of the mouth and has straps attached to go over the animal's poll and buckle behind the horns. The probang should be oiled. An assistant on each side of the animal catches the gag in one hand and the horn in the other and holds the head in such a position as to make the mouth and the oesophagus as nearly in a straight line as possible. The operator then passes the probang through the hole in the gag and gently backwards until it enters the oesophagus and with steady pressure applies sufficient strength to force it downwards. In some cases the obstruction is so firmly implanted that it cannot be forced down in this way, in which case, if in the cervical region an operation called oesophagotomy may be performed. This consists in cutting through the skin and oesophagus and removing the obstruction, then stitching the oesophagus with carbolized silk or cat gut, then stitching the wound in the skin, feeding on sloppy food only for 10 to 14 days and giving the wound ordinary attention. None but a veterinarian should attempt the operation. When the obstruction is in the cervical region and cannot be forced down all that can be done is to leave the animal alone. If necessary to prevent bloating leave the canula in the stomach and await developments. In many cases the animal gets relief in several hours, the obstruction evidently becoming practically cooked and passes to the stomach. As choking is liable to recur if care be not taken, the animal should not be fed on food liable to cause the trouble for a week or ten days after the occurrence in order to allow time for the inflamed and dilated oesophagus to regain its normal condition.

WHIP.

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What Shall we Pay for Feeders?

The time of year is almost at hand when many of our farmers begin their annual hunt for feeding cattle. Those who have been following the business of winter feeding know that each year for many years past there has been difficulty in securing cattle of suitable quality to fill the stalls. The difficulty seems to be increasing yearly. The proportion of dairy-bred cattle owned in Eastern Canada has been increasing very rapidly. Many of these dairy-bred males are marketed as veals, and in many cases it is a pity that more of them are not marketed early in life, for, when kept until mature, they make indifferent feeders and produce a poor quality of beef. While the development of the dairy industry has undoubtedly been in the best interests of agriculture, it has certainly lowered the quality and decreased the number of our feeding cattle. Another feature that has had great influence in reducing the supply of feeding cattle is the high price that has prevailed during the past year or two for light-weight butchers' cattle. Cattle of from 800 pounds to 1,100 pounds have sold almost on a par with heavy exporters, consequently many light cattle have been marketed. Added to this has been the demand from across the border for young stock. The result is that in Eastern Canada, at least, feeding cattle will be scarce and hard to buy this fall. As soon as the after-harvest rush of buyers commence prices for feeding cattle may be expected to advance, and the buyer will be up against the old question, "what price may we safely pay for our feeding cattle?" It is not our intention to try to answer that question. No one can foretell with any degree of certainty what the price will be next spring. There are those who, on account of the scarcity of cattle, this fall predict that prices will reach unheard-of levels next season. There are certain features which always operate and which will operate particularly strongly this year to keep the price of beef or any other article from becoming abnormally high. It should be remembered that the present price of beef is so high that many hundred butcher shops in British cities have been forced to close. The poorer classes are not able to buy beef now. Should the war continue until next spring many who are now buying meat will be forced to use some cheaper substitutes. It looks as though the great mass of people are now paying about all that they can afford for their beef, and while high prices must rule for some years to come, the great consuming masses are not generally in a position to afford meat at abnormal prices.

Use Nothing but Pure Bred Sires.

One of the great mistakes that is being made in Canada is the use of scrub sires in preference to pure-breds. Invariably this is caused by misconception of the value of line-bred individuals which are a potent factor in building up the herd. Too many are of the opinion that an individual of a good type, no matter if it is a scrub, has the ability of producing good stock when mated with their breeding herds. By using a scrub sire it is practically impossible to build up the herd, whereas the continued use of a pure-bred will in six generations make the progeny practically pure.

The disappearance of unimproved blood by the continuous use of pure-bred sires is shown in the following table:

Generations	Sires	Dams	Offspring
	p.c. of Pure Blood	p.c. of Pure Blood	p.c. of Pure Blood
1.....	100	00	50
2.....	100	50	75
3.....	100	75	87.05
4.....	100	87.05	93.75
5.....	100	93.75	96.87
6.....	100	96.87	98.44

Hypothetically the offspring from the sixth generation will have retained on the average 1.55 per cent. of unimproved blood from the original dam or the dam of no breeding. This applies only to the average of large numbers and does not apply to individuals. Occasionally individuals may still be like the scrub dam in the original foundation stock.

The breeder must be reminded that to produce the high-grade no other sire than a pure-bred one of the breed selected can be used. No progress toward eventual purity of blood can be made by using pure-bred sires of different breeds for each cross or occasional cross. Grading up means using a pure-bred sire for the first cross and continuously crossing the female offspring with pure-bred sires of the breed first selected, until all impure blood has been practically bred out.

Cod Liver Oil for Flies on Sores.

The Queensland Agricultural Journal contains the results of various dressings to prevent the attacks of flies on live stock. Most of them were preventive through being distasteful to the pests and not by being toxic or poisonous, but a few being caustic proved injurious to the skin. The claim is made, however, that cod-liver oil was found to have a toxic effect on the flies, and in cases of horses that a light smearing on those parts most subject to attack would relieve the animal in a few moments, a light touch of the oil being sufficient to kill the flies and without any caustic action in the skin subsequently. This seems to be a rather excessive claim to make on behalf of the oil, though it is conceivable that some of the coarser brands of objectionable odor and flavor might be repellant to the insects. However, it is an application easily tried, and would not be harmful nor very costly. It is stated further—and this does not seem unreasonable—that it is decidedly valuable as a soothing and healing emollient for wounds or sores, liable to be infested with flies in hot weather, being more lasting than some other oils. It is easily obtainable and certainly has simplicity in its favor. If any readers of "The Farmer's Advocate" have had experience in using cod-liver oil for such purposes or should give it a trial we would be glad to learn the results.

We are Lagging.

The same conditions which prompted "The Farmer's Advocate" to plead for more live stock on our farms half a century ago are to be seen in Canada to-day. In this regard history does not fail to repeat itself, and to do so in an unmistakable form. Ever as new lands are being cleared and broken, as the vast expanse of the prairie is being brought into subjugation, and as

more stock and still more stock and returning to the land something in return for what we take from it becomes more and more apparent. The new acres that are being added to Ontario's arable land require manure even from the first; the plant food is there but it requires a liberator such as barayard manure. The old and long-tilled fields can be rejuvenated in the same manner, and when farmers universally awaken to the fact that grain selling is robbery and that manure is the life of their farms they will realize that the admonitions of 30 and even 50 years ago have still more significance at the present time.

Some will think that this country is well stocked, but in this they are wrong. Considering the immense number of acres under cultivation the number of live stock per acre and per capita is inexcusably small. We are lagging in this particular, and in the most important department of farm economics.

FARM.

A Believer in Sweet Clover.

Editor "The Farmer's Advocate":

Having noticed an article from a correspondent in "The Farmer's Advocate" of July 29, headed "Quack Grass and Sweet Clover," I thought that it was time for the true value of sweet clover to be stated and I hope others who are using it for pasture and winter feed will step forward and state the facts as they are for there is no use of crying an article down until one makes quite sure of its true value.

I live in one of the banner counties of Ontario where the land is sold for one hundred dollars an acre and upward. Here the farmers are sowing the white blossom sweet clover on their

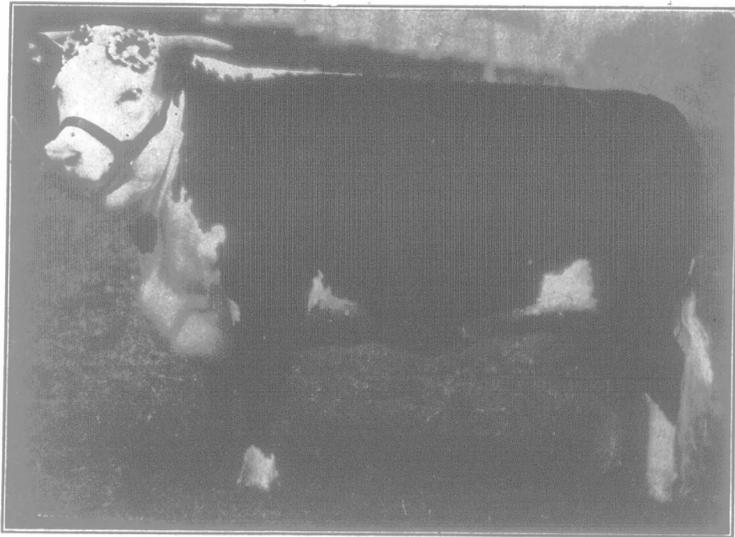
valuable farms and I can safely say they know what they are doing for they are men who are engaged in dairy farming and know a good thing when they see it.

As a pasture clover, sweet clover stands at the head. A dairyman who is shipping milk to Toronto had been complimented on sending one of the best and choicest flavored milks. Upon being asked by a neighbor what he was feeding his cows, he, the shipper of the good-flavored milk, took him to a field of sweet clover where his herd of dairy cattle was pasturing. There, he said, is the secret. As it was farmer No. 2

went to a neighbor who was saving some for seed and told him to keep him four bushels for next spring's seeding.

Pigs are very fond of it in its tender state. When sweet clover is sown with or without a nurse crop and the hogs are turned in when it is up a nice height, which will be in a good season the fore part of July, they will make surprising gains. Calves also take to it readily. As a pasture plant it is quite unlike alfalfa for sweet clover can be pastured right up until cold weather as it will not hurt the crown for the following spring. Sweet clover to get the best results for pasture should have the stock turned on it early in the spring so they can get accustomed to it before it gets too coarse and when they once have taken a liking for it, they have a keen appetite for it.

As a hay crop it equals any of the other clovers when handled correctly. As for pasture, it should be sown in the spring with a nurse crop quite thickly, twenty pounds to the acre being none too much. The first cutting will come off the following year about the middle of June to the last of the month according to the season and the thickness of the stand. By no means let it get too coarse and rank. I think when the first crown blossom buds begin to show it is plenty old enough. Then if cut with the mower bar up a fair height so as to leave two or three joints of the stem in the stubble you may expect another crop of equal height by the first to the middle of August. Or, after taking the first crop it can be pastured from then until fall. That ends all, for the second fall it dies branch and root, whether it is cut or pastured. I have a field in my mind at present which had sweet clover seed on last year. It was cut for seed.



A Winning Hereford Heifer in England.

The stubble was ploughed down and sown with oats last spring and to-day not a single plant has come up to show its flower. But the farmer reseeded the field and he will have a nice lot of pasture from it this fall after removing the oats, and then it will be ready for pasture or hay next season as he sees fit.

If one sees in the spring he is going to be short of hay for the coming year by seeding down a field with sweet clover twenty pounds to the acre without a nurse crop, in a good season and the land in fair heart he could reasonably expect from a ton to a ton and a half of hay to the acre that fall and leave the field nicely seeded for pasture or hay for the coming year.

As a fertilizer and a land cleaner sweet clover is one of the best, quite equal to buckwheat as a smothering crop. It will make a stand right among twitch roots and although it will not kill them out in one year it will weaken those large running roots so they can be more easily killed when ploughed, or reseeded will soon put the twitch out of business. As a fertilizer it is the best of all clovers, for it sends its roots down deep into the ground and then dies the second year. Thus it opens up the soil deeply besides enriching the land with its decaying roots so, when sown with grain the following year it will give to the grass that healthy, dark green look which always makes the farmer smile.

Sweet clover is a boon to the man with the poor soil. It is like a mow full of hay and a farm yard of manure. It is salvation to the dairyman. So my advice is not to let it "severely alone" but to sow sweet clover and sow plenty of it. If there is doubt in your mind sow a little for a trial and I am firmly convinced that after harvesting the first crop you will sow it by the bushel instead of by the pound.

YORK COUNTY, ONT. INVESTIGATOR.

NOTE.—We would advise all our correspondents on sweet clover to read carefully articles we have published from time to time on our experience with the crop at Weldwood. We found it made good pasture or soiling crop and very good hay although difficult to cure. The crop is not hard to kill as many suppose from experience with the plant in permanent pastures or old meadows where it seeds year after year. All that is necessary is to keep it cut to prevent seeding and it will die of itself the second year. As described in an article on page 1096, issue of July 8 we killed ours permanently at Weldwood by cutting too close so that we only got one crop this year instead of two as we should have done. Our correspondent's advice to try it on a small scale is good. Sow it thick and cut early. We would not advise anyone to go in to it on a large scale at first. Try it and if you like it sow more of it and if not discontinue. Some report difficulty in getting cattle and other stock to eat it. We had no trouble.—Editor.

Alfalfa Experience.

Editor "The Farmer's Advocate":

In your issue of July 1 I noticed an article by Henry Glendinning re making alfalfa hay, and as we have been growing alfalfa for some years with very good satisfaction we have come to about the same conclusion as Mr. Glendinning, the tender is a necessity to make alfalfa hay. I cannot see any practical side to the plan with the sticks. It might be all right for the hay, but I think there would be more work to get and fix the sticks than to cure the hay the other way.

As to the question about cutting alfalfa three or four times I might say that we have never cut more than three times, and that was a favorable season. The first year we often only cut it once and pasture a little, but not to allow it to be eaten bare at all. In most fields we sow orchard grass and alfalfa mixed. We like the aftermath for pasture.

We have changed our belief in seeding down with alfalfa to leave it permanently should it hold, but find that to use it as a soil-builder by ploughing it down every two or three years that improves the land greatly and gives a good crop. Of course, ploughing it up is not an easy job, but we think it pays.

On the other hand there is many a catch of alfalfa lost by the owner being disappointed with the first season's yield. It should, in most cases, be left for two seasons, as it gains for several years as the root gets stronger. Anyway if left two years it is a good investment for the soil improvement alone. We think, in doubtful places, a little orchard grass mixed with it helps. We were fortunate to strike a good variety for the first field we sowed, and have some fine crops that have been admired by many an observing person. The soil in this field is a clay loam, most of it well drained. Professor Zavitz, talking on sowing alfalfa, recommended mixing a little in all mixtures, and was asked if he would sow it whether he thought the land would grow it or not, and answered, "yes." I think he is right. I think it will grow on any kind of soil if it is rightly prepared for it.

Huron Co., Ont.

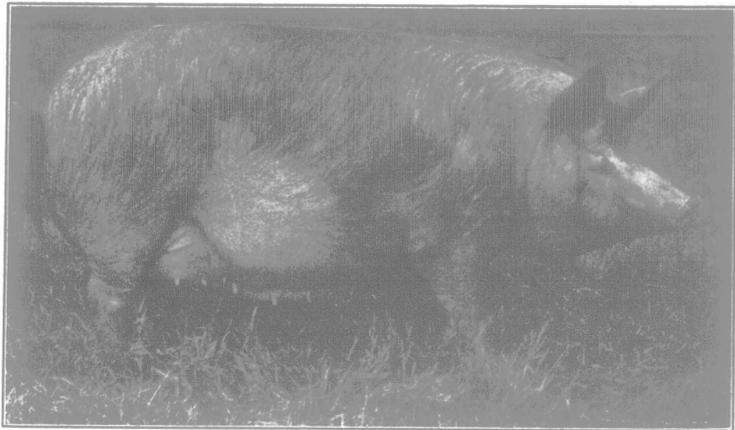
R. C. MCGOWAN.

Co-operation The Cure.

At the Conference for Rural Leadership held at Guelph last week H. H. Le Drew, Lecturer in Economics at the College gave a very interesting address on "Organization for Marketing Farm Products." The burden of his discourse hinged around the fact that the rural problem is one of finance and that something should be done to put a stop to that great wastage of money which is now taking place between the farmer and the consumer. Also something must be done to stay the mad rush from the country to the city, and to make the country a place for investment equally as good as any city. Mr. Le Drew believes that the remedy for all these ills is co-operation which will afford an outlet for that class of farm boy who does not take kindly to farm work but rather requires a wider sphere in which to operate; and one that would bring him face to face with financiers, business men, captains of industry, exploiters of capital, etc. Co-operation would do all this. Agricultural organization, when thoroughly complete, would mean that there would be no distinction between the city and the country, for, as the speaker put it, the city would spread itself over the country or the country would spread itself over the city. It matters not which way the statement is made. Rural isolation would be no more. There would be no more talk of lack of recreation in the country, and the absence of opportunity in rural districts would be an unheard-of complaint. Besides all this the city problems of congestion, lawlessness and immorality which arise through the tenement and associated systems would pass away. The address stirred up much discussion and it was the general consensus of opinion that co-operation would mean much to the producer and consumer alike.

Some Tree and Plant Diseases.

A disease of the sugar maple shade-tree appeared this year at Sussex, N. B., and, so far as I know, has never been reported from Canada before. It is a twig-blight quite similar to the fire-blight of pear trees and to the twig-blight of apple trees. This disease is caused by parasitic bacteria which infect the twig from the



Cholderton Tibbie.

The right kind of Tamworth sow.

terminal bud back six to twelve or fourteen inches. Whether this trouble would be sufficiently serious to cause the destruction of the trees is difficult to say, but it causes an unsightly appearance from the dead leaves and twigs here and there over the tree.

The remedy is the same as for pear-blight, namely, to cut back the dead or dying twigs and burn them.

Another plant disease of a serious nature in parts of New Brunswick is what is called "black root" of strawberry. It is so serious in some parts of the Province that it has put out of business several strawberry growers.

The disease affects the roots, causing a blackening and decay. The plant becomes sticky and dried up soon after the trouble begins, and plants may be attacked even when in fruit. When this happens, the fruit becomes soft and dark-colored and utterly unfit for use. It is caused by a fungus or bacteria, the life history of which has not yet been worked out. The disease appeared also in Bowmanville, Ont., this year.

The remedy is to secure plants from a clean source and plant on land which has previously been thoroughly cultivated and on which strawberries had not recently been grown. Barnyard manure seems to be favorable to the disease, therefore, if fertilizer is necessary, it would seem wise to use commercial fertilizer. It might be a wise precaution to dip the roots of plants, previous to planting, in dilute formalin solution for a few minutes,—formalin about one per cent., and for about five minutes.

The strawberry industry in parts of New Brunswick could be made a very important one,

because they can be successfully grown as late as August 1. This late crop should command a good price, both on the Montreal and the Boston markets.

Durham Co., Ont.

J. B. DANDENO.

THE DAIRY.

Buttermilk.

Editor "The Farmer's Advocate":

The third dairy by-product we shall consider is known as buttermilk, which is the material remaining after cream has been churned, or what is left or removed when the fat of the cream has been concentrated into what is commercially known as butter. Buttermilk more nearly resembles skimmilk in composition than it does any other dairy product. It has about 90 per cent. of water and 10 per cent. of solid material, made up of fat, nitrogenous matter, sugar and ash. It varies a great deal in its composition, sometimes containing as much as one-half to one per cent. of fat, but usually about one-quarter of one per cent. The special point about buttermilk as a food is the lactic acid which it contains.

Some most extravagant claims have been made for the use of sour milk as a means for prolonging life. It is reported that a people in Southern Europe known for their longevity, use sour milk largely in their diet. In consequence of this, and some statements attributed to a well-known French scientist, there have arisen a number of commercial products which are claimed to have wondrous renovating and healing properties for the human system. After making due allowance for over-statement of the facts, due to the enthusiasm of certain persons, who incidentally expected to reap a fortune from the too easily humbugged public, there is undoubtedly a wide and useful field for the utilization of buttermilk more largely than is the case at present, in assisting nature to heal the injuries of reckless mankind with reference to their health. The mild lactic acid of buttermilk tends to overcome an alkaline condition of the human system, aids in the digestion of food, stimulates the secretion and elimination of waste material, and also tends to dissolve limy deposits in the arteries and elsewhere, which cause impaired circulation of the blood and that general "stiffness" which comes with advancing years. The young human is, as farmers say, "limber as a cat," but he soon becomes bent in posture and unmistakably and painfully non-pliable in his body.

We read recently of a noted Irish medical man, who is known locally as "Buttermilk Doctor," who prescribes this homely remedy for many diseases which afflict his patients, and especially for those who are afflicted with what doctors call alcoholic disease. He claims to be able to cure the worst case of alcoholism by a liberal use of buttermilk to take the place of the stimulants, whisky and beer. More Buttermilk and less beer would be a decided advantage to most of the so-called civilized nations. We are hearing a good deal at the present time about the ravages of strong drink among the working classes, but little permanent good will be accomplished until a satisfactory substitute is found. Deprived of whisky and beer the human animal, in many cases, is like the lower animals deprived of food and water—they become crazed. It would seem as if buttermilk is the substitute mankind is looking for. Instead of feeding this to pigs, or wasting it, as is the case at some creameries, someone will in future undertake to buy this drink in wholesome quantities and have it sold in hotels, restaurants, etc., as is the custom to-day with other forms of beverages. We understand that many of the bars in New York City and elsewhere list buttermilk among their drinks and that thousands of glasses are sold daily, more especially during hot weather. This custom has an advantage in that a man who does not take strong drink, does not care for filling his stomach with soda-waters of doubtful origin, and yet desires to be sociable can ask for a glass of healthful buttermilk. Man is a social animal and it is useless to try to break up well-established social customs without a satisfactory substitute. If, however, these social customs can be utilized for the good, instead of the harm, of the members of a social community

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be successfully grown as late as late crop should command a price on the Montreal and the Boston market.

J. B. DANDENO.

THE DAIRY.

Buttermilk.

The "Farmer's Advocate" has recently published a by-product we shall consider buttermilk, which is the material left over when the cream has been churned, or what is left when the fat of the cream has been separated into what is commercially known as butter. Buttermilk more nearly resembles milk in composition than it does cream. It has about 90 per cent of water, 10 per cent of solid material, 1.5 per cent of nitrogenous matter, sugar and a great deal in its composition, including as much as one-half to one per cent of lactic acid which it contains.

It will be noticed by the foregoing that in 1908 the skimmilk had a higher relative feeding value for pigs than did the buttermilk, but in 1909 the buttermilk was much superior. The probable explanation of the high feeding value of the buttermilk in the second year's tests, is the fact, that during that summer we were conducting a number of experiments in churning pasteurized sour cream and the buttermilk tested abnormally high in fat, frequently going so high as 5 to 1 per cent. In no other way can we account for the exceptionally high returns in feeding buttermilk to hogs as were got that year. Under ordinary conditions the skimmilk has generally given better results than either of the other two by-products. In commercial work, of course, it does not pay to feed milk-fat to hogs; consequently buttermilk is creamed and on the farm try to secure as exhaustive churning as possible, as fat at 25 to 30 cents a pound is rather expensive feed for pigs, even though they may be selling around ten cents per pound live weight.

Summing up our argument with reference to the by-products of the dairy we should like to emphasize:

1.—These are among the most valuable foods on the farm for live stock. For the very young animal there is no satisfactory substitute for skimmilk. Our live stock interests are among our most valuable assets in Canada. While grain is relatively high, just at present, owing to abnormal conditions, the man who intends to remain permanently in agriculture at one place, must keep animals to restore and maintain the balance of nature.

2.—Skimmilk and buttermilk are also valuable human foods. They contain all the elements found in new or whole milk, though the fat is usually quite deficient. However, they contain a higher percentage of ash and proteid or muscle-forming material than does new milk, hence are especially valuable for the growing person who needs to build bone and muscle for a sound body, which is essential for the highest type of human service.

In addition, buttermilk contains a valuable digestive agent, and has stimulating properties of great value. Skimmilk may also be made into buttermilk, if so desired, by introducing, or by allowing to develop, the lactic ferment. After the skimmilk thickens it should be churned to give it a smooth consistency, which is characteristic of good buttermilk. Those farmers who are convenient to town or city can usually dispose of all buttermilk at prices nearly equal to the value of whole milk. A few particles of butter allowed to float on top of the buttermilk will give added taste and please the customers. Producers can very well afford to lose a little butter in this way, if the price is high for the by-product.

Finally a buttermilk campaign might, and doubtless would, do a great deal of good in overcoming the ravages of strong drink among those addicted to the habit. "More Buttermilk, Less Beer" for Canadians.

O. A. C. H. H. DEAN.

H. H. DEAN.

RELATIVE FEEDING VALUES.

By-product	1908	1909
Separated Whey	100	—
Ordinary Whey	125	100
Buttermilk	160	172
Skimmilk	163	129

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O. A. C. H. H. DEAN.

THE APIARY.

The Rearing of Good Queens.

Editor "The Farmer's Advocate":

The matter of rearing queens with a view to the improvement of our bees is certainly of no mean consideration to the beekeeper. In rearing queens it is necessary to study the conditions which exist when queens are reared naturally, namely—under "the swarming impulse." This swarming fever usually takes place under the most favorable circumstances. The colony is in the most prosperous condition; it is crowded with worker bees of every age; drones make the air resonant with their wings; both honey and pollen are coming in abundantly, and the atmosphere within the hive is maintained at an even temperature. The queen cells that are built are well developed because the bees know how to rear queens perfectly well.

Keeping in mind these natural conditions of a colony when building queen cells, the principles of queen rearing may be formulated into the following propositions:

1. The hive must be well filled with bees, and the bulk of them must be young ones.

2. There must be an abundant supply of both pollen and honey.

3. The amount of brood supplied should be limited in quantity in order to concentrate the working force of the colony, and it should embrace eggs just hatching or larvae not over one day old.

4. The temperature must be warm enough not to chill the brood.

5. Drones must be flying.

Other influences which can be brought to bear on these natural conditions so that they can be aided and directed toward bee improvement, are the following:—

1. Careful selection of the breeding stock with special reference to those qualities that it is desirable to perpetuate and add to.

2. Selection of drones from the most vigorous queens whose worker progeny are noted for size, strength and honey-gathering capacity.

3. A rigid system of pruning cells and killing defective queens.

How far this improvement can be carried by the bee is difficult to determine, as the organs of reproduction in the queen, as well as her fertilization, are so unlike the breeding of our domestic animals that the queen breeder will always have immense difficulties to contend with.

Wellington Co., Ont. W. F. GEDDES.

HORTICULTURE.

Spraying Ten Acres of Apples.

Editor "The Farmer's Advocate":

I figure that an orchard of ten acres would probably contain on an average of 400 trees. I figure on the labor of three men to operate a power outfit, two men to handle the spraying rod; one on the tank and one on the ground, and one to drive the horses. I figure two men at \$1.50 per day, \$3.00, and a team and man at \$4.50—that may be a little high, but that is what we have to pay in our county—making a total



One of the Females to be Sold by Auction on Glenescott Farm, near London, Ont., on September 15, 1915.

cost of \$7.50 a day for help. Now, the capacity of a power outfit should be about 1,500 gal.ons. Some days we would run more than that, and some days less. That would give us a cost per gallon of one-half a cent.

Regarding the material, I wish to give you the result of the material I use. For my first spraying I use the commercial lime-sulphur for scale or aphid or fungus. I use it at the strength of 1 to 11, and try to use it just before the buds are opening. As to the average price of commercial lime and sulphur, I figure it at \$10.00 a barrel of 40 gallons, and one barrel diluted at 1 to 11 would make 480 gallons of spraying mixture, which would make a cost of 2.08 cents per spraying gallon. Now, at cost of labor of .5 and cost of material at 2.08, would make a total of 2.58 cents per gallon. I figure on an ordinary-sized tree 5 gallons to a tree—some trees will take less and some a little more, but I believe by judgment and care 5 gallons can be made to do the work. At 5 gallons to a tree, and 2.58 cents per gallon would make it cost 12.9 cents per tree for the first spraying. For the second spraying, for codling moth principally, and fungus, which I give just as the blossoms have fallen, I use commercial lime-sulphur at the same cost per barrel, but dilute it at 1 to 30, and that would make 1,240 gallons or a cost per gallon of .83 cents. I add with that arsenate of lead, which I figure at an average of 14 cents a pound in small packages, it would probably cost less in larger packages. I figure 2 lbs. of arsenate of lead to 40 gallons of water, or 5 lbs. to 100 gallons, making the arsenate of lead cost .7 cents per gallon. The labor will cost you just the same for your second and third spraying. The lime and sulphur would cost .83 cents and the

arsenate of lead .7 cents, making a total of 2.08 cents per gallon spraying mixture. At 5 gallons per tree that will make the second spraying cost 10.15 cents per tree.

As to the third spraying which, in my opinion, should follow 10 days or two weeks after the second, it would take the same material and the same labor and the same cost; so for the third spraying it would cost 2.08 per gallon, and at 5 gallons to a tree, it would cost 10.15 cents per tree. The first spraying at 12.9, and the second and third sprayings at 10.15 cents per tree, make a total of 33.2 cents per tree for three thorough sprayings. Therefore, 400 trees would cost \$132.80. At 4 gallons per tree it would reduce the cost one-fifth, making a total of 26.56 cents per tree, or a total cost for 400 trees of \$106.24. If you eliminate the third spraying, which is not necessary in all seasons, and I have seen excellent results with two sprayings, and taking 5 gallons to a tree, it would cost 23.05 cents per tree, or \$92.20 for two thorough sprayings; or for two sprayings at 4 gallons to a tree, would cost 18.44 cents per tree, or \$73.76 for the 400 trees in a ten-acre orchard.

I use 150-gallon tank and gasoline engine. I prefer a 150-gallon tank to a 200-gallon tank. In one of the orchards it is very hilly, and I find no trouble in getting around with a 150-gallon tank. I do not believe in horse-power for spraying trees. I do not think it is practicable. You can only generate power when your wheels are in motion; I prefer gasoline engines to hand outfits for several reasons. I think first that they are far cheaper to operate. You can operate a gasoline engine for 10 or 15 cents a day for gasoline, and you can get a higher and more even pressure. I prefer a pressure of over 150 lbs. I have experimented this past season on different pressures, and I found that I got much better results from a pressure of 150 to 200 lbs., an average of 175 lbs.; as I say, high pressure is more economical in spraying. You can get where you want to more quickly, and you do not waste so much material. I think that high pressure is

very essential for the second spraying after the blossoms have come out. You cannot drive the spraying material into the calyx end of the blossom with a 60 or 70 lbs. pressure. I find it can be done better with a 150 or 200 lbs., or an average of 175, and high pressure for blossom spraying in my opinion is very important, and much better results can be obtained with high pressure at that time than any other.

I would buy a pump that would give me that pressure. Some pumps will not, the capacity is not sufficient. You want a pump that will give you sufficient pressure and capacity for the kind of nozzles which you propose to use. I like a pump that will carry at least four large nozzles, two for each line of hose. I have in my work discarded the small nozzles altogether. I use a nozzle of the Friend type, of which there are a dozen different makes, and I find that I have less trouble and better results.

I think the question of hose is the most important. It is absolutely necessary that you get good hose. More time and money can be lost with poor hose than with any other part of the outfit, that part generally breaks down first. I would always buy a good hose fitted with large plugs and clamps. A good many of the hose plugs that are sold have only one. Have them made with long shanks so that you can put two clamps on them. I have quite a lot of trouble with those single-clamp hose plugs. I used on one outfit this year four different lots of hose before I got a good hose. I would sooner pay 50 cents a foot for good hose than pay 5 cents a foot for inferior hose, as I would save it in loss of time. I think it pays nearly every time to buy the best you can.

I recommend gasoline engines for another reason. They are always useful to a man on the farm. They can be easily attached to other things, generally by undoing three or four bolts, and they can do lots of little things on the farm. When I was through with my spraying I took the engine to my home and attached it to a little pump which I have there, and it is now supplying water for the entire farm. They do not need much looking after by anyone who can follow the instructions given and avoid trouble. There is an old saying that if you spare the rod you will spoil the child; I think that if you spare the material you will spoil the fruit every time.

I believe in spraying the whole tree right from the root up. It does not pay to be stingy with spraying material at all. As I have said, I have sprayed this year about 25 acres of fruit, practically covering all kinds. I sprayed apples, plums, pears, cherries, grapes, red currants, and gooseberries, and I have had very gratifying results in all cases. I used just the same material on the grapes as I did on the others. I might instance the red currants. We have about two acres of red currants, and we generally figure to get from \$250 to \$400 for them. Last year I sprayed them very thoroughly, at the same strength, and about the same time as I sprayed the apples for the first and second spraying. We had in our district a large crop of currants, and a bulk were harvested at 4 to 5 cents a quart. With my spraying last year I noticed that I had a very heavy foliage, the heaviest foliage I have ever seen on red currants, so I decided that while other people were picking their currants I would leave mine, and did not pick a currant until I think every currant in the district had been picked and shipped. Then I started picking my red currants, and never got less than 10 cents for a single quart, and I never had a blistered currant. Also, of all the cherries grown in this district only those cherries which were sprayed were worth buying at all. There were some men who did not spray their cherries, and on the following morning after they were picked they were rotten. I spray the cherries just before the buds swell, and then spray with a second spraying just after the small cherry forms. I just spray twice for cherries.

I have been an apple buyer for a good many years, and I have come to the conclusion that there is more money in growing apples than there is in buying them or handling them in any other way. It is surer money, and it is easier-made money.

I would like to draw one or two comparisons of what 33 cents a tree means. It might seem to some a big expense to spend 33 cents a tree. A bushel of culls is worth 15 cents, and a bushel of good apples is worth 50 cents; therefore, the difference between a bushel of culls and good apples is 35 cents on the present market. On an average a tree should produce 10 bushels, which is not a big average—some would produce 20 and some 5—and if you convert one bushel of culls at 15 cents into one bushel of good apples at 50 cents you are making 35 cents. If you have a tree of apples bearing 10 bushels and do not spray them, you will have half culls, and if you convert that 5 bushels into good apples, you will make \$1.75 profit on that one tree, or on 400 trees a net profit of \$700. That is not the profit on your orchard, but that is over and above what you would get if you did not spray. Take the cost of your spraying off that and it means a net profit of \$567. Besides all that, you will strengthen the tree and stimulate it to produce a better crop another year, and you will also help your neighbors by getting rid of pests. Bruce Co., Ont. R. B. DALE.

Controlling Plant Lice in Apple Orchards.

The information gained by a series of experiments extending over a number of years in the treatment of apple orchards for the control of aphids or plant lice is summarized by F. H. Hall in a bulletin recently received from the New York Experiment Station. It is pointed out that the greatest amount of injury in orchards is done by the early broods. The first brood checks the growth of the young leaves and retards the development of blossoms, while those that follow by sucking out considerable quantities of the vital plant juices at a time when these are most needed, dwarf and deform the developing apples and defoliate the branches.

All the tests emphasize the necessity of spraying at the proper time namely when the buds are just swelling in the spring. Later than this the insects work into the buds where they are protected by the hairy growth of the opening leaves. As the leaves unfold the lice feed on the under surface causing the leaf to curl around and further protect the insects.

The cheapest and most satisfactory method of dealing with these pests has been found to consist of spraying with Lime-sulphur to which has been added three-fourths pint of 40 per cent. nicotine solution. Arsenate of lead may be used in the spray at the same time if desired.

Attention is drawn to the fact that where early spraying has been omitted the trees may be helped over a critical period and some protection afforded by a later spraying. For this any one of the following mixtures is recommended.

No. 1.—Nicotine Solution (40 per cent.). 3 Pint: Water 100 gals.; soap, 3 to 5 pounds. The soap should be omitted in combining the solution with lime-sulphur.

No. 2.—Kerosene, 2 gals.; fish oil soap 1/2 pound; soft water, 1 gal. The soap is dissolved in boiling water, after which the kerosene is added and the mixture violently agitated for from three to five minutes. One gallon of this mixture

should be diluted with eight gallons of water before being applied.

No. 3.—Fish oil soap 12 to 20 pounds; water 100 gals. It is recommended that where this mixture is used a test should be made to determine the amount of soap to use, as this soap varies greatly in its water content.

Experiments conducted at this Station prove that from 95 to 98 per cent. of the lice are killed by spraying with a suitable mixture when the buds are showing green but still compact. Liberal quantities of material under the high pressure are necessary in order to obtain these results.

POULTRY.

Fitting Birds for Exhibition.

The art of fitting birds for exhibition is founded on the wise selection of individuals worthy to be exhibited. There are so many defects and disqualifications in each particular breed that the exhibitor must be, to a certain extent, a 'fancier' in the particular strain of fowls he may be handling. There is 'fitting' and faking but between the two operations no very distinct lines can be drawn. There is a common maxim which says, 'faking is faking only when it is found out.' This statement, although not morally true, has considerable truth as applied to showing at a poultry exhibition. Illegitimate methods of fitting birds are commonly considered wrong but when is a practice illegitimate? There is no doubt as to the ethics of performing surgical operations to remedy certain defects of the head parts, removing important feathers and plugging holes left by the removal of the same, dying or staining the plumage and legs and using chemicals to such a degree that the plumage has been materially altered in color. However, there are some practices which are looked upon rather leniently, such as removing a few unimportant defective feathers and the removal of fine down and stubs from the legs and feet of birds of clean-legged varieties.

When birds which bear the greatest promise are selected they should be given considerable range where they can enjoy either sun or shade at will, yet it should be remembered with white plumage there is a tendency to go brassy when exposed to too much sunlight. The feeding should be liberal and if new plumage is being grown such feeds as will best encourage the same should be given. Clean, sanitary, natural conditions accompanied by plenty of nourishing feed are the fundamental principles of growing and developing exhibition stock.

When the time comes to prepare the birds for the exhibition coops the exhibitor must then show considerable skill in cleaning the head parts, legs and plumage yet, if the legs of the bird are inclined to be scaly they should be washed and oiled weeks previous to the time of entering the show. To clean the legs and feet they should first be washed with castile soap and warm water and scrubbed with a tooth-brush or nail-brush. After a thorough washing any remaining particles of dirt beneath the scales can be taken out with a small stick or wooden tooth-pick. The legs should then be well dried and rubbed with cotton-seed oil or sweet oil. The oil should be rubbed in until none is left on the outside to collect dust. Birds of white plumage will require washing. This operation requires considerable time, patience and energy. There is a knack in washing which every would-be exhibitor should acquire before the time comes for final fitting. It would be well to practice on some cull stock not intended for exhibition purposes. The washing should be done in a warm room at a temperature between 85 and 90 degrees and everything should be in readiness before the work begins. Three or four tubs are necessary. First lather and soap water then rinse in a tub of luke-warm water and again in two changes of cold water. Rinsing must be carried on until every trace of soap is removed. The specimen should then be dried in a clean coop or a clean pen at a fairly high temperature which may be reduced to about 70 degrees.

Dead and broken feathers should be removed weeks prior to the date of the exhibition so new feathers may take their place, yet during the final preparation more will probably be seen and they too should be removed. Down appearing on the shanks or toes is plucked off at this time. During the period of fitting it is wise to handle the birds a few moments each day for the individual that is quiet and docile at the fair has an advantage over the entry that is not 'coop broken.' The specimen should also be taught to pose in such a manner that the wings and tail will show to best advantage while being judged.

FARM BULLETIN.

A B.g Yield of Wheat.

The Census and Statistics Office issued August 11 a bulletin giving a preliminary estimate of the yield of fall wheat, of hay and clover and of alfalfa, based upon appearances at the end of July as estimated by correspondents, and a report on the condition of other field crops at the same date.

The preliminary estimate of the average yield per acre of fall wheat in Canada for 1915 is 28.10 bushels, as compared with 21.41 bushels last year and with 21.78 bushels, the average of the five years 1910 to 1914. The harvested area of fall wheat in the five provinces of Ontario, Manitoba, Saskatchewan, Alberta and British Columbia amounts in 1915 to 1,208,700 acres, as compared with 973,300 acres in 1914, and the total estimated yield to 33,957,800 bushels as compared with 20,837,000 bushels in 1914, an increase in total yield of 63 per cent. In area harvested, in average yield per acre and in total yield the fall wheat harvest of 1915 is therefore expected to be the largest on record. In Ontario the total estimated yield is 27,080,000 bushels from 972,000 acres, an average of 27.86 bushels per acre and in Alberta the other large fall wheat province, the total yield is 6,225,000 bushels from 215,700 acres, an average of 28.86 bushels per acre. The estimated yield of hay and clover in 1915 is 10,589,800 tons from 7,875,000 acres, as compared with 9,206,000 tons from 7,997,000 acres in 1914, the average yield per acre being 1.34 ton, as compared with 1.15 ton in 1914. Alfalfa shows a total yield of 158,755 tons from 92,665 acres, as compared with 129,760 tons from 90,385 acres in 1914; the average yield per acre is 1.71 ton as compared with 1.44 ton.

Spring-sown grain crops continue to show an excellent average condition, all being for Canada above 90 per cent. of the standard representing a full crop. Beans, buckwheat and flax are 88 per cent. of the standard, potatoes and turnips are above 90 and the remaining crops are as follows: Corn 82, mangolds 89, hay and clover 81, alfalfa 87, sugar beets 89 and pasture 89. Converted into a standard wherein 100 represents the average yield per acre of the seven years 1908 to 1914, the condition of the principal grain crops at July 31, 1915, is as follows: Fall wheat 120, spring wheat 112, all wheat 113, rye and barley 111, oats 108, flax 107. That is to say, the yields per acre of these crops, according to their appearance on July 31, are expected to be above the average yields of the previous seven years to the extent of 20 per cent. for fall wheat, 12 per cent. for spring wheat, 13 per cent. for all wheat, 11 per cent. for rye and barley, 8 per cent. for oats and 7 per cent. for flax.

Welcome Each Rebuff.

Editor "The Farmer's Advocate":

To see one's wheat shocks growing green on top, and one's oat crops beaten flat upon the ground is painful enough but is not without compensation, such compensation as the city dweller misses. In the city one has but to "press the button" and everything that the heart desires appears. The fairy tales that used to fascinate our childish imaginations are indeed surpassed by the achievements of modern civilization, the enjoyment of which has been in a large measure as yet confined to our cities. The urbanite is largely independent of storm and flood and all the gigantic destructive forces of nature. His work goes on with complete disregard to the weather. His food comes to his door, in many cases already prepared for the table. Clothing and shelter are ready and close at hand. Personal services of all kinds are immediately available. In the city man's triumph over nature seems complete, and one can appreciate to the full the advantages that have come to humanity by reason of the way in which man has changed his own environment.

But these advantages bring with them many corresponding losses. The everlasting and everlastingly necessary struggle of man with opposing natural forces is forgotten in the enjoyment of the fruits of the struggle, especially by those far removed from the struggle itself. To-day thousands of bushels of ruined wheat, and other losses of a similar character are some of the many reminders to the farmer of his dependence upon the uncontrollable forces of nature. Nature's smiles and nature's frowns come very close to him. But the typical urbanite knows nothing of such dependence, or knows it only in a remote, unsympathetic way. He misses the moral discipline of those engaged in the primary industries. Occasionally the terrible upheavals of earthquake or volcanic eruption bring home to him man's littleness and powerlessness; or perhaps the more terrible upheavals of the Satanic forces of human nature, such as we see in the present war, destroy and ravage more than a hundred earthquakes. But in general the typical urbanite knows not the meaning of the command: "In the sweat of thy brow thou shalt

a handsome revenue in exchange for the whey and grain they consume.

Many appliances about the house and buildings of this farm in Huron County could be copied to great advantage by hundreds of Canadian farmers and in the adoption of the household conveniences they would have the happy concurrence of the women folk.

The Banking Situation.

By Peter McArthur.

Does anyone know just what is happening in banking circles just now? Under the cloud of the war Canadian financiers are doing things that in happier times would have been discussed freely. But facts are hard to get at in this hot weather. At the present writing there is a story that a Montreal bank is going to swallow an Ontario bank and that later on a bigger bank is going to swallow the bank that is doing the swallowing. And some day there may be only one bank in Canada. That would look like a money trust, wouldn't it? What do you think of it? If the facts can be secured they will furnish the substance of a future article.

The Outlook in Huron and Lambton Counties.

Western Ontario has been deluged with rain and during the first twelve days of the month of August as much as six inches of precipitation was recorded. In some districts probably more fell while others were treated more leniently by nature. Last year 5.2 inches of rain fell during the entire month of August and 37 years ago 7.1 inches inches fell in the same month. In the northern part of Middlesex County and in Huron this condition of the weather is responsible for considerable damage. Up to the beginning of this week there were many acres of oats yet to cut and in some isolated cases yet some hay to draw, yet it would no longer be fit to put in the mow. From Goderich to Sarnia on the shore of Lake Huron and for many miles inland many acres of grain were yet standing. In field after field one could see the binder at one corner of the unfinished field, the long whip still standing erect in the socket with grain on the table and everything indicating that the harvester had beaten a hasty retreat with his team. The weather has been capricious indeed. Often the sun would come out with such promise that uneasy farmers would hitch up the team and resume work only to be driven from the fields again when less than an hour's cutting had been executed. Some wheat still stood in the shock but it was badly colored from the weather.

In Huron County particularly grain has gone down badly and in many cases only the mower will do effective work. The height and appearance of the corn crop too gave evidence that it required a somewhat different treatment and a little warmer atmosphere if it were going to result satisfactorily. The second cut of alfalfa was in bloom and ready to be harvested, but what was the use of cutting it? The damp weather has been just exactly what bean growers do not want. The spores which cause anthracnose, the most destructive pest affecting the crop, spread more freely during damp weather and cause a poor sample. Onion growers too complained of difficulties with their crop.

One Fruit Growers' Association in the vicinity of Goderich has a membership of about 20. This year they are only planning on 100 barrels to the grower, making in all about 2,000 barrels which is less than half what they produced last year. This proportion of a crop seems to apply all along the northern part of the Lake Huron shore, but in many cases the output will be even less. Neither can Lambton County growers boast of very high percentage of a normal crop of apples. Along the Lake Shore some orchards are well laden with fruit but this is not general and considerably less than an average crop will be harvested. Farther in at Arkona the conditions are not so good as on the front and probably less than half an average crop will come out of that district.

Excessive moisture has had a very injurious effect upon berries and although the yield has been good the crop would not "stand up" during shipment. Raspberries were seen on the Sarnia market in a very critical condition after coming only 20 miles by train and those transported by auto-truck showed deterioration yet not so far advanced as did those handled according to slower methods. There will be some plums and pears throughout the fruit districts on Lake Huron and peaches along the shore in Lambton County. The vegetable growers in the Sarnia district have not had an exceptionally profitable season. In former years they have received in the vicinity of \$1.20 or more per bag for early potatoes but 75 cents per bag has been the prevailing price in that locality for the 1915 crop. Many potatoes of the early kinds were yet in the ground at the end of last week and sometimes in such wet soil that they could not be dug until several dry days had elapsed.

Throughout the northern part of the County of Lambton the writer could not see that grain had suffered quite so much from recent wind and rain as had that in Huron County. Although apparently no more grain had been hauled to the barn or stack yet the shocks were standing better in the field and the uncut grain was not so badly beaten down. Corn too looked to be a little more forward. However, in one field water was standing between the drills as it would in a freshly-flooded, irrigated patch.

The circumstances surrounding the grain harvest are rather depressing yet dairy farmers all have a good tale to tell regarding their milk yields this year and where cattle have been graz-

ing they too have made satisfactory gains. Early cut clover fields are covered with a grand after-growth which will yield seed, another crop of hay or, perhaps, pasturage. The writer saw fields of second-growth clover being plowed and it looked like good farming indeed to see the land thus replenished with humus and plant food.

Be Optimistic!

Western Ontario has suffered from altogether too much rain and the papers have been telling the people of the ruin of all the crops. An expert here and another there have been interviewed and the headlines next day make it appear that blue ruin stares the farmer in the face. A drive through the country and a visit to the farms reveals a somewhat different state of affairs. True the damage has been great and we would not attempt to minimize it in the least but nevertheless the Ontario farmer, operating on a mixed-farming basis, has more than one string to his bow and when one crop is damaged another is saved. Grass, beef and milk have been crops which have done well in the excessive moisture. A great deal of the wheat was harvested before the continued deluge came. That which remained out will still be good feed, and those who have tried it know what good feed wheat is when mixed with other grain. Most of the hay went in in fair condition. Those who delayed haying got caught. The barley was ripe when the storms came and stood up, although much of it got too ripe before cutting and all got badly discolored before harvesting. But then it is made into pork and beef and not into beer and the stock do not object to its color. The oat crop was hard hit. Much of it was knocked flat. Continued wet weather caused it to get too ripe before being cut and shelling was prevalent. Cutting took longer and was hard on man, machinery and horses but even so it is remarkable how well the crop was picked up by careful farmers. The greater part of it was saved. Corn has grown better than one would expect under the circumstances. Roots are doing well. The second crop of hay will be a bumper. Are we downhearted? No! It has been wet but it might have been worse. Let us be optimistic! Things are not nearly so bad as some experts would have us believe.

First Wheat Sold.

The first load of Ontario fall wheat to be marketed from this year's crop on Toronto market was sold last week. The wheat was grown in Scarborough Township and was harvested prior to the big rains. It weighed 62 lbs. to the bushel and sold at \$1.10 per bushel.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts at the Union Stock-yards, West Toronto, from Saturday, Aug. 11, to Monday, Aug. 16, totalled 249 cars, comprising 4,244 cattle, 239 calves, 1,097 hogs, 1,510 sheep, and 606 horses; 62 cars 1,186 cattle billed direct, export cattle mainly poor to fair quality. Trade slow and easier. Butcher steers and heifers, choice, \$8.25 to \$8.85; good, \$7.25 to \$7.75; medium, \$6.75 to \$7.25; common, \$5.50 to \$6.25; feeders, \$6.50 to \$7.25; stockers, \$5.50 to \$6; cows, \$4 to \$7; milkers, \$45 to \$95 each; bulls, \$5 to \$7.25. Calves, \$4.50 to \$11. Sheep, \$3.50 to \$6.75; lambs, \$7 to \$9.65. Hogs, \$9 fed and watered, and \$9.15 to \$9.25 weighed off cars.

REVIEW OF LAST WEEK'S MARKETS
The total receipts of live stock at the City and Union Stock-yards for the past week were:

	City.	Union.	Total.
Cars	18	600	618
Cattle	141	5,062	5,203
Hogs	296	6,407	6,703
Sheep	825	3,405	4,230
Calves	56	641	697
Horses	13	4,975	4,988

The total receipts of live stock at the two markets for the corresponding week of 1914 were:

	City.	Union.	Total.
Cars	36	384	420
Cattle	518	5,429	5,947
Hogs	177	7,158	7,335
Sheep	1,155	4,634	5,789
Calves	136	908	1,039
Horses	20	16	36

The combined receipts of live stock at the two markets for the past week show an increase of 198 cars and 4,952 horses, but a decrease of 744 cattle, 632 hogs, 1,559 sheep and lambs, and 342 calves, compared with the corresponding week of 1914.

Receipts of live stock for the past week have not been large, and trade has been fairly active except in the common classes, where it dropped to slow on account of the poor quality. There has been practically no change in values. Heavy fat steers and heifers were very ready sale, at firm prices, a few selling up to \$9.10, about forty cattle weighing 1,300 to 1,400 lbs. bringing above price. The price was also firm for choice feeders and stockers, weighing from 800 to 1,000 lbs. There are many orders for outside points of the above class that cannot be filled. American buyers are more in evidence for these cattle for delivery at all points in the United States. For export to France, CoBett, Hall & Coughlin handled 900 choice steers for P. Burns. The sheep and lamb market had a fair run, with prices decidedly firm for this time of year. Calves came in only in small numbers, with choice veal calves in great demand up to 11c. Grass calves have no demand. Hogs that were brought on this market before 12 o'clock p. m. were quoted at \$8.90 weighed off cars. The weighing then ceased until 7 a. m., when the quotation was \$9.15 for these latter. This plan is to equalize the price of long and short-run hogs, and to avoid misunderstanding as to time of weighing. Some select hogs, bought on order, sold for \$9.20 to \$9.25, weighed off cars.

Export Cattle.—Steers weighing from 1,250 to 1,400 lbs., were worth from \$8.40 to \$8.90.

Butchers' Cattle.—Extra choice butcher steers, \$8.50 to \$9.10; choice butcher steers, \$8.10 to \$8.50; good to choice, \$7.75 to \$8; medium, \$7 to \$7.50; common, \$6.65 to \$7; inferior, light steers and heifers, \$5.75 to \$6.25; choice cows, \$6.75 to \$7; good cows, \$6.25 to \$6.60; medium cows, \$5.50 to \$6; common cows, \$5 to \$5.50; canners and cutters, \$3.75 to \$5; bulls, \$5 to \$7.60.

Stockers and Feeders.—Choice feeders, 850 to 1,000 lbs., sold from \$7 to \$7.50; feeders, 800 to 900 lbs., \$6.80 to \$7.25; stockers, 600 to 800 lbs., \$6 to \$7; common stock steers, \$5 to \$5.25; stock heifers, 550 lbs., sold at \$5.25 to \$5.75.

Milkers and Springers.—Trade for these was steady, at unchanged values. Choice milkers and forward springers sold at \$85 to \$100; good cows, \$70 to \$80; common and medium cows, \$45 to \$65 each.

Veal Calves.—Choice veal calves sold at \$9 to \$11; good, \$8 to \$8.75; medium, \$6.50 to \$7.50; common calves, \$5.75 to \$6.75; grass calves, \$4 to \$5.

Sheep and Lambs.—Light ewes, \$6 to \$7; yearling lambs or sheep, \$7 to \$8; heavy, fat ewes and rams, \$3 to \$4.50; spring lambs, \$9 to \$10.50.

Hogs.—Selects, weighed off cars, \$8.90, p. m.; \$9.15, a. m.; fed and watered hogs, \$8.75; f. o. b., \$8.40. Heavy, fat hogs, weighing over 230 lbs., 50 cents per cwt. deducted. Sows sold at \$2 per cwt., and stags \$4 per cwt. less than prices paid for selects.

BREADSTUFFS.

Wheat.—Ontario, No. 2 winter, per car lot, new, \$1.12 to \$1.15, nominal, according to freights outside. Manitoba, No. 1 northern, \$1.384; No. 2 northern, \$1.374; No. 3 northern, \$1.344; track, lake ports.

Oats.—Ontario, No. 2 white, 57c. to 58c., outside; No. 3, 56c. to 57c., according to freights outside. Manitoba, No. 2, 63c., track, lake ports.

Corn.—American, No. 2 yellow, 84c., nominal, track, lake ports; Canadian, No. 2 yellow, nominal, track, Toronto.

Rye.—Outside, No. 2, nominal.

Barley.—For malting, nominal, outside; feed barley, 60c., outside.

Buckwheat.—No. 2, nominal. Flour.—Manitoba flour—Prices at Toronto were: First patents, \$7; second patents, \$6.50; in cotton, 10c. more; strong bakers', \$6.30; Ontario, 90-percent winter-wheat patents, \$4.60, seaboard, or Toronto freights, in bags.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, No. 1, \$17 to \$19; No. 2, \$15 to \$16, track, Toronto.

Bran.—\$27 per ton, Montreal freights; shorts, \$29 per ton, Montreal freights; middlings, per ton, \$30, Montreal freights; good feed flour per bag, \$1.30, Montreal freights.

Straw.—Baled, car lots, track, Toronto, \$7 to \$8.

COUNTRY PRODUCE.

Butter.—Butter remained stationary on the wholesale during the past week. Creamery pound squares selling at 20c.

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have made satisfactory gains. Fields are covered with a good crop of winter wheat, and the papers have been telling of the ruin of all the crops. An expert there have been interviewed and next day make it appear that blue farmer in the face. A drive country and a visit to the farms what different state of affairs. There has been great and we would minimize it in the least but Ontario farmer, operating on a basis, has more than one string to one crop is damaged another, beef and milk have been crops, well in the excessive moisture, the wheat was harvested before huge came. That which remained good feed, and those who have that good feed wheat is when grain. Most of the hay went in Those who delayed having got they was ripe when the storms up, although much of it got too and all got badly discolored. But then it is made into port into beer and the stock do not. The oat crop was hard hit, knocked flat. Continued wet it to get too ripe before being was prevalent. Cutting took hard on man, machinery and so it is remarkable how well the it was saved. Corn has grown would expect under the circum- are doing well. The second crop bumper. Are we downhearted on wet but it might have been optimistic! Things are not some experts would have us

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Wheat Sold.

of Ontario fall wheat to be this year's crop on Toronto market. The wheat was grown in ship and was harvested prior to it weighed 62 lbs. to the bushel 0 per bushel.

Grain Markets.

BREADSTUFFS.
 Wheat.—Ontario, No. 2 winter, per car new, \$1.12 to \$1.15, nominal, according to freights outside. Manitoba, No. 1 northern, \$1.38; No. 2 northern, \$1.34; No. 3 northern, \$1.34; track, ports.
 Ontario, No. 2 white, 57c. outside; No. 3, 56c. to 57c., according to freights outside. Manitoba No. 2, 63c., track, lake ports.
 American, No. 2 yellow, 84c. nominal, track, lake ports; Canadian, No. 2, 63c., nominal, track, Toronto.
 Outside, No. 2, nominal.
 Oats.—For malting, nominal, outside; for feed, 60c., outside.
 Rye.—No. 2, nominal.
 Flour.—Manitoba flour—Prices at Toronto: First patents, \$7; second patents, \$6.50; in cotton, 10c. more; bakers', \$6.30; Ontario, 90-per-cent winter-wheat patents, \$4.60, or Toronto freights, in bags.
HAY AND MILLFEED.
 Baled, car lots, track, Toronto, \$17 to \$19; No. 2, \$15 to \$16, Toronto.
 Montreal freights: \$29 per ton, Montreal freights; \$30, Montreal; good feed flour per bag, \$1.30, real freights.
 Baled, car lots, track, Toronto, \$7 to \$8.

COUNTRY PRODUCE.

Butter remained stationary on wholesales during the past week. Every pound squares selling at 20c.

THE ROYAL BANK OF CANADA

Capital Authorized - - \$ 25,000,000
 Capital Paid up - - - 11,500,000
 Reserve Funds - - - 13,000,000
 Total Assets - - - 180,000,000

HEAD OFFICE: MONTREAL

Branches throughout every Province of the Dominion of Canada

Accounts of Farmers Invited
 Sale Notes Collected

Savings Department at all Branches

to 30c. per lb.; creamery solids at 27c. to 28c. per lb., and separator dairy butter at 25c. to 26c. per lb.
 Eggs.—New-laid eggs declined 1c. per dozen, selling at 22c. to 23c. per dozen.
 Cheese.—New, large, 15c.; twins, 15c. Honey.—Extracted, 11c. to 12c.; comb, \$2.40 to \$3 per dozen sections.
 Beans.—Hand-picked, per bushel, \$3.40; primes, \$3.20.
 Potatoes.—New are now selling at 50c. per bushel, track, Toronto.
 Poultry.—Live weight: Turkeys, per lb., 20c.; spring ducks, 11c. per lb.; spring chickens, 15c. per lb.; fowl, heavy, 12c. per lb.; light, 10c. per lb.; squabs, per dozen, 10 ounces, \$3.60 (dressed).

HIDES AND SKINS.
 City hides, flat 16c.; country hides, cured, 16c. to 17c.; country hides, part cured, 14c. to 15c.; calf skins, per lb., 15c.; kip skins, per lb., 13c.; sheep skins, \$1.50 to \$2; horse hair, per lb., 34c. to 37c.; horse hides, No. 1, \$3.50 to \$4.50; lamb skins and pelts, 35c. to 50c.; tallow, No. 1, per lb., 5c. to 7c.; wool, washed, fine, per lb., 35c.; wool, combings, washed, per lb., 35c.; wool, unwashed, fine, per lb., 30c.; wool, unwashed, coarse, per lb., 28c.; rejections, per lb., 28c.

FRUITS AND VEGETABLES.

Small fruits have been very wet and waxy during the past week, with the exception of blueberries, which have been of good quality, raspberries ranging from 4c. to 10c. per box, a few bringing 11c.
 Plums have been coming in in especially large quantities, but they are not of good quality, being very hard and green. Thursday the six-quart baskets sold at 12c. to 25c., while the 11-quart baskets went at 20c. to 50c.
 Peaches are on a par with the plums in point of quality, although there were a few of better quality, the bulk selling at 20c. to 50c. per 11-quart basket, three baskets of extra choice bringing \$1 per basket on Thursday.
 Cherries declined on Thursday, as the demand was poor and the quality poor also, the 11-quart baskets selling at from 32c. to 50c.
 Tomatoes, which declined so heavily a week ago, remained nearly stationary the last few days, at 20c. to 30c. per 11-quart basket.
 Cucumbers also have held firm during the last two or three days of last week, the bulk selling at 25c. per 11-quart basket.
 Cabbages, after being a glut on the market, have recovered, and sold at \$1 to \$1.25 per case containing about thirty heads.
 Apples, new, 25c. to 50c. per 11-quart basket; bananas, \$1.50 to \$1.90 per bunch; blueberries, \$1 to \$1.60 per 11-quart basket; currants, red, 3c. to 6c. per box; 35c. to 50c. per 11-quart basket; black, \$1 to \$1.50 per 11-quart basket; cherries, 32c. to 50c. per 11-quart basket; cantaloupes, \$3.75 to \$4.50 per case, Canadians, 60c. to \$1 per 11-quart basket; grapes, California, \$3.75 to \$4 per case; gooseberries, per 11-quart basket, 30c. to 50c.; lemons, \$3.75 per box; oranges, \$4.75 to \$5.25 per case; peaches, Georgia Elbertas, \$2.25 to \$2.50 per six-basket crate; California, \$1.10 to \$1.25 per box; Canadian, 20c. to 50c. per 11-quart basket; a few bringing \$1; pears, California, \$2.50 per box; plums, imported, \$1.25 to

\$1.75 per box; Canadians, 12c. to 25c. per six-quart basket; raspberries, 6c. to 10c. per box, a few at 11c.; thimbleberries, 6c. to 12c. per box; watermelons, 40c. to 60c. each; beans, wax and green, 30c. to 40c. per 11-quart basket; beets, 20c. to 25c. per 11-quart basket; cabbage, \$1 to \$1.25 per crate; cauliflower, \$1 to \$2 per dozen; carrots, 20c. to 30c. per 11-quart basket; celery, small, 30c. to 40c. per dozen; large, 60c. per dozen; corn, 10c. to 15c. per dozen; cucumbers, 40c. to 50c. per 11-quart basket; egg-plant, \$1 to \$1.15 per 11 quarts; peppers, sweet, 35c. to 40c. per 11-quart basket; parsley, 25c. to 35c. per 11-quart basket; potatoes, new, 75c. to 90c. and \$1 per bag; tomatoes, 20c. to 30c. per 11-quart basket.

Montreal.

Live Stock.—Offerings of cattle on the local market were light last week, and there was a good demand for everything offered. The quality of the stock on the market was anything but choice, the proportion of the latter being small. There were practically no choice steers at all. The supply of fair stock, however, was ample, and sales of these took place at 7c. to 7c. per lb.; good steers sold at around 7c., and medium at 6c. to 6c., with common ranging down to 5c. per lb. Some choice butchers' cows sold at 7c. to 7c. per lb., lower grades ranging down to 5c. and 5c. per lb. Bulls brought about the same figures as cows. Packers were after canning stock, and everything offered was taken. Prices of bulls ranged from 4c. to 5c. for best canners' stock, cows being from 4c. to 4c. per lb.

Supplies of sheep and lambs continued moderate, and there was a good demand for everything offered. Lambs sold at 8c. to 9c. per lb., and sheep at 5c. to 6c. per lb., according to quality. The market for hogs was firm in tone, demand being good. Prices were 9c. to 9c. per lb. for select, rougher stock ranging to 1c. lower. Calves were in good supply, prices being from \$3 to \$5 each for ordinary, and up to \$15 for best.

Horses.—Dealers cannot say anything good of this market. Supplies were very small, practically no horses being offered in the regular way, and demand being on a par with offerings. There is no actual change in the market. Prices were as follows: Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$250 to \$300 each; light draft, weighing 1,400 to 1,500 lbs., \$200 to \$225 each; small animals, \$125 to \$175; culls, \$50 to \$100, and fancy saddle and carriage horses, \$300 to \$400 each.

Dressed Hogs.—Very little change was noted in the market for dressed hogs. Everything offered was readily absorbed, at steady prices, being 13c. to 14c. per lb. for abattoir-dressed, fresh-killed stock.

Honey and Syrup.—Demand for syrup was moderately active for the time of year, and there was a little doing in honey. Maple syrup was 70c. for small, 8-lb. tins, 80c. for 10-lb., and \$1.20 for 13-lb. Maple sugar was 9c. per lb. White-clover comb honey was 15c. to 16c. per lb., extracted being 11c. to 12c., and dark honey, 8c. to 9c.

Eggs.—The market for eggs continued firm. Supplies were fairly large, and demand good. Fresh-laid eggs were 27c. to 28c. per dozen; select 26c.; No. 1 candled 23c., and No. 2 candled were 20c. per dozen.

Butter.—Almost no change was reported in the market for butter. Quality was not quite up to the choicest. Prices were 27c. to 28c. for choicest, and 27c. to 27c. for fine, seconds being about 1c. under these prices. Dairies were 23c. to 24c.

Cheese.—Demand for cheese was not so brisk over the cable, and prices were slightly lower. Finest Ontario colored cheese was 13c. to 13c. per lb., white being 13c. to 13c.; finest Eastern was 12c. to 13c., and undergrades about 1c. less. As will be observed, colored cheese continued at a slight premium over white.

Grain.—The possibilities of the harvest are now occupying the entire attention of financial and commercial circles, and never was greater interest taken. So far, all goes well with the Northwest. The market for oats was firm. No. 3

Canadian Western were quoted at 61c. per bushel; extra No. 1 feed at 61c.; No. 1 feed at 60c.; No. 2 feed at 59c.; sample oats at 58c.; Quebec No. 3 white at 59c., car lots, ex store. American No. 2 yellow corn was 91c., ex track, and Argentine corn 86c.

Flour.—Millers reported a very slow demand for flour. Prices were steady, at \$7.10 per barrel for Manitoba spring-wheat first patents; \$6.60 for seconds, and \$6.40 for strong bakers', in bags. Ontario patents were \$6.25 per barrel; straight rollers \$5.60 to \$5.80 per barrel, in wood, and the latter at \$2.70 per bag.

Milfeed.—The market for bran and shorts was steady, bran being \$26 to \$26.50 per ton, in bags, and shorts being \$28. Middlings were \$33 to \$34 per ton; pure grain mouille \$38 to \$40 per ton, and mixed \$35 to \$37 per ton.

Hay.—The tone of the market for hay was very firm, and prices were fully up to those of a week ago. No. 1 hay was quoted at \$22.50 per ton to \$23; extra good No. 2 hay at \$21.50 to \$22, and No. 2 hay at \$20.50 to \$21 per ton, ex track. New hay was quoted at \$17.50 to \$18 for No. 1; \$16.50 to \$17 for extra No. 2; \$16 for No. 2, and \$15 for No. 3.

Hides.—The only change in the price of hides last week was in the price of lamb skins, these being 80c. each. Beef hides were 21c., 22c. and 23c. per lb., respectively, for Nos. 3, 2 and 1; calf skins were 18c. and 20c. per lb.; horse hides were \$1.50 for No. 2, and \$2.50 each for No. 1. Tallow was 6c. per lb. for refined, and 2c. for crude.

Buffalo.

Cattle.—Receipts were liberal last week, both here and at Western marketing points, and values were correspondingly lower, generally speaking, although some sales were made at satisfactory prices on the best end of shipping steers. Largest supply of Canadians for some weeks past, around twenty loads being offered, prices on which showed the wide range of from \$8.35 to \$9.25. Buyers of shipping cattle took hold slowly. As yet there is no indication that the American packers will buy here for export to the Allies' armies, but there is reason to believe that they will be casting eyes this way. Supply of shipping steers generally lacked quality, although quite a few lots showed desirable finish. Nothing in the tippy line was in evidence, \$9.85 being the best price, taking a load of medium-weight steers. Butchering cattle sold lower, market being somewhat uneven, fat cows selling to fairly good advantage, while a decent kind of heifer stuff was punished a full quarter, and in some cases more, kinds that have been selling right along from \$7.50 to \$7.75 dropping last week to \$7 and \$7.25. A lot of thin butchering steers were offered last week, causing weakness on heifer stuff. Yearlings were more plentiful than for some weeks past, and looked a quarter lower. On bulls, the market ruled from a dime to a quarter lower, best heavy kinds landing at steady prices up to \$7.25, a decline being noted on the medium grades, while on a thin, common kind, it was fully a quarter lower deal. There is every reason to believe that the market on shipping cattle will ease up somewhat, now that the Southern steers are moving rather liberally to Jersey and other Eastern markets. Receipts last week were 5,550 head, against 4,250 for the preceding week, and 6,200 for the corresponding week a year ago. Quotations:
 Shipping Steers.—Choice to prime, \$9.75 to \$10; fair to good, \$9.25 to \$9.60; plain, \$8.50 to \$9.
 Butchering Steers.—Choice heavy, \$9.25 to \$9.50; fair to good, \$8.50 to \$9; best handy, \$8.75 to \$9.25; common to good, \$7.50 to \$8.50; yearlings, \$9 to \$9.75.
 Cows and Heifers.—Prime weighty heifers, \$7.75 to \$8.50; best handy butcher heifers, \$7.50 to \$7.75; common to good, \$6.50 to \$7.25; best heavy fat cows, \$6.75 to \$7.25; good butchering cows, \$6 to \$6.50; medium to good, \$5.50 to \$6; cutters, \$4 to \$4.50; canners, \$3.25 to \$3.90.
 Bulls.—Best heavy, \$7 to \$7.25; good butchering, \$6.50 to \$7.
 Grass cattle quotable from 50 cents to a dollar under given quotations.
 Hogs.—Market showed improvement as

the week advanced. However, the range in prices continued wide. On the opening day of the past week heavies sold down to \$7 and \$7.10; heavy mixed grades landed at \$7.20 and \$7.35; desirable packers' weights brought \$7.40 and \$7.50; Yorkers landed generally at \$7.75, and pigs reached \$8. The next four days prices showed a steady advance, and before the week was out—Friday—heavies brought up to \$7.65; heavy mixed made \$7.90; desirable mixed grades moved at \$8 and \$8.15, and lighter-weight grades changed hands at \$8.25, with a few reaching \$8.35. Roughs, \$5.75 to \$6, and stags, \$5.25 down. Receipts the past week totaled approximately 25,800 head, being against 29,635 head for the previous week, and 32,640 head for the same week a year ago.

Sheep and Lambs.—Market last week was active, and a good clearance was had from day to day. Top lambs the first four days ranged from \$9.50 to \$9.75, few \$9.85, and Friday, with other markets lower, prices were declined a quarter to fifty cents, general range being from \$9.25 to \$9.50. Cull lambs the fore part of the week brought up to \$8.50, and Friday they went mostly from \$8 down. Sheep were steady all week, top for wethers being \$7.25; yearlings landed around \$8, and ewes went from \$6.75 down. Receipts last week aggregated around 7,400 head, as compared with 3,540 head for the week before, and 12,600 head for the same week a year ago.

Calves.—On the opening day of last week top veals sold generally at \$12, and the next two days best lots moved at \$11.50 and \$11.75. Thursday's market was a quarter higher, and while Friday's opening prices were \$1 higher than Thursday, the closing trade was 50c. to 75c. lower. Bulk of Friday's opening sales were made at \$13, and the late range was from \$12 to \$12.50. Culls went from \$9.50 down; heavy, fat calves, unless on the veal order, are not quotable above \$8, and the general range on grassers was from \$5 to \$6. Friday's supply included a deck of Canadians, and the tops out of these sold at \$12.50. Receipts last week were 2,000 head, being against 2,349 head for the previous week, and 2,325 head for the same week a year ago.

Cheese Markets.

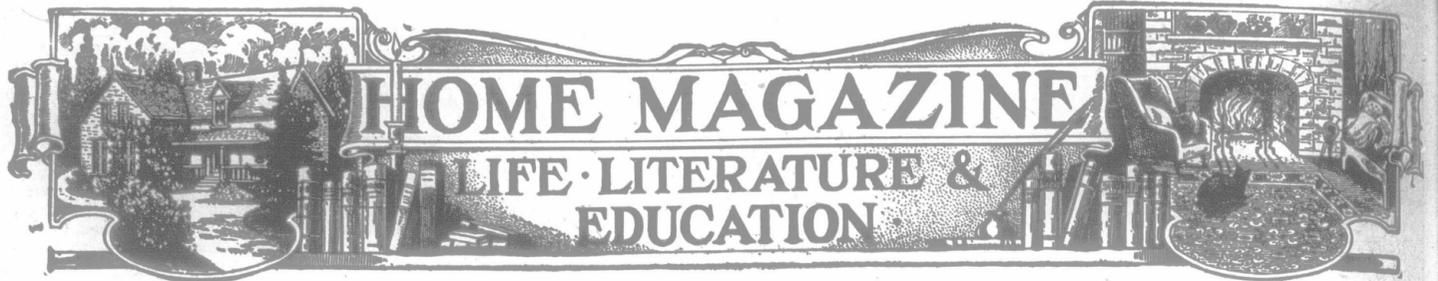
St. Hyacinthe, Que., 11c.; Belleville, 12 15-16c. and 12 18-16c.; Kemptville bid 12 9-16c.; Watertown, N. Y., 12c.; St. Paschal, Que., 11 17-22c.; Campbellford, 12c. and 12 7-16c.; New York, State whole milk fresh flats, white and colored, specials, 13c. to 14c.; colored, average fancy, 13c. to 13c.; white, 18c. to 13c.; Brockville, 12c. bid; Alexandria, 12c.; Kingston, colored, 12c.; white, 18 1-16c.; Vankeek Hill, 12 1-16c.; Cornwall, 12c.; Picton, 12 7-16c. and 12c.; Napanea, colored, 12c.; white, 12c. (bid); Iroquois bid 12c.; Ottawa, 12c.; Listowel bid 12c.; Woodstock bid 12c.; Madoc, 12c.; Montreal, finest Westerns, 13c.; finest Easterns, 18c.

Chicago.

Cattle.—Beeves, \$6.10 to \$10.25; cows and heifers, \$3.10 to \$9.10; calves, \$3 to \$11.75.
 Hogs.—Light, \$7 to \$7.80; mixed, \$6.30 to \$7.65; heavy, \$6.05 to \$7.10; rough, \$6.05 to \$6.20; pigs, \$6.90 to \$7.75; bulk of sales, \$6.40 to \$7.15.
 Sheep and Lambs.—Sheep, native, \$5.90 to \$6.65; lambs, native, \$6.75 to \$8.95.

Gossip.

The farmers who are getting the highest results in dairying are those who have chosen a breed of cattle which (in official test) have shown their great milk-producing qualities. A rare opportunity presents itself to any who may wish to start a herd or improve the herd they now have, in the dispersion sale of pure-bred Holsteins which will be held at Glenescott Farm (near London), on Sept. 15. Among the lot are some bulls and heifers of excellent breeding. Many of the cows have high official records. The sires of the herd, Lewis Prilly Mercena Hartog 18665, and Prince Rouble Hartog De Kol 22071, have a long line of ancestry, and will be sold at the same time to the highest bidder.



At Dawn.

[The following poem was written in the trenches in Flanders by a rifleman of the London Irish. Readers will agree that the lines reveal poetic ability of a genuine kind.—Ed.]

All night the echo of the battle smote
The highest heavens with its angry note,
As each long-throated, iron monster's
roar
Proclaimed the three-crowned Kings of
damned War—
Along the parapet of the white trench,
'Mid blood-red flash and acrid powder
stench,
Fought the grim souls, who, all the
night and day
Play the great hero in their own small
way;
While, swiftly, through the darkness,
growing, swelling,
Rushed the grey-coated guards like fiend-
hounds, yelling;
Taking no heed of those who slipped
aside
Into the tangled grass—and maybe died.
Ah!—then they met; and for a space
there strove
Devil 'gainst demon, changing all that
grove,
Where apples once had hung to Death's
retreat,
'Till morning broke. Then dawn, with
silver feet,
Sped through the skies—while in the
darkness grey,
Winging to Heaven a lark began its lay.
RIFLEMAN D. HOWARD TRIPP.—In T.
P's Weekly.

Mrs Pankhurst.

[On July 17th a remarkable and very beautiful procession of women, miles long, went through the streets of London. Women in costume represented each country engaged in the war against Germany; bands of uniformed women represented every profession and trade; "floats," beautiful and symbolical, spoke silent messages. The procession had been organized as an expression of woman's readiness to work in any way that might be helpful during the Empire's time of need, and at every point of its progress it was received with cheers. It is almost superfluous to say that Mrs. Pankhurst was one of the "heads" of the venture, and that in the procession were hundreds of women—suffragettes—who had once figured less attractively, if quite as spectacularly, in the streets of London. But Mrs. Pankhurst is no longer jeered at in England. People are recognizing the elements of justice in the cause for which she once fought so strenuously if so ingloriously, and perhaps she herself, recognizing the strength of this newer and more artistic method of expression, will scorn to go back to her old plans of attack for women's suffrage—should any further struggle be necessary. At all events, Mrs. Pankhurst is a character, and a forceful one; hence, perhaps, our readers may be interested in the following sketch of her, as given by A. G. Gardener in his "Prophets, Priests and Kings." The book is one of "The Wayfarer's Library," published by J. M. Dent & Sons, London, Eng., and Toronto.]

It was at the memorable meeting at the Albert Hall at which Sir Henry Campbell-Bannerman made his first public utterance as Prime Minister that the meaning of the women's war dawned on me. There had been one or two preliminary skirmishes, at Manchester and again at the Queen's Hall. But here was the first general engagement. The time was well chosen. The spirit of that meeting can never be recaptured in our day. It was the hour of triumph, a moment such as one cannot look for twice in a lifetime. The Balfour Parli-

ament was dead at last. The long reign of Toryism was over and Liberalism was born again after twenty years of obliteration, qualified by one feeble flicker of office without power. We stood on the threshold of a new time. All the nightmare of the war and Chinese serfdom, of adventure abroad and wrong at home, was behind. We looked, as it were, under.

"... an arch, wherethrough
Gleamed the untravelled world."

It was like a vast thanksgiving as, after long years in the wilderness, the exiles entered the land of promise. Suddenly I became conscious that something unusual was happening. There was a murmur below, as though a light breeze had ruffled the great sea of humanity that filled the area. All eyes were turned from the platform to a point in the boxes near me. I looked out and my eyes encountered, hanging from the box next but one to mine, a banner with the legend, "Votes for Women." It was the signal of a new attack in the rear. Another Richmond was in the field. The Tory host was in ruins; but the Amazons were upon us.

Now, whatever may be our private views as to the campaign of the militant women, we cannot deny that it revealed quite brilliant generalship. It may not have been magnificent, but it was war. It was extremely "unlady-like," the exaltation was sometimes unpleasantly like hysteria, the drama often bordered on the wildest farce. Oc-

shrill and tempestuous, with the velocity of the wind and a sort of sleepless fury that threw every convention to the winds. It was startlingly unlike the warfare of men. Men in their ultimate political expression are brutal. If you are a minister of whom they do not approve they will smash your windows. But the women were more subtle. They got inside the hall; they hung on to the door knob; they besieged you back and front. They made life intolerable with pin-pricks. They murdered the orator's best periods, and left his peroration in rags. They marched on the House in battalions; they stormed it in furniture vans; they penetrated the keyholes. You watched the river for suspicious craft, lest they should scale the Terrace; your eye roved the sky lest they should descend by parachute from the clouds. It was a war divorced from all the rules of war. It was feline in its activity and cunning. It was unlovely, but it was business. It made the cause, Women's suffrage had been an academic issue for half a century; it became actual and vital, as it were, in a night. It was a pious opinion, discussed as you might discuss the Catiline conspiracy; it became an issue about which men were ready to fight in the last ditch.

Who was the Molke of this amazing campaign? Who was it who prepared her battalions and her strategy in such secrecy that no whisper of the menace was heard until the whole cannonade burst on the new Government as it entered into office? I was presiding one afternoon at one of the sittings of

truth is apparent. She is not a woman; she is an idea. One idea. Now the dominion of an idea, provided it is sane, is the most potent thing in the world. Most people have either no ideas or are burdened with so many that they are useless. They are like the normal committee described by Mr. Chamberlain. "On every committee of thirteen persons," he once said, "there are twelve who go to the meetings having given no thought to the subject and ready to receive instructions. One goes with his mind made up to give those instructions. I make it my business to be that one." Mrs. Pankhurst does instinctively what Mr. Chamberlain did by policy. She leads by virtue of an obsession. She is the symbol of the potency of one idea held to the exclusion of every other motive and interest in life.

The idea is this, that women are the victims of an age-long tyranny imposed on them by men. That tyranny varies with time and latitude and social conditions. In its crudest form among the savage tribes, it treats women frankly as a slave; a beast of burden, a hewer of wood and drawer of water. In the East it imprisons her in harems and regards her as the plaything of idle moments. In mediæval England she was held "something better than his dog, a little dearer than his horse." In Victorian England she was the graceful decoration of life, a symbol of sweetness and innocence, a creature with pretty, kittenlike ways, but having no relevance to the business of the world. To-day she is emerging into sex consciousness and beating at the bars of circumstance. The cage is enlarged; but it is still a cage. She goes to the University and is bracketed with the Senior Wrangler; but she is denied her degree. She qualifies for the Bar, as Christabel Pankhurst did, but she is denied the right to practise. She enters the inferior walks of life, and finds that there is one standard of payment for men and an immeasurably inferior one for women. She falls, and finds that society has smiles for the betrayer and the flaming sword for his victim. At the bottom of the abyss, in the sunless court, she fights the last silent, helpless battle between starvation on the one hand and the lash of the sweater on the other. Everywhere she sees herself the chattel of men. If she is happy she may be serenaded and garlanded with jewels; if she is unhappy she may be trodden in the mire. But one thing she cannot have. She cannot have equality of treatment. She cannot have simple justice, for she is a woman in a world made by men. "Madame," said Charles XI. of Sweden to his wife when she appealed to him for mercy to some prisoner—"Madame, I married you to give me children, not to give me advice." That was said a long time ago; but behind all the changes of the centuries it still represents much of the thought of men in relation to women.

It is not until one has entered sympathetically or otherwise into this conception of the serfdom of woman that one can understand Mrs. Pankhurst and her campaign of violence. She is a woman to whom the thought of this sex oppression is like a raging fever. It has burned up all other interests. It has driven her in turn from one political party to another, from Liberalism to the I. L. P., and from the I. L. P. out into a sort of political wilderness. She has deliberately chosen the role of Ishmael, her hand against the whole institution of society, whether the immediate cause be good or bad, for that institution represents to her only a single lurid fact—the dominance of one sex and the subjection of the other. She sees everything hinge upon that fact. At the Guildhall meeting to which I have alluded, she rose to put a question after Mr. Pember Reeves had spoken. "Was



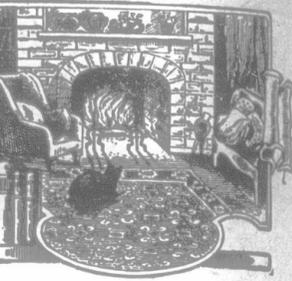
In Harmony—England, Ireland and Scotland in the Procession.

asionally there was the sense of an astonishing lack of humor, as when some of the Suffragettes lashed themselves to the railings in Downing Street. The world would have said that that was typically feminine, but for the fact that as an achievement in futility it was easily surpassed by the police, who, instead of leaving them in the pit they had dugged for themselves, solemnly rescued them and then put them in the lock-up.

But with all its elements of comic opera, the campaign was the most brilliant piece of electioneering in our time. It discovered a masterly strategy, a sense of the moment to strike, a daring and a fertility of resource that commanded admiration, if not approval. It was a revelation of the woman in action,

the Conference on Sweating at the Guildhall when a small woman with a tired and rather sad face rose to speak. She spoke quietly in a monotone, as if she were soliloquizing. It was as if an abstraction had found voice, so remote did it seem from any personal emotion. With great ingenuity her remarks drifted from sweating to the subjection of women, who are the victims of sweating, and then, before the closure could be applied, the concealed battery was unmasked in "Votes for Women." It was raids.

At the first glance it is difficult to associate this slight and pathetic figure with the authorship of so much tumult and with the inspiration of a movement so bizarre and frenzied. But soon the



the anti-sweating legislation in New Zealand," she asked, "passed before or after the women had the vote?" And a wan smile of triumph greeted the admission that it was after. The fact covers her whole sky. It hangs like a dark pall over her spirit, shutting out the sunshine. As Mr. J. J. Mallon says in a sketch of her:

"What she has to say springs from dark and somewhat bitter waters. Her metaphors are shapes of gloom. But at her best, as on one memorable day in Manchester, when we commemorated the Russians, slain on Bloody Sunday, there is that in her voice and mien that stays in the mind forever. Then she passes from recital of particular hardship to an impassioned contemplation of all suffering:

"The whole of the world's tears,
And all the trouble of her laboring ships,
And all the trouble of her myriad years."

"Her sombre face glows with impersonal pity and appeal; her sad lips deliver the plaint of a sex. You no longer hear a woman's voice: you hear the voice of woman."

It is the gloom of fanaticism, of a thought gnawing ceaselessly at the vitals, and growing by what it feeds on. The spirit was inherent, for Mrs. Pankhurst comes of a revolutionary stock, and her grandfather narrowly escaped death at Peterloo. But it has been cultivated by circumstance. As a student at Paris she was a room-mate of the daughter of Henri Rochefort, and caught from her the spirit of Republican France. Back in Manchester, she met and married Dr. Pankhurst, a barrister, whose political enthusiasm equalled her own, and who made the original draft of the Married Women's Property Bill—giving married women the control of their own property—which subsequently became law. Together they worked feverishly for many causes, Mrs. Pankhurst herself serving on the Manchester School Board and the Board of Guardians. Then they leapt into national notice in connection with the battle for free speech in Boggart Hole Clough. They won, but the victory cost Dr. Pankhurst much, and was not unconnected with his premature death. Left with a young family, Mrs. Pankhurst became a Registrar of Births and Deaths, a position which, bringing her into direct touch with the tragedy of the poor, fed anew the flame within. Her purpose ripened. There were four children. They should be prepared, like Cornelia's "jewels," for the cause and flung into the arena. She formed the Women's Social and Political Union, and out of the little group of half a dozen unknown women who used to meet in a room in Manchester has emerged the movement which has shaken the whole fabric of politics.

She has in a high degree, apart from that intensity which is the soul of leadership, the gift of command. She has something of the aloofness of Parnell. She nurses, as it were, a fire in secret, has that independent life of the mind which seems unconscious of all external motive, and invites neither help, advice nor sympathy. She seems to have no personal life and no emotions except that overmastering one of abstract justice—a

Stern, tyrannic thought that makes
All other thoughts its slave.

She has the masterful will that evolves laws for herself, and is indifferent to formulas. When challenged to act on the democratic constitution of her union, she replied that democracy and constitutions are of tunes and seasons, and are not sacrosanct in the realm of varying impermanent groups—a declaration of thinly veiled autocracy that led to a disruption. As a debator she has a mordant humor and a swiftness of retort that make her a perilous foe. "Quite right!" shouts a voice from the gallery as she protests against the provision of the Children's Bill which makes mothers punishable in certain cases of mischance to children. "Quite right!" she flashes back. "Before the law the father is parent, the mother is forgotten; forgotten, forsooth, until there is punishment to be borne. Then they drag out the woman and it is 'Quite right.'" She is, above all, a leader in that her passion is always governed by the will.

Her exaltation is kept at white heat, but never, as in the case of some of her followers, gets out of control. Her extravagances are considered: they are not touched with the taint of hysteria.

Her astuteness is evidenced as much in the limitation as in the violence of her campaign. Not a word of access to Parliament. You would gather that that was an ideal to which she was indifferent. It is, of course, the crown of her purpose, the end to which the present agitation is the preliminary. For she stands for the complete civic and political emancipation of woman, for full and equal citizenship, and out of that equality of citizenship she believes there will emerge that equality of social condition and that equal justice which will remove the wrongs that afflict her sex. Whatever we may think of her methods, we cannot doubt that they have shaken the walls of Westminster and made a breach through which future generations of women are destined to enter into undisputed possession of citizenship, with consequences fateful and incalculable. It may be that the methods will be carried too far—that their success as an advertisement will lead to their adoption as a policy. In that case the cause will suffer, for the English people are not easy to coerce.

Annual Meeting of the Red Cross Society for Western Ontario.

Month by month, and week by week, the activities of the Red Cross Society and the Canadian War Contingent Association have continued, and increased, till to those who have not followed the actual work closely, the extraordinary number of articles, now being regularly shipped to the front and to the hospitals in England and abroad, would really come as a surprise. When the warm weather approached, and our workers hoped that they might take a well earned rest, Lady Buck returned from abroad; and her account of the dire necessities facing us, so inspired them, that instead of slackening their labors, they have been turning out a double quantity of work.

Money, of course, is our first requirement. Without a steady income our work cannot go on; and there is so much actual manual work to be done, that few of us have the time to go about collecting or raising money, in the various ways open to charity. In this connection we feel that we owe a very large debt, first, to "The Farmer's Advocate and Home Magazine" for the wonderful work that it has done for us in collecting from its subscribers; and, secondly, to those subscribers themselves for the splendid way in which they have responded to its appeals. Possibly the "little and often" giver, does more than the one who hands out a large check, and is done with it. There are many people these days who would like to hand out large checks; but many of those who have the desire, have not the means with which to gratify it, so they are pledging themselves to various sums "Till the end of the War."

The account of the funds raised, the work done, and the way in which it is organized, will be given more fully at the annual meeting of the London Branch of the C. R. C. S., which will be held on Thursday, August 26th, in the Y. M. C. A. Auditorium, London. The business meeting, for the reading of the report and election of officers, will commence at 3.30, and we hope that all members and Associate Members, throughout the country, will make an effort to be present, and that all those who have the privilege of voting, will do so. All members are asked to bring their membership cards with them.

In the evening there will be an open meeting, when Surgeon-General Ryerson, President of the C. R. C. S. for the Dominion, will speak, and tell of the present, and future needs of the Society. General Ryerson is lately returned from abroad, where he visited the hospitals of Belgium, France and England, and so speaks as one having, not only authority, but direct, first-hand knowledge of his subject, and all its branches.

While this is not the annual meeting of the C. W. C. A., a report of the work, up to date, will be given. The ulti-

mate aim of the two Societies being so much alike, i.e., the welfare of our soldiers, we find it a great help to work in as close conjunction as possible, and to co-operate in every way. And we feel that any one really interested in either association must, of necessity, be interested in the other.

We are very grateful to "The Farmer's Advocate" for allowing us through its columns to cordially invite all those who are interested in either society, to come to these meetings. It is not necessary to be a member. It is not even necessary to become a member. We hope that very many who are not either members or associates (as well as those who are) will be with us on Thursday, August 26th, and if they can return to their homes—unmolested either to work or to pay—that will be our fault.

Don't come if you're afraid! But in these days we must all cultivate courage. Yours very truly,

KATHLEEN BOWKER,
Cor. Sec'y. of the London Branches of
the C. R. C. S. and C. W. O. A.

Hope's Quiet Hour.

Father, I Thank Thee.

JESUS lifted up His eyes and said, Father, I thank Thee that Thou hast heard Me. And I knew that Thou hearest Me always.—S. John xi. 41, 42.

"A reader" has asked me to write on the question of "How God wants to be thanked." To answer that question I must turn to Him who has set us a perfect example. There He stood beside the open grave of His loved friend. If ever there was a time when words of thankfulness would come as a surprise it would be then. The crowd stood around, wondering—as Martha wondered—why He had ordered the stone removed from the mouth of the cave. Suddenly the Man, who had wept with the sorrowing sisters of His friend, who had approached the sepulchre "groaning in himself," lifted His head. With eyes raised to heaven He offered His thanksgiving to the Father who always heard His prayers. If He had uttered those words after the resurrection of Lazarus it would not have surprised us; but, even when death seemed triumphant, He thanked God for His listening Presence.

So it should be with us. When everything is easy and pleasant a man would be ungrateful indeed who could accept the beauty, sunshine and happiness of life without a word of thankfulness to the Giver. It is very easy to thank God when the heart is brimming over with gladness, when smiles come unbidden to the lips, and the time of the singing of birds has come. Like a child, catching his father's smile between the pauses of his play, we look up, and thank God almost unconsciously because we are so happy. That is good, so far as it goes—but it does not go far.

Can we thank our Father for His Love and ever-present care, when we stand beside the grave of a friend, when life looks dark and black clouds have blotched out the sunshine? Our father loves to be trusted. Shall we say: "I will trust God and believe in His love as long as He gives me everything I want?" There is no trust in such an attitude of soul, except foolish trust in ourselves. It is like saying to God: "I know exactly what is best for me and I can grow unselfish, brave and patient if I get my own way in everything. If all pain and unpleasantness be put far from me. I will thank Thee with all my heart." Such a spirit as that cannot please God, for it is both conceited and foolish. If we really trust God we shall thank Him for the discipline He sees fit to send, we shall know that He is hearing and answering our prayers when He seems silent. Even when we offer our prayer we shall—like our Master—thank Him for hearing us always. If we only offer thanks when we can plainly see and understand His reply, we are guilty of distrust. Let us try to rejoice in the Lord always, rejoice in His Love and Presence, more than in the outward circumstances He

sees fit to appoint for us. What would you think of a woman who found no joy in her lover's visits unless he brought her a gift? The gratitude expressed for his gifts, and the evident disappointment felt when he came empty-handed, would make him sad instead of pleasing him. How sadly Elkanah complained of his wife's unhappiness: "Hannah, why weepest thou? and why eatest thou not? and why is thy heart grieved? am not I better to thee than ten sons?" So God may tenderly rebuke a sorrowing heart saying, "Why fret over swiftly-dying earthly pleasure? Am not I better to thee than all earthly happiness?" If the Divine Lover is always near, always providing for our real and eternal good, we can look up in His face and thank Him with all our hearts. I am sure God wants us to thank Him for Himself more than for His gifts. Perhaps He finds we are apt to forget Him in our pleasure over His gifts, and takes away the gifts that we may fix our attention on the Giver and really learn to know Him.

St. Columban said to a young student, when he saw his devotion to learning: "Thou hast asked a perilous gift of God. Many out of undue love of knowledge have made shipwreck of their souls."

"My father," was the humble answer, "if I learn to know God, I shall never offend Him, for they only offend Him who know Him not."

Let us thank God for His gifts, and go on thanking Him when He takes them away; because we prize His love above all things and are willing to suffer if He sees that through suffering we can learn to know Him better and can be drawn nearer to His heart.

"Wounded? I know it, my brother,
Sorrow hath pierced thy heart;
Patience! In silent endurance
Play thou the hero's part.
Brother, the road thou'rt treading
Our Captain Himself hath trod;
Shrink not, if His order comes ringing,
'Forward! the city for God!'
Pledged to follow thy Captain,
Through good report or ill;
With a cheer, take the post set thee,
Rejoice to do His will.
Rejoice, if He think thee worthy,
To front the fiercest foe;
Wrap His peace around thee,
Thy patience God doth know."

There is one kind of thankfulness which is very displeasing to God, and that is the proud thankfulness of the Pharisee. "God, I thank Thee, that I am not as other men are, extortioners, unjust, adulterers, or even as this publican," he said vaingloriously. Sometimes the characters are reversed while the thanksgiving is the same. Have you ever heard anyone say: "Well, I am thankful to say I am not a hypocrite. I don't profess to be a saint or pretend to be any better than I am." Does not such a remark prove that the speaker is looking around at his fellow-sinners and complacently comparing himself with them, declaring himself to be their superiors?

Let us thank God that he has opened a fountain to wash away our sins, instead of congratulating ourselves that we are reasonably good already. If we really come near to God, if we see His holiness as shown in the Life and words of JESUS Christ, we may first shrink away—as St. Peter did—saying, "Depart from me; for I am a sinful man. O Lord." But, as we gaze on that Life of perfect beauty, we are more and more attracted by it, and follow the Great Master of hearts as St. Peter did, echoing his earnest words: "Lord, to whom shall we go? Thou hast the words of eternal life. And we believe and are sure that Thou art that Christ, the Son of the living God." Then we shall have an ever-springing fountain of joy and thankfulness in our hearts. "Thou art with me," we shall say wonderingly, "and having Thee I possess all things." It was a man who had endured the things of which he spoke so unconcernedly, who said with exultant thankfulness: "Who shall separate us from the love of Christ? shall tribulation, or distress, or persecution, or famine, or nakedness, or peril, or sword." Nay, in all these things we are more

than conquerors through Him that loved us."

That is the way God wants us to thank Him, to turn tears into a glorious rainbow by holding them up for His light to shine through them. He wants us to thank Him when He leads us along pleasant paths and also to thank Him for Himself and His marvellous Love when He leads us into a desert place because He wants to be alone with His friend. His Presence can make any desert blossom like the Garden of Eden, for in God's Presence is fulness of joy. It has been said: "We pray God to forgive us our sins, we ought to pray to be forgiven our sadness." We cannot yield to gloomy fears while our eyes are lifted to God's Face.

"How little we may know, how little see,

Only—that Thou art there."

DORA FARNCOMB.

For the Needy.

Again I have been granted the privilege of acting as almoner for Advocate readers, having received a dollar "for the needy" from D. & G. M. This will bring good cheer to a sick and struggling woman, helping her to thank God and take courage. Yes, I can "make use of nice reading matter," among my sick friends in the hospital. Please address to me at 52 Victor Ave., Toronto, (not Victoria Ave.) Thank you!

HOPE.

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 in which issue pattern 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:

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Measurement—Waist, Bust,

Date of issue in which pattern appeared.



8734 Princess Dress, Perforated for Tunic Length, 34 to 46 bust.



8738 Infant's Coat and Cap, One Size.



8724 Empire Neglige for Misses and Small Women, 16 and 18 years.



8736 Princess Slip for Misses and Small Women, 16 and 18 years.



8722 Girl's Dress with Founce and Skirt, 10 to 14 years.



8743 Child's Coat, 4 to 8 years.



6727 Middy Blouse for Misses and Small Women, 16 and 18 years.



8730 Sports Coat, 34 to 44 bust.



8739 Flounced Skirt, 24 to 30 waist.

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.]

On Cheerfulness.

I've been staying for the past fortnight with a friend whose unflinching cheerfulness is remarked upon by everyone who knows her. Needless to say, she is a general favorite. Naturally cheerful folk gravitate to her on the principle of like seeking like; "pious" folk come to her, instinctively seeking a ray of her sunshine; and so her house is a continual resort for droppers-in. But she likes that, for she is interested in everybody, and ready to laugh or give sympathy as occasion calls, quite spontaneously, too, for she never does anything for "effect."

After years of very constant intercourse with this friend, I have come to the conclusion that her almost unflinching cheerfulness is due to two things. In the first place she does not keep herself in a fume over the shortcomings of those with whom she has to do. As she said, a day or so ago, "We have to overlook a few little faults in people who have a great many good qualities." She takes pains, in short, to see the good qualities, and she doesn't turn a magnifying-glass on the faults. . . . In the second place, she manages to keep hopeful. "If things don't turn out just as I want them to," she says, "I just wait. Usually they come out all right in the end."—And, really, when we stop to think of it, aren't a great many of our worries due, more or less, to lack of patience? We can't "wait" to see how things will turn out. We want to push the earth, and at once, when the wiser way would be to do the very best we can and then trust to fortune. Of course, heavy blows—that stagger—must occasionally come, but it is the nagging, daily worry, permitted to go on unchecked, that kills.

It's a fortunate disposition to possess—the cheerful one—and perhaps more of us might be possessors of it if we chose to exercise a little will-power. You know the educationists (scientific) are not few who assert that, by persistently "willing" we can make ourselves almost what we wish to be.

And, after all, it must seem clear enough that it is not a bit of use to be blue. Being blue only takes what the boys call the "pip" out of one, and spoils one's work. Neither does it mend anything at all.

Still worse is it to inflict one's indigo moods on others. One seldom receives any real sympathy, and almost never any help. As a rule, people avoid blue folk as the plague, or, at best, tolerate them for pity's sake.—And who wants to be pitied?

Upon the whole, it is much better to swallow one's moods, turn the lip-corners up when they want to go down, and laugh to cover up the ache in the heart. It's better for other people, and better for oneself.

It is a great mistake, when one has a blue fit, to stay in and brood. That only magnifies things out of all balance. By far the better plan is to go out and have a chat with somebody, the sanest, cheeriest "body" one knows, keeping bright on the surface anyway. Often, in doing so, the worries fade away like the mist, and one wonders where they have gone. After all, not a few of our woes are chiefly imaginary.

THE SUBLIMINAL SELF.

And now for something a bit more elusive.

The other day, when reading an article somewhere, I came on the following and copied it down:

"We all have in the mysterious realms of the submerged self various secondary personalities who are dying for a chance to live. Among them are some who might be worth while bringing out and getting acquainted with."

Have you ever detected any inking of a secondary personality within yourself?—a something different, somehow, that sometimes crops up and surprises you,

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On Cheerfulness.

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Worse is it to inflict one's indignation on others. One seldom receives real sympathy, and almost never help. As a rule, people avoid blue faces as the plague, or, at best, tolerate for pity's sake.—And who wants to be pitied?

In the whole, it is much better to know one's moods, turn the lip-corners when they want to go down, and to cover up the ache in the heart. Better for other people, and better for oneself.

A great mistake, when one has a bad day, to stay in and brood. That magnifies things out of all balance. The better plan is to go out and chat with somebody, the sanest, the "body" one knows, keeping on the surface anyway. Often, when so, the worries fade away like mist, and one wonders where they went. After all, not a few of our troubles are chiefly imaginary.

THE SUBLIMINAL SELF.
I am now for something a bit more

Other day, when reading an article here, I came on the following and it down:

All have in the mysterious realms submerged self various secondary personalities who are dying for a chance to be. Among them are some who are worth while bringing out and acquainted with."

You ever detected any inking of secondary personality within yourself? Something different, somehow, that comes crops up and surprises you,

making you say or do things, perhaps, that, in your more ordinary state of ambulating along, you would never think of saying or doing?

I think the most of us have such sensations, and sometimes they exasperate us, and sometimes they please us—all depending upon which of our personalities happens to be on top. It sometimes appears, indeed, as though many of our mental and moral struggles are due to a conflict to overcome a personality within us which is undesirable, and, as we often feel, quite foreign to the real us.

We cannot understand why these different personalities exist in us, and it is interesting to know that many scientific men have devoted and are devoting much time to trying to study out the whole matter.

In the course of their investigations they have, as might be expected, come upon some very interesting "cases,"—cases in which the difference in personality has been so marked as to produce two absolutely distinct persons in the one body. This discovery, you will remember, the famous "R. L. S."—Robert Louis Stevenson—made good use of in his book, "Dr. Jekyll and Mr. Hyde," in which figures the strange person who at one time is the benevolent, kindly Dr. Jekyll, and at another the malevolent, repulsive Mr. Hyde.

Of course, "Dr. Jekyll and Mr. Hyde" is but a sort of allegory, yet the whole condition of it is absolutely possible in real life. Indeed, cases have been actually found in which not only two, but even three personalities have been locked up in one body. In one instance, a young woman—in France, if I remember rightly—was so different at different times that she led three distinct lives. The strange part of it was that she seemed to have a normal personality that distinctly recognized her other personalities, but was helpless to control them. In each state, she kept a diary, which is still shown as an interesting proof of her variations in life and temperament. Needless to say, this young woman's vagaries were a great source of mystery and inconvenience to her friends. Of course, such spectacular divergences are quite abnormal, and few of us would care to see lines so distinct and various drawn within ourselves. But the whole subject is very interesting, as showing the vast depths of the human mind still to be explored, and understood, and developed. It is interesting, too, isn't it? to know that we are all more wonderful than we seem, and that there are existences and potentialities in us of which, perhaps, we are almost unaware, but which may some day come to the top and assert themselves, we may hope to our great advantage.

This secondary or "submerged" self has often been called the subliminal self. I remember talking with a man once—at the Caledon Club House, to be definite—on this subject. He was, he said, distinctly conscious of a subliminal personality within himself, and it was, he was convinced, an especially good force in his life. It always seemed to him, he said that it attained its greatest ascendancy just about the time of waking, before "the world" had time to close down, an evanescent time, when the spirit seemed more free than at others. It was then that his best thoughts came to him, and he made it a practice, in order to hold them and their influence, to write them down at once in a notebook kept beside his bed. He was convinced, he said, that this habit had been responsible for most of the real successes and conquests of his life.

Isn't life interesting, after all, the more we really think about it? And aren't we ourselves more interesting than we think? And the best of it is that "we know not now what we shall be."

JUNIA.

Autumn Cookery.

Baked Peaches.—Select large, yellow peaches, remove the skins, and cut in halves. Arrange in individual baking dishes and fill the pit cavities with a Paste made of sugar, butter and cinnamon. Bake in a moderate oven, basting frequently with a thick lemon syrup flavored with nutmeg.

Baked Peach Pudding.—Put sliced and sweetened peaches, with a sprinkling of flour, in a deep pudding dish. Cover

with rich pastry, slashed to let the steam escape. Bake, and serve with cream.

Gherkin Pickles.—Wipe 4 quarts small, green cucumbers, put in a crock and add 1 cup salt dissolved in 2 quarts boiling water. Cover and let stand three days. Drain cucumbers from the brine; bring brine to boiling point, again pour over cucumbers and let stand three days. Repeat a third time. Drain, wipe cucumbers and pour over them 4 quarts boiling water in which 1 tablespoon alum has been dissolved. Let stand 6 hours, then drain. Cook cucumbers 10 minutes, a few at a time, in one-fourth of mixture given below, then strain the remaining three-fourths over the pickles. For the mixture, put 1 gallon vinegar in a kettle, and add 4 red peppers, 2 sticks cinnamon, 2 tablespoons cloves, 2 tablespoons allspice berries. Bring to boiling, and boil 10 minutes.

Cucumber Sweet Pickle.—Select large cucumbers, peel, remove seeds and cut flesh into pieces. Place in a large, open vessel, sprinkle generously with salt and leave overnight. In the morning drain well, weigh, and for 7 pounds of cucumbers allow 1 pint vinegar, $\frac{1}{2}$ cup whole spices, and $3\frac{1}{2}$ lbs. sugar. Boil the sugar, vinegar and spices until clear, then add cucumbers. Ready for use in a month.

Green Corn.—To boil corn so that it will be tender and preserve its flavor, treat as follows: Have ready a large pot of boiling, unsalted water, put in the ears and boil rapidly for 20 minutes, then draw to a cooler portion of the range, let stand 10 minutes, drain, and serve at once.

Green Corn Pudding.—Draw a sharp knife lengthwise through each row of the ear, then scrape out the pulp. To 1 pint of this add 1 quart milk, 3 beaten eggs, a large tablespoon butter, and sugar to taste. Turn into a buttered baking dish and bake in a slow oven, stirring occasionally until it begins to thicken.

Corn Oysters.—Mix 1 pint grated corn with $\frac{1}{2}$ cups milk, 2 beaten eggs, $\frac{1}{2}$ cup flour, 1 tablespoon melted butter, salt and pepper to season, and 1 heaping teaspoon flour. Drop a large spoonful at a time in deep, boiling fat. Fry to a golden-brown, drain, and serve very hot.

Mint Vinegar.—Fill a wide-mouthed bottle with crushed mint, then fill up with vinegar. Let stand three or four weeks, then strain and bottle.

Mint Jelly (nice to serve with a roast, lamb or cold meat).—First make some mint extract as follows: Pour 1 cup hot water over 1 cup mint leaves well pressed down, and let stand, covered, for an hour. Strain through a cloth, pressing the leaves well. Next, add this to apple juice boiled down so that it is ready to jelly, put in an equal quantity of sugar and cook a short time until it jellies. If the jelly is to be used at once, it may be made with gelatine and lemon juice instead of the apple juice.

Blueberry Gingerbread.—Add $\frac{1}{2}$ cup boiling water to 1 cup molasses. Mix and sift $2\frac{1}{2}$ cups pastry flour, 1 teaspoon soda, $1\frac{1}{2}$ teaspoons ginger, $\frac{1}{2}$ teaspoon salt. Beat all together. Add 4 tablespoons melted butter, and beat well, then add 1 cup blueberries rolled in 2 tablespoons flour. Turn into a buttered and floured shallow pan, and bake in a moderate oven for 30 minutes.

Sauce for Cold Meat.—One tomato chopped fine, 1 bunch small onions chopped fine, $\frac{1}{2}$ green pepper chopped fine, 1 grated cucumber, 2 stalks celery chopped, $\frac{1}{2}$ level teaspoon salt, $\frac{1}{2}$ level teaspoon pepper, $1\frac{1}{2}$ teaspoons vinegar or lemon juice. Mix all well together and serve very cold. No cooking is required.

The Scrap Bag.

TO SLICE TOMATOES.

When slicing tomatoes use a bread-knife with saw teeth. It makes thinner slices, and the work can be done more quickly.

TIGHT LIDS.

Tight lids on pails can be taken off easily by tying a strong cord around the pail just below the lid. Place a nail under the cord, twist it, and tighten it up evenly, which loosens the lid.

MAKING VINEGAR.

To make pure vinegar at a cost of only three or four cents a gallon, fill a one- or two-gallon crock half-full of apple parings and fill with water. Let this stand ten or twelve days until the contents are sour. Drain off the liquid and put into a two- or three-gallon jug. Repeat the process until the jug is full. To each gallon of strained liquid add one cup of brown sugar and a piece of vinegar "mother." Place a long-necked bottle in mouth of the jug and set it where it will keep warm. Keeping the liquid warm is important. The process requires two and one-half to three months to complete. But after the first jug is ready for use you can always have one or two other jugs in the making, so that you will not be out of your own vinegar when you get started. This process makes strong, pure vinegar, at a cost of three or four cents a gallon.—Sel.

GOOD SOAPS.

A knowledge of the chief characteristics of good household soap is necessary if one is to select soap intelligently. Among these characteristics the following may be mentioned: No fabric should be perceptibly weakened by soap, white clothes should remain white, colored clothes unfaded, and woollens unshrunk. A soap should not be wasteful of material or time, that is, it should neither dissolve too readily nor with such difficulty as to retard the work, or in the case of soft soap, fall and lie undissolved in the bottom of the tub. A soap should contain so little water that the bars will retain their form when dry, and shrink very little in drying. A soap should contain so little rosin that when the hands are washed with it they will, after being rinsed, feel smooth and soft, not rough and sticky. If it gives a yellowish tint to white clothes, it should be suspected of containing too much rosin. There should not be enough free alkali present to give the sharp, biting sensation of lye when touched to the tongue, although good laundry soaps usually contain some free alkali. This is not considered objectionable in a soap for washing white clothes. A soap should not contain so large a per cent. of fatty acids that these will separate when the soap is dissolved in water, because such a soap causes yellowing of the clothes, and does not cleanse as well as it should. A soap should not impart to the clothes a decided and tenacious odor. A soap should not contain so high a percentage of rosin as to cause it simply to suds well without cleansing properly.—Junia L. Shepherd, Domestic Science Department, University Farm, St. Paul.

THE BATTLE OF THE TUBS.

By Margaret MacLaughlin, in Mother's Magazine.

The first wash-day in the ocean's waves about Plymouth Rock marked the establishment of Monday as the wash-day of the nation. If the Priscillas of yesterday who did their washing on the rippled, polished stones in some singing river of the woodland, could peep into some of our well-equipped laundries of the present day, what would they see?

In the model laundry of a great New York high school, the pretty, eager, interested girls in their dainty Priscilla caps, are finding an efficiency, an ease in their tub battle that would be eye-opening to those other Priscillas. Here are great washing machines, a centrifugal wringer, an electric dryer, and an enormous mangle. The girls guide with brain, eye and hand the electric irons on the perfectly outfitted ironing table, having used the individual washtubs, the electric wringers, and the artificial winds of the drier in the process of washing.

Their handiwork includes the laundering of all the spotless bed and table linens, towels and curtains of the model apartment connected with the school, whose counterpart is their dream of home and happiness.

At Teachers' College, New York City, the scene is repeated, but on a slightly larger scale. Here, classes of white-clad nurses learn to turn out by hundreds the freshly-laundried bed linens of the hospitals or college dormitories. They guide with the skill of trained mechanics the almost humanly sensitive ma-

chines, listening to lectures upon the "rhythm of the workers" as they proceed in pairs to turn out so many sheets a minute, which have been ironed by the immense rollers of the mangle; then to fold in rhythm. At the end of the lesson, there is but a touch of the hand and the great power ceases; the noise, the energy of the devices sleep until called to waking duties again.

This method of washing and ironing is being used in the home as well as in the domestic science class of to-day. Mrs. Frank Ambler Pattison, President of the State Federation of Women's Clubs, has installed in her beautiful home in Colonia, New Jersey, a model housekeeping station that is visited by thousands every year. She says that with her laundry equipment it is easy for her to turn out in one day with her own hands, washing equivalent to the amount that thirty families would need.

All sorts and kinds of family washing machines, ranging from one dollar to one hundred dollars, and all sorts of electric and gas irons are on the market. Almost any family can have this sort of equipment; for the millions in farm-houses, apartments, bungalows, and all small homes where washing is done in set porcelain or zinc tubs, dried in the sun and winds, and ironed in the old style, the domestic science expert has helps to offer.

The worker should not stand all the while. The ironer may sit upon a high stool, or she may sit in a lower seat and use a lapboard. Another great help is the soft floor cushion about three inches thick and large enough to stand upon. The ironing table must be just the right height, allowing for the cushion, and for the elbows to be bent, without stooping. A folding table is best. Use the tie-on covers over thick pads, and when not in use a brown denim cover keeps the board fresh. Little boards for children's dresses and for sleeves, aid greatly in the dispatch and neatness with which the work may be done. For ironing embroidered pieces or laces, a square of heavy cardboard with a four-fold flannel cover may be used. A box of salt, plenty of paraffin, a clean wiping cloth, all are necessary equipment for good work. A big starch kettle of agate or block tin is best for the purpose, and cheesecloth strainers for the starch are also needed.

Electric irons well warrant the expenditure, and a gas iron certainly is a saving of both time and money. Generally speaking, heavy irons save time and produce better results.

In collecting the soiled clothes, time and labor is saved if the modern chute has been set in the house when it is built, this being done at little extra cost. With an opening in the bathroom and one in the butler's pantry, the chute carries the soiled clothes to their receptacle in the laundry. This is the most sanitary and convenient of modern arrangements for disposing of soiled linen. If baskets are necessary, the wise housekeeper has a washable bag to line them, so that dust particles and germs do not collect from week to week. Laundry bags in kitchen, bathroom, and various parts of the house, help toward the order and method which count here, as in all phases of housekeeping.

The domestic science teacher of to-day is trying to bring about three results in modern laundry work, cleansing, preserving the fabric, and keeping the color. This means greater care in washing procedure.

Sort the clothes carefully, as this saves time and labor. White garments should be separated from colored; cotton, from woollen and silk; coarse, from fine; very dirty articles from those little soiled. It is well to wash table linen first; then bed furnishings; next skirts, nightgowns, and so on; then colored articles; next stockings and underwear; and last the much soiled pieces which are to be soaked.

Mend any little hole or tear, lest it become larger after washing. All stains should be taken out before the article is put in the water, the nature of the spot being considered. Stains are frequently set by washing, and their removal made hopeless thereafter. Tea, coffee, chocolate or fruit stains should be treated, if possible, as soon as they are noticed, and the part pressed without washing the whole cloth. Ink, wagon grease,

STAIN.	REAGENT.	APPLICATION.
Tea.....	Boiling water.....	Spread stained part over bowl. Pour water from height.
Coffee.....	Boiling water.....	Spread stained part over bowl. Pour water from height.
Chocolate or cocoa.....	Borax and cold water.....	Sprinkle stain with cold water, then pour on boiling water.
Fruit, except peaches.....	Boiling water, with Javelle water, alcohol for peaches.	One-half cup Javelle water, 1 pail of boiling water. Immerse stained part, soap and rinse; wash.
Meat grease.....	Cold water and soap, sunlight and boiling water.	Wash in cold water, follow with soap. Hang in sun or soak in boiling water.
Grass stains.....	Naphtha soap, ammonia water, alcohol, paste of soap and boiling water.	Wash in soap and water. Wash in ammonia water next, then soak in alcohol. Soak in a pan or let stand. Spread on paste and allow to stand. Rub on stain, wash with warm water and soap.
Wagon or automobile grease.....	Lard.....	Soften paint with turpentine, take out stain with benzoin.
Paint.....	Benzoin and turpentine.....	Place paper over spot, cover with iron.
Wax.....	Absorbent paper and hot iron. French chalk, blotting paper.	Put in soap and hang in sunshine.
Perspiration.....	Soap solution, ether, absorbent cotton for coat collar of velvet.	Soak.
Machine oil.....	Cold water and white soap.	Soak in cold water until stain turns brown, then wash with soap and warm water.
Blood.....	Cold water, if deep stain add salt.	Soak.
Medicine.....	Alcohol.....	Soak in milk at once. Know the kind of ink. No soap. Oxalic with cold water. Apply acid and rinse. Soak in Javelle water. Wash and rinse.
Ink.....	Milk and oxalic acid, salts of lemon and Javelle water.	Put on liquid, let stand in sun. Cover stain with soft soap. Apply two to five times, paste, then let stand.
Mildew.....	Lemon juice, sunshine, soft soap. Paste of tablespoonful of starch, half a teaspoonful salt, juice of lemon.	Let stand in reagent until stain disappears, then wash.
Iodine.....	Ether, chloroform or naphtha soap, boiling water.	Let stand in reagent until stain disappears, then wash.
Indigo.....	Ether, chloroform or naphtha soap, boiling water.	Wash with this until stains have disappeared.
Vaseline.....	Turpentine.	Spread over bowl containing water, teaspoonful of borax, drop on acid with dropper until stain lightens, then dip in water. Rinse thoroughly, spread with lemon juice and hang in sun.
Iron rust.....	Muriatic acid, or lemon juice.	

and grass stains on garments should likewise be removed immediately upon discovery.

If the clothes are soaked, the time should depend upon the degree of dirt; one hour should be enough, although many laundresses soak them over night. As a rule, the quickest washing is the most satisfactory, soaking, sometimes hindering cleanliness.

Have the boiler on the back of the stove and fill it with cold water. Cut the soap in thin layers and use it generously. It is best to shave it and put it in a vessel of water on the back of the stove until it forms a jelly. Soap of the best quality is the most economical. In the inferior grades there is too much alkali and resin with fatty matter. Soap powders may be used with discretion. If caustic soda be used it should be in the proportion of a tablespoonful to three gallons of soft water, a fourth of a tablespoonful more if the water is hard, the lime being thereby neutralized. Properly used, the soda acts on the dirt first, and is washed out before it has time to eat into the fabric. Clothes much soiled or yellow may be cleansed by an emulsion of kerosene, linseed oil and turpentine in equal proportions in a boiler full of water, and they should be boiled a half hour. If the clothes need bleaching, Javelle water may be used with care, but it rots the clothes if used too freely. A cupful to a boiler of water is safe to use as a bleach. It is made as follows: One pound sal-soda, one pound chloride of lime, one quart boiling water. Dissolve the sal-soda in boiling water, and the chloride of lime in a little cold water. Let it settle, pour off the clear liquid and add to the soda and again let settle. Keep in bottles. To bleach, use stronger than to whiten, by one-half or one-third. A table of specific stains with their reagents and uses, as given to students of the laundry course in the New Jersey State College is given herewith.

Of course, care must be exercised in using any of the acids mentioned, as they are poison, and if kept in the house should be kept out of the possible reach of children.

Table linens should first be looked over carefully before washing, to see that any tea, coffee, chocolate or fruit stains have been removed. Fine linens should not be rubbed much. In drying, hang out the clothes full; neither fold them nor hang them in corners. Tablecloths

should be stretched and hung straight. The linens may be scalded, washed again, rinsed, and bleud.

Rinsing determines the success of the work. Good linens should be well sprinkled and ironed until perfectly dry, to give them a gloss and to bring out the pattern more distinctly. In ironing, use heavy irons, with thick pads on the board. Iron first on the wrong side until partly dry; then turn and iron on the right side until perfectly dry.

Fold tablecloths by the selvaige edges. They may be folded lengthwise twice or in three folds. It is even better to fold them once and roll them. Napkins should be folded perfectly straight, with the selvaige edges together. Fold all edges evenly except when folding lengthwise folds in half, the upper part should be drawn back a half-inch. This folding applies to handkerchiefs also. Tray cloths are laid in three folds; or better still, rolled, as are centerpieces.

Four short rules should be observed in washing woollens:

1. Wash one piece at a time.
2. Do not soak, boil or rub.
3. Do not wash in water that has been used for other pieces.
4. Wash in water about the temperature of the room.

Woollens should never be put out of doors in cold weather. Liquid soap may be added to the lukewarm water, a quarter pound to a quart of water. Dissolve the soap, if cakes or bars are used. Wash up and down, without rubbing on the board, as this causes shrinkage. Keep the three or four rinse waters all of the same temperature as the wash water. If white, use bluing and squeeze as dry as possible. Shake into shape, and hang to dry in a warm place. Hang wrong side out, and when nearly dry, turn.

A Scottish couple were on their way to be married, but on nearing the church the bride got rather anxious, and finally burst out:

"Sandy, A hev a secret tae tell you before we get marrit."
"Weel, an' whit is't, Mary?" queried Sandy.
"A canna cook very weel," replied Mary.
"Och," said Sandy, "never mind that; it's precious little ye'll get tae cook wi'?"

The Windrow.

A LUCKY OLD COAT.

When Dr. Gimino arrived at Ruhleben he was wearing a green coat, which through much exposure had grown extraordinarily like the German "old grey." It was a lucky fluke, and gained for him exceptionally good treatment. "As I lingered about the yards they took me for one of their own wounded who had unaccountably been interned among the English. Many weeks later, on the day of my release, I sauntered into a 'cafe' at Berlin, dressed in that same old overcoat. I was treated most deferentially, and the awe-struck waiter took me to the cosiest corner and placed on the shelf near by the symbolic Prussian helmet so as to guard me in splendid isolation."

His Italian-sounding name also stood him in good stead in Berlin during his period of detention there on a sort of parole before leaving for England in February. He strolled into a great hospital and asked to assist at the operations. "I went up to the principal surgeon, bowed and gave my name, 'Ah,' he said, 'an Italian; come along this way.'"—The Graphic.

Here is a true story: It was nearly half-past seven o'clock one evening, and in the lounge of one of London's most famous restaurants were little groups of people chatting before dinner. A young man, very brown, with keen eyes and clean-cut features, was sitting alone, obviously waiting for friends. He was in evening dress. Two girls in one of the groups looked around at him once or twice, and at last one of them detached herself from her friends, and, with an air of resolution, walked across to the lonely man opposite. "Pardon me," she said, "I have something for you!" The man jumped to his feet, and the girl put into his hand a white feather. A little smile fitted over his face. "It is very strange," he said, and took something from a waistcoat pocket, "that on one and the same day I should receive two such distinguished decorations." He opened his hand, and in the palm lay a little bronze cross with two words, "For Valor," inscribed upon it.—S.L.

EXOTIC NATIONALISTS.

In the current discussion of Pan-Germanism it has been noted as a curious paradox that the most extreme exponents of the movement were obviously not of pure Teutonic stock. Houston Chamberlain is an Englishman by birth. Treitschke was of Bohemian and Nietzsche of Polish descent.

But this is not so strange a circumstance as it is thought to be. In fact it is so common to find that the leaders of any country whether in action or in thought are of alien ancestry that it might be regarded as rather the rule and anything else the exception. O'Higgins, the national hero of Chile, bears anything but a Spanish name. Napoleon was from the island of Corsica, and the empress Josephine from the island of Martinique. Kossuth, the leader of Hungarian nationalism, was not a Magyar but a Slav. Kosciuszko, the Polish patriot, was born as every one knows in Merezow's cryna in Lithuania. Bernadotte, the founder of the reigning Swedish dynasty, was a Frenchman. Alexander Hamilton, the exponent of American nationalism, was born in the island of Nevis, Columbus, who gave a new world to Spain, was an Italian. Disraeli, who originated British imperialism, was a Jew. Venizelos, to whom the expansion of Greece is due, is a Cretan by birth. Parnell, the Irish home ruler, was part Scotch and part American. Gladstone, the most typical of Englishmen, was Scotch. Wellington was Irish, so is Kitchener. Lloyd George is a Welshman if ever there was one.

In the present war we see the British armies led by General French, the Russian by General Francofs and the German by General Mackens n, whose names suggest alien origin. The kings fighting against Germany, except the Mikado, are largely of German blood. The French General Joffre is of Spanish de-

The Dollar Chain

A fund maintained by readers of "The Farmer's Advocate and Home Magazine" for (1) Belgian Relief; (2) Soldiers' Comforts; (3) Red Cross Supplies.

Donations for the week from August 6th to August 13th, were as follows:

- Over \$1.00 each:—
J. & W. R., Fergus, Ont., \$5.00; Unknown, \$20.00; J. R. Strangways, Vinemount, Ont., \$2.00; E. McIntyre, Middlemarch, Ont., \$2.00; Mrs. W. W. Brown, South Monaghan, Ont., \$2.00; Mrs. A. Thompson, Mildmay, Ont., \$2.00; B. B. Hotson, Avonbank, Ont., \$3.00; Mrs. P. J. Switzer, St. Mary's, Ont., \$2.00.

- Amounts of \$1.00 each:—
Mrs. F. W. McConnell, Brighton, Ont.; Mrs. Jas. Green, Westport, Ont.; A Friend in Crimson, Crinan, Ont.; Chas. A. Salmon, Port Elgin, Ont.

Total amount previously acknowledged, from Jan. 30th to Aug. 6th.....\$1,675.75
Total to Aug. 13th.....\$1,717.75

THE JAM SHOWER.

Asked for—Jam, honey, jelly, marmalade.

Received from August 6th to August 13th: Mrs. Thos. Percival, Mrs. Alfred Percival, Mrs. Chas. Percival, Miss Mary Percival, Mrs. Wm. Percival, Mrs. Benj. Percival, Mrs. Howard De Pencier, from Kemptville, Ont.; Mrs. Jas. Armstrong, Burritt's Rapids, Ont.; Mrs. H. De Pencier.

One case, received during the present week, was found, on being opened, to contain three bottles badly broken, and some of the labels were undecipherable.

Kindly address contributions simply to "The Farmer's Advocate and Home Magazine," London, Ont.

The Windrow.

A LUCKY OLD COAT.

When Dr. Cimino arrived at Ruhlben was wearing a green coat, which through much exposure had grown extraordinarily like the German "field". It was a lucky find, and gained him exceptionally good treatment: As I lingered about the yards they came for one of their own wounded had unaccountably been interned the English. Many weeks later, the day of my release, I sauntered a "cafe" at Berlin, dressed in that old overcoat. I was treated most cordially, and the awe-struck waiter me to the cosiest corner and placed the shelf near by the symbolic Prussian helmet so as to guard me in splendor.

An Italian-sounding name also stood in good stead in Berlin during his period of detention there on a sort of parole before leaving for England in January. He strolled into a great hall and asked to assist at the operation. "I went up to the principal surgeon and gave my name. 'Ah!' said, 'an Italian; come along this way.'—The Graphic.

It is a true story: It was nearly past seven o'clock one evening, and in the lounge of one of London's most famous restaurants were little groups of people chatting before dinner. A young man, very brown, with keen eyes and sharp features, was sitting alone, busily waiting for friends. He was wearing a green dress. Two girls in one of the groups looked around at him once, and at last one of them detached herself from her friends, and with a look of resolution, walked across to the man opposite. "Pardon me," she said, "I have something for you!" She jumped to his feet, and the girl put in his hand a white feather. A little smile flitted over his face. "It is very nice," he said, and took something from a waistcoat pocket, "that on one of the same day I should receive two distinguished decorations." He took his hand, and in the palm lay a bronze cross with two words, "For Bravery," inscribed upon it.—St.

EXOTIC NATIONALISTS.

The current discussion of Pan-Germanism has been noted as a curious phenomenon that the most extreme exponents of the movement were obviously not of Teutonic stock. Houston Chamberlain is an Englishman by birth, but his mother was of Bohemian and Northern Polish descent.

This is not so strange a circumstance as it is thought to be. In fact it is common to find that the leaders of a country whether in action or in theory are of alien ancestry that it be regarded as rather the rule and the exception. O'Higgins, the national hero of Chile, bears any Spanish name. Napoleon Bonaparte, the conqueror of Corsica, and the Emperor Josephine from the island of Corsica. Kossuth, the leader of the Hungarian national movement, was not a Slav. Kosciuszko, the patriot, was born as every one knows in Mercewowszczyzna in Lithuania. Lafayette, the founder of the reigning dynasty, was a Frenchman. Alexander Hamilton, the exponent of American nationalism, was born in the island of Nevis, Columbus, who gave a name to Spain, was an Italian. The man who originated British imperialism, was a Jew. Ventzelos, the expansionist of Greece, is an Albanian by birth. Parnell, the Irish nationalist, was part Scotch and part English. Gladstone, the most typical Englishman, was Scotch. Wellington, the Englishman, was Scotch. Lloyd George is a Welshman if ever there was

In the present war we see the British General French, the Russian General Francois and the German General Mackensen, whose names are of alien origin. The kings fighting in Germany, except the Mikado, are of German blood. The General Joffre is of Spanish de-

cent. The Russian General Rennenkampf bears a German name. The most successful of the Russian generals in Galicia is Dimitieff, a Bulgar. Russia has always drawn upon foreign talent for her generals. Ali Hanoff, who planned the capture of Merv, was Ali Khan before he was christened. Melikoff, who took Kars, was a Georgian, not from the State of Georgia, a Caucasian Georgian—perhaps that is still ambiguous, let us say a Georgian from the Caucasus.

One cannot study the lives of the philosophers, scientists and authors of any country without being struck with the frequency with which one comes across alien ancestry. Kant, whom all the Germans swear by, was of Scotch descent. Ibsen, the leading light in Norwegian letters, was part Scotch and part German. Rousseau, who furnished the philosophy for the French Revolution was a Swiss. Many of the most distinguished names in modern German literature are Jewish, among them Heine, Heyse, Sunderman, Hauptmann. Dumas, most popular of French writers, was part negro, so was Pushkin, the poet of Russian patriotism. Browning was German on his mother's side. Maeterlinck, who is the best known of living French authors, is a Flemish Belgian. Bergson, the best known of living French philosophers, is of English and Polish Hebrew stock. Madame Currie, the French chemist who discovered radium, is a Pole. Metchnikoff, director of the Pasteur Institute at Paris, was born in Russia, so was Oswald, one of the greatest of German chemists. Only two Nobel prizes in science have come to America; one in physics to Michelson, who was born in Germany, and the other in medicine to Carrel, who was born in France. Marconi, in whom Italy glories, is half English, Mayor Nathan of Rome, leader of the "Italy for Italians" movement, is an English Jew. D'Annunzio, who boasts that he brought Italy into the war—but we will not venture into the vexed question of his origin.

These are merely names that happen to come to mind at the moment. Any reader can extend the list of exotic genius. To explain it is not so easy. If we say that it is due to Mendel's law that hybridization produces new varieties it does not explain the pronounced patriotism of immigrants of pure but alien blood for their adopted country. Is it that the mere transplanting to a new environment acts as a stimulus to human beings as it does to sugar beets and potatoes? Is it that those who emigrate have greater energy and initiative than those who live for generations in one place? Or is it that acquired tastes are strongest and one who voluntarily chooses a country thinks more of it than one who is bound into it by the accident of birth? At any rate this disposes of the superstition that there is some mysterious connection between race and national spirit.—The Independent.

MASQUERADING AS MEN.

Indiscreet as the donning of man's attire is considered, it is astonishing what a large part this resource has played in real life as well as in fiction. History, says The Weekly Scotsman, contains many instances of men masquerading as women or women as men in order to gain some great advantage. Professor Aurell of the University of Stockholm declares that Charles XII. of Sweden was a woman. Aurell's father was present when the body of the famous boy King was exhumed in 1857, and it was discovered at that time, he declares, that the body in the coffin was that of a woman. He further asserts that the Swedish Government is aware of the fact, but that the secret, for State reasons, has never been divulged. For several years Aurell has been working to establish this theory, and he is now engaged in writing a book which he says will prove his contentions beyond a doubt.

The leading historians of Sweden have all admitted that Charles XII. resembled a woman in appearance, and many of the facts in his life bear out that theory. He refused a gift of a harem from the Sultan of Turkey while living in that country, and, furthermore, he

never married, although he was constantly urged to do so. When he was killed in Norway his body was spirited away by his attendants, and buried without being examined. On three occasions it has been exhumed to ascertain how he met his death, and, according to Aurell, to determine his sex, which has been in doubt for nearly two centuries.

The realms of legend and romance are full of such cases. Ariosto's heroines, the maiden Bradamante and Marfisa, travelled about in armor as Knights-errant, and the discovery of their sex often proved most mortifying to the redoubtable warriors whom they defeated in battle or tournament.

Portia and Rosalind are but two instances of Shakespearean heroines disguised as men. A famous critic, in reviewing Sarah Bernhardt's performance of Hamlet, suggested that the sorrowful Prince of Denmark may have been a woman, and that, keeping such an idea in mind, would help a student to understand some of the mysteries of the character.

Then there was at least one of Sir Walter Scott's heroines who followed her lover to the wars disguised as a man, while Theophile Gautier's Mademoiselle de Mauphin lived for years as a man among men, undetected as long as she chose to remain incognito.

Just what this desire to masquerade in clothes of the opposite sex means no one has even been able to explain.

In a sketch of his career Edward Bok, editor of the Ladies' Home Journal, gives in a few words the moral of his life: "Behind every story of success is a story of hard work and self-denial." He came to America from the Netherlands at six years old, and went through extreme poverty helping his widowed mother to scrub, cook and wash dishes. He believes firmly in the beneficial stimulus of poverty and patches.

The Women's Institute.

Education of a Farmer's Wife.

[A paper given at a meeting of the Campbellford branch of the Women's Institute, by Mrs. Howard A. Clark.]

After God made man He saw that it was not good for man to be alone, and He said He would make a helpmate for him. So He made woman. The Bible teaches, then, that woman's duty is to be man's helpmate. Where has she a better opportunity to fulfill this duty than on a farm as a farmer's wife?

In order to have the ability to fulfill her duty to the best advantage she must have a good education. I would say that she needs and has a chance to get a better education than woman in any other sphere of life. She should have, and may get, through experience and observation, a thorough knowledge of at least the following subjects:

(1) In cooking she should be economical. By that, I mean able to make tasty, substantial and digestible dishes for those she has to provide for without a great supply of material, and with material that she has on hand, as she cannot run down street to buy this and that just when she wants to use it. Neither should she be extravagant in the use of eggs, cream, butter, lard, etc., just because she has plenty of it on hand. It would also be good to be able to make appetizing and nourishing dishes for any sick person, and serve them temptingly.

As it may be a help to someone, I will just mention that it is a good plan to keep a little book with removable pages and a pencil near it, and when you are about your work and find that you will soon need certain articles from the store, just jot it down on your paper. This saves much irritability and many trips to town. My book is made of wrapping paper, and stitched with an unthreaded sewing machine so that the proper sized paper may be torn off.

(2) In sewing there would be a great saving, and therefore a help, if every

farmer's wife could make at least the everyday clothes for her family. Knitting also should be known, and fancy-work, as we have our pretty centerpieces, counterpanes, cushions, etc., just as well as our town sisters. Most industrious girls have a supply of fancy-work made before they get married.

As a rule you can do your own sewing with less goods than a dressmaker calls for, because you work with care and go slowly, as you have to pay for the goods. Homemade garments are more substantial than ready-made ones, and usually fit better if made with care.

Quilts and mats could be made in winter when the evenings are long, and when we have not much to do except the regular chores.

(3) In housekeeping it is superfluous to say that a home should be kept so that any member of the family would like to come to its comfort, health and happiness. If possible, work should be managed so that the evenings would be free for social intercourse. After the day's work the members of a family enjoy an evening of conversation, reading or music very much, and it does much good in different ways. Most women would have plenty of time for social intercourse in all its phases if they only managed their work as it should be managed. Many women are very poor managers, and as a result are always busy at home, and yet they do not accomplish as much as the woman who works half her time and manages well.

(4) In gardening, a woman may produce nearly everything she needs in the line of vegetables for both summer and winter use. And what farmer's dinner or supper seems complete without some vegetable other than potato? Many things may be canned for winter and be as good as fresh if done properly. If one has a surplus of garden stuff, it may be sold.

(5) In poultry, a knowledge of how to feed and care for all kinds of poultry means a home supply, as well as the profit made by selling eggs and live or dressed poultry.

(6) In home-making (perhaps this would have been better placed first), children learn from example more than otherwise. Therefore, mothers, and other members of the household, should be polite and genteel, and train their children as they should be trained. Hundreds of women are striving to bring up their children to do great good in the world. Men who go to war and destroy nations have monuments raised as memorials, but women who bring up their children to uplift nations, die and are forgotten; yet, who does more good? A great deal more might be said along these lines, but I must pass on.

(7) In nursing, a woman could save many doctor bills and much trouble if she had a knowledge of the simple ills of mankind, such as measles, chicken-pox, jaundice, etc.

(8) And lastly, in agriculture, how much knowledge a woman should have if she is a successful farmer's wife! She should understand how to carry on all her husband's work, and if he gets in a "pinch," help him out, as it does neither one any harm, but good. (Of course, there are exceptions; women who are really physically unfit for much work, and these should certainly be excused.) If a husband were away, or sick, or dead, how would a farmer's wife succeed if she knew nothing of outdoor work? Of course, in any of these cases a man could be hired to keep up the work, but with most hired men how would it be kept up if she knew nothing of how and when it should be done.

Some men who farm, or try to farm, would succeed very poorly if they had not wives who had the education required. While writing, my mind is on a man who was born and brought up on a farm, and yet seems to know nothing about it. He doesn't seem to be able to see ahead or to make anything at all. He has a good wife, and by her own work at gardening, poultry-raising, calf-rearing and butter-making, they pay for, or I should say she pays for, almost everything, even to the rent of the place. I will not deny that some women are just as useless, and some men are to be pitied.

If a wife uses common judgment and talks over things with her husband, he generally likes to hear her ideas, and it

often helps and keeps him out of many difficulties. The Bible tells us that a house divided against itself shall not stand. So why not let husband and wife be one, as they are supposed to be, and talk over all their affairs together, and then do what seems best and wisest. Some may think this looking after, or taking part in out-door things, is getting too wear the harem skirt, but surely a woman has a right to look after her own interests and those of the family. But if she hasn't the education for it, what can she do? We never know what is before us, and the best anyone can do is to be prepared as far as possible for any emergency.

In taking in all these things, a woman need not pen herself up from the outer world. She has every opportunity to attend any social gathering, to get the daily news through the aid of R. M. D., and to converse with friends and neighbors by aid of telephone. She has a splendid opportunity to study nature also, and all its beauties.

Therefore, let us as farmers' wives educate ourselves along these lines and be true helpmates as God intended.

News of the Week

It has been reported that 150,000 Italian troops will be sent to the Dardanelles.

The Russian army is still retreating in good order.

The Turkish warship Kheyr-ed-Din Barbarossa was sunk by a British submarine.

A hail storm at Port Dover, Ont., did considerable damage to greenhouses.

New Allied forces landed at the Dardanelles.

A Zeppelin was destroyed near the coast of Belgium after a raid on the English coast.

The auxiliary cruiser India and the destroyer Lynx were lost in the North Sea.

Fourteen were killed and fourteen wounded by a Zeppelin raid on the English coast.

United States battleships and troops have been dispatched to Mexico.

The British trebled their land held at Gaba Tepe on the Gallipoli peninsula.

The British patrol Ramsay, and the German steamer Meteor, were sunk in a North Sea skirmish.

Sir David Beatty has been made Vice-Admiral. He commanded the fleet which sunk German warships about a year ago.

Premier Borden spent several days at the front, and passed through a town under bombardment.

Good weather has hastened the ripening of the Western crop.

Lloyd George declared 345 factories in Britain "controlled establishments" for the manufacture of munitions.

Nineteen ships were the victims of submarines last week.

The Russians repulsed a large German fleet near the Gulf of Riga.

Floods did much damage in Oshawa, Whitby, Scarborough, and surrounding country, Sunday, Aug. 15. Oshawa streets ran rivers.

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Chapter X.

RUDOLPH BREDERODE'S POINT OF VIEW.

(Continued.)

It was nine in the morning—a clean-washed morning of blue and gold—when I arrived on board "Lorelei," with a small box which my man brought me from Lillendaal, according to telegraphed orders.

No one was there but the chauffeur, though on board the barge "Waterspin" the "handy man" had arrived, and was settling into his new quarters. Toon de Jongh is his name, and I conceived a liking for his grave brown face, at sight. I know his type well, a type which excels in deeds, not words, and was bred in the Low Countries by certain policies of Philip Second of Spain. He liked me too, for some reason or other, I saw by his eyes, in a way one never mistakes but can never explain.

I had to find my quarters on the barge, and going below, on the first door I saw a visiting card of Mr. Ronald L. Starr's conspicuously pinned, with the one word "Alb" printed large upon it, in red ink. Chuckling, I took possession of the cabin, hauled my things out from my box, and had got them mostly packed in lockers and drawers, when I heard the sound of voices on "Lorelei." She was there. What would she say when she discovered that the man she had "thanked enough and didn't want to see again" had foisted himself upon her party?

The evil moment couldn't be postponed for long. I might give them time to go below, and add the contents of their dressing-bags to the belongings they had bestowed in the cabins yesterday afternoon, but that would take fifteen minutes at most, and then they would be wanting to start. I should have to get on board "Lorelei," be introduced, and face the music, whether it played the "Rogue's March," or "Hail, the Conquering Hero!"

The sounds of girls' laughter was so upsetting that I couldn't decide what to do with my collars and neckties. I wandered aimlessly about the cabin with my hands full, grumbling aloud, "What an ass you are!" and hadn't yet made up my mind to cross over to "Lorelei" when Starr pounded on the half-open door.

"Thank goodness, you're here!" he exclaimed, as the door fell back and revealed me.

"What has happened to make you give thanks?" I asked, disposing hurriedly of the neckties.

"Any port in a storm—even Albport. And there is a storm, an awful storm; at least "Lorelei's" staggering about as if she were half-seas over, and if you don't get us off at once every soul on board will be lost, or, what's worse, seasick. A nice beginning for the trip!" I am so much at home on the water that I hadn't noticed the tossing and lolling of the barge, but I realized now what was the matter. The morning was fresh, with a gusty wind blowing up the Maas, against the tide running strongly out; and consequently little "Lorelei" and sturdy "Waterspin" strained at their moorings like chained dogs who spy a bone just beyond their reach.

I didn't stop to answer, but bolted off the barge and onto the motor-boat.

Toon and Hendrik cast off the moorings, the chauffeur flew below to set his engine going; I took the wheel, pushed over the starting lever, the little propeller began to turn, and we were away on the first of the watery miles which stretch before us, for joy or sorrow.

Starr had followed Hendrik below, and just as the motor was getting well to work, revolving under my feet at the rate of six hundred revolutions a minute, I heard his voice shouting—
"Hallo, help! catch that dog!—you up there!"

At the same instant arose a babel of cries, "Oh, my angel!—don't let him

drown! Save him!" and the Emperor Tiberius shot up the companion as if launched from a catapult. Unused to engines and a life on the wave, frightened by the teuf-teuf of the motor, his next bound would have carried him overboard into the river; but hanging on to the wheel with one hand, with the other I seized the dog by the collar—a new resplendent collar—just as somebody else, rushing to the rescue from below, caught him by the tail.

It was Miss Van Huren. For a second—I bending down, she stretching up—our faces were neighbors, and I had time to see her expressions undergo several lightning changes—surprise, incredulity, and a few others not as easy to read—before she retired, leaving Tibe to me. Instead of coming up on deck as she had evidently intended to do, she vanished, and a head exquisitely hatted and blue-veiled appeared in place of hers.

A moment later the tiny lady of the arbor, transformed into Parisian elegance by an effective white yachting costume, with a coquettish blue yachting-cap on her gray hair, the goggling effect of the glasses softened by the floating folds of azure chiffon, arrived to succor her beloved. She started slightly, staring at me through veil and spectacles, and I deduced that whatever Starr had told his "aunt" about the skipper, it had not prepared her to meet the man of the arbor. Those hidden eyes recognized me, and took in the situation.

Under their fire I realized that the success of my adventure might largely depend upon the chaperon; and if, suspecting something more than met her gaze, she should strike an attitude of disapproval, she could prejudice the girls against the skipper, and so manoeuvre that he had his trouble for his pains.

With this danger ahead, I redoubled my attentions to Tiberius; but it was fortunate for me that the doubts he entertained of the man in the arbor were chased away by gratitude for the man on the boat. If it had not been so, such is the primitive sincerity of dog kind—especially bulldog kind—no bribe in my power to offer could have induced him to dissimulate. I knew this, and trembled; but Tibe, being an animal of parts, was not long in comprehending that the hand on his collar meant well by him. He deigned to fawn, and meeting his glance at close quarters, I read his dog-soul through the brook-brown depths of the clear eyes. After that moment, in which we came to a full understanding one of the other, once and for all, I knew that Tibe's wrinkled mask, his terrible mouth, and the ferocious tusks standing up like two stalagmites in the black, protruding under jaw, disguised a nature almost too amiable and confiding for a world of hypocrites. Tragic fate, to seem in the shallow eyes of strangers a monster of evil from whom to flee, while your warm heart, bursting with love and kindness, sends you chasing those who avoid you, eager to demonstrate affection! Such a fate is destined to be Tibe's, so long as he may live; but in this first instant of our real acquaintance he felt that I at least saw through his disguise; and under the nose and spectacles of his mistress he sealed our friendship with a wet kiss on my sleeve.

"Good boy!" said I, and meant it. He had given me a character, and had placed me upon a sound footing with one who would be, I foresaw, a Power on "Lorelei."

"Thank you so much!" said she, with the promised burr so pronounced in her accent that she must, I thought, have spent the night in practising it. She then carefully selected the best chair, and took from another a blue silk cushion which matched her yachting-cap and veil.

As she sat down, making a footstool of Tibe, and displaying two exquisitely shod feet in brand new suede shoes, Miss Rivers appeared, pale and interesting.

"I do hope you're better, my poor child," purred the Chaperon.
"Oh, thank you, dear Lady Mac-Nairne, I shall be quite right now we've started."

This interchange of civilities told that the Mariner's "Aunt Fay" had already contrived to ingratiate herself with her charges.

Miss Rivers sank into the nearest chair, closing her eyes, while I stood

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aloof and turned the wheel; but presently the languid lashes lifted, and she became conscious of me. Then her eyes grew big. She remembered me from the day at the Prinzenhof, or the Horse Show, perhaps. Evidently Starr had not named me yet, nor had Miss Van Buren, in descending after our brief encounter, put any questions. Whether this boded ill or well I could not decide, but longed to get suspense over; and I was not kept waiting.

I heard Starr's voice below urging Miss Van Buren on deck. "Don't bother about putting everything away," he said. "Do it later. You must say good-by to Rotterdam. Who knows what will have happened to us before we get back?"

It would not be my fault if two of the party were not engaged, I was thinking hopefully, as Miss Van Buren's eyes—rising from below like stars above a dark horizon—met mine. There was no recognition in them. To all appearance oblivious of ever having seen my insignificant features on land or sea, she came smiling up, on the friendliest terms with Starr.

The vacant chair, most conveniently placed for her, was close to the wheel, and I hoped that she would take it. But rather than be thus trapped, she stepped over Tibe, and pushed past her stepsister with an "I beg your pardon, dear."

The Mariner gave no glance at me, but there was a catch in his voice which betokened a twinkle of the eye, as he said—

"Aunt Fay, Miss Van Buren and Miss Rivers, I must introduce the friend I told you about: our skipper, Jonkheer Brederode."

Miss Rivers smiled delightfully, with just such a flush of ingenuous surprise as I should have liked to see on another face.

"Why, how curious," she exclaimed, "that you should be a friend of Mr. Starr's! I think we have almost met Jonkheer Brederode before, haven't we Nell?"

"Have we?" sweetly inquired Miss Van Buren. "I'm a little near-sighted, and I've such a wretched memory for faces. Unless I notice people particularly, I have to be introduced at least twice before it occurs to me to bow."
"Oh, but, Nell," protested Miss Rivers. "Surely you know we saw Mr.—no, Jonkheer Brederode—with your cousin at the Museum in Delft, and then afterwards you—"

"People's clothes make so much difference," remarked Miss Van Buren.

"Oh, but I wasn't thinking of your sea adventure, so much as when Jonkheer Brederode rode in the contest—"

"I'm afraid I was looking at the horses," cut in her stepsister.

If Robert had been on board at this juncture he would probably have wished to box his cousin's ears, but I had no such desire, though mine were tingling. In fact, I should have enjoyed boxing Robert's; for I saw that, with the best intentions in the world (and intentions are dangerous weapons!), my too-loyal friend had in some way contrived to make me appear insufferable. Perhaps he'd given the impression that I had boasted an intention to meet her within a given time, and she took this for my brutal way of carrying out the boast.

"What is a Jonkheer?" the pseudo-Lady MacNairne demanded of Starr.

"I don't know exactly," he admitted.

"Don't you? But, nephew dear, how can you help knowing, when you have an old friend who is one?"

(Was there a spice of malice in this question?)

"You see, almost ever since I've known him, I've thought of him as Alb," Starr explained hastily. "Alb is a kind of—er—pet name."

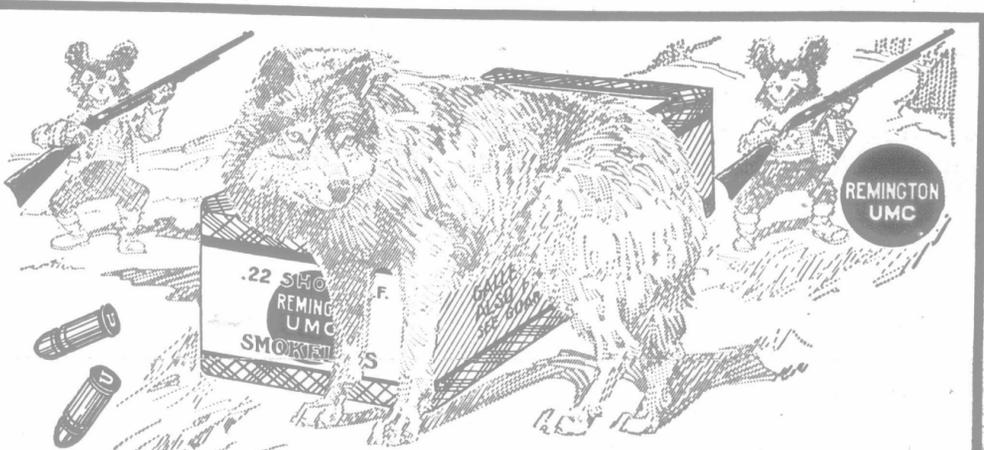
"I suppose it means something nice in Dutch," said Miss Rivers, in the soft, pretty way she has, which would fain make every one around her happy. "But I think Mr. van Buren told us that 'Jonkheer' was like our baronet: 'Jonkheer' instead of 'Sir,' isn't it?"

"Something of the sort," I answered.

"It sticks in the throat, if you'll excuse me for saying so, like a bit of crust," remarked Aunt Fay.

"You can all call him Alb," said Starr.

"Why not compromise with Skipper?" asked Miss Van Buren, looking at my yachting-cap (rather a nice one) with



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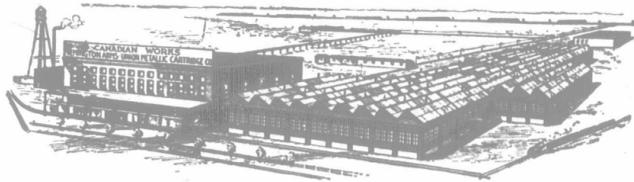
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serene impertinence. "We shall probably never have the pleasure of knowing him on land, so why stumble over Dutch names or titles? He has come on board 'Lorelei' to be our skipper, hasn't he? So he would probably prefer to be called 'Skipper.'"

Starr leaned down to pat Tibe, shaking all over. "Ha, ha, ha!" he gasped. "I never saw such a funny tail; I do hope it isn't going to give me hysterics."

"Nobody else laughed, and Miss Rivers was gazing at her stepsister in a shocked, questioning way, her violet eyes saying as plainly as if they spoke—
"My, darling girl, what possesses you to be so rude to an inoffensive foreigner?"

I should have liked to ask the same question, in the same words; but I said nothing, did nothing except turn the wheel with the air of that Miller who grinds slowly but exceedingly small, and smile a hard, confident smile which warned the enemy—

"Oh, yes, you are going to know me on land, and love me on land, so you might as well make up your mind to what has to come."

She caught the look, which forcibly dragged hers down from my hat-brim, and I am convinced that she read its meaning. It made her hate me a degree worse, of course; but what is an extra stone rolled behind the doors of the resisting citadel, or a gallon more or less of boiling oil to dash on the head of the besiegers? If they are determined, it comes to the same thing in the end.

Fortunately for the spirits of the other players who were "on" in this scene (in a subordinate capacity), the fair Enemy was not of the nature to sulk. True, of free will she did not address me; but having shown her opinion of me and intentions toward the person deserving punishment, she did not weary her arm with continued castigation. Instead, she

gave herself up heart and soul to delight in her first taste of "botoring" She basked in it, she reveled in it; had she been a kitten, I think she would have purred in sheer physical enjoyment of it.

"My boat! My boat!" she repeated, lingering over the words as if they had been cream and sugar. "Oh, I wonder if it knows it's My Boat? I wish it could. I should like it to get fond of me. I know it's alive. Feel its heart beat. What Tibe is to Lady MacNairne, 'Lorelei' is going to be to me. We never lived before, did we, Phil? And aren't you glad we came? Who knows what will become of us after this, for we certainly never can go home and take up life where we left it off."

"You shan't. I'll see to that," I said to myself; but this time she was not looking even at the brim of my cap. Her eyes, luminous with childlike happiness, searched and photographed each new feature of river-life that skimmed swiftly past us.

"We might become motor-boat pirates," she went on. "There'd be no anticlimax about that; and I dare say we could make a living. We'd hoist the black flag whenever we came to a nice lonely stretch of water, with a rich-looking barge or two, or a fine country house on shore, and the work would begin. Tibe would terrorize our victims. But, speaking of the black flag, I see the star-spangled banner floats o'er the deck of the free and the cabins of the brave. How charming of you to think of putting it there, Mr. Starr! It would never have occurred to me."

"It would have been charming, if it had occurred to me," said the Mariner; but it didn't.

"Perhaps our skipper can explain the mystery," remarked the Chaperon, graciously. I smiled. "I happened to have the little silk flag," said I, "and as the owner of the boat is an American. It took the liberty of flying her colors from the mast to-day; they went up early this morning. But we have another flag with us for emergencies—that of my Sailing and Rowing Club,—which, when we show it, will give us the right to enter sluices—or locks, as you call them—ahead of anything else."

"Alb, you have your uses," observed the Mariner. "Why can't we keep our flag up all the time—under the Stars and Stripes?"

"It wouldn't be fair to make use of it except in extreme cases," I said. "All these lighter and bargemen whom we see have their living to get. Time's money to them, while it's pleasure to us. It's right that they should get through ahead, when they're first comers; but there may be occasions when we shall need our advantage; and till then I'll keep the flag up my sleeve, with your permission."

"I never thought to feel so safe on a motor-boat," exclaimed Miss Rivers. "Since we made up our minds to come—or rather Nell made up hers—I've added another prayer to those I've been accustomed to say for years—that we shouldn't be blown up, or, if we had to blow up, that we shouldn't realize long enough beforehand to be frightened, and that we should blow into quite little pieces which couldn't know anything about it afterwards. But now I've such a peaceful feeling, I have to make

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myself remember that any instant may be my last."

"I wouldn't try," said Miss Van Buren. "I suppose, when one thinks of it, worse things could happen to one on a motor-boat than in a motor-car, because there's water all round; but it seems so heavenly restful, rather like motoring in heaven might be, and no frightened horses, or barking dogs, or street children to worry you."

"I pity people on steamboats, just as the other day, when we motored, I pitied people in stuffy black trains," said Miss Rivers. "But I don't pity the people on lighters and barges. Don't they look delightful? I should love to live on that one with the curly-tailed red lion on the prow, and the green house with white embroidered curtains and flower-pots, and sweet little china animals in the windows. It's called 'Anna Maria,' and oh, it's worked by a motor!"

"Lots of them are, nowadays," I said. "They're easy to rig up, and save work. I happen to know 'Anna Maria,' and the lady she's named after, who lives on board and thinks herself the happiest woman on earth—or water. There she goes, on her way to the kitchen, with her baby in her arms. Pretty creature both, aren't they?"

"Pictures!" cried Miss Rivers; and her stepsister, who at the moment was being particularly nice to the Mariner (I fancy by way of showing the Outcast how nice she can be—to others), glanced up from a map of Holland, which Starr had opened, across his knees. "It's like a very young Madonna and Child, painted by a Dutch master. I wish you could introduce us."

"Perhaps I will, when we come back this way," said I. "You shall go on board and have tea with Anna Maria and her baby, and the husband too, who's as good-looking as the rest of the family. They would be delighted, and proud to show off their floating home, which saved Anna Maria's life."

"How? It sounds like a story." "So it is—a humble romance. Anna Maria's the daughter of a bargeman, and was born and brought up on a barge. When she was seventeen and keeping house-boat for her father (the mother died when she was a child) the poor man had an accident, and was drowned. There wasn't much money saved up for Anna Maria, so the barge was sold, and she had to live on dry land, and learn how to be a dressmaker. She was as miserable as a goldfish would be if you took it out of its bowl and laid it on the table. In a few months she'd fallen into a decline, and though, just at that time, she met a dashing young chauffeur, who took a fancy to her pretty, pale face, even love wasn't strong enough to save her. The chauffeur, poor fellow, thought there was no flower in the garden of girls as sweet as his white snowdrop. He felt, if he could only afford to buy a lighter for himself, they might marry, and the bride's life might be saved. But it was out of the question, and perhaps the idyl would have ended in tragedy, had he not confided his troubles to his master. That master, as it happened, had a lighter which he'd fitted up with a motor. He'd used it all summer, and got his money's worth of fun out of it; so when he heard the story, he told the chauffeur he would give him the thing

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as it stood, for a wedding present, and it must be rechristened 'Anna Maria.'

"What a lamb of a master! I quite love him!" exclaimed Miss Van Buren, before she remembered that she was talking to One beyond the Pale.

"There wasn't much merit; he was tired of his toy," I answered carelessly; but I felt my face grow red.

"I don't believe it a bit. He just said that," cried Miss Rivers. "I should love him too. Is he a Dutchman?"

"I shouldn't be surprised if he was half English, half Dutch," remarked Starr, good-naturedly.

"Or if he was making our wheel go round now," finished Aunt Fay, pulling Tibe's ear.

"Oh!" said Miss Van Buren, and buried her nose in the map.

She and Starr were tracing, or pretending to trace, our route to Gouda, whither we were going, and where we expected to lunch. Hurriedly she threw herself into a discussion with him as to whether we were now in the Lek or the Maas. Reason said Maas, but the map said Lek, though it was a thing, thought the lady, about which there could be no two opinions; it must be one or the other.

As a matter of fact, there are many opinions, and as I knew the history of the dispute, after all she had to turn to me, and listen. I talked to Starr, and at her, explaining how only experts could tell one river from another here, and even experts differed.

"Our waters are split into so many channels that they're as difficult to separate one from the other as the twisted strands in a plait of hair," said I. "It was like Napoleon's colossal cheek, wasn't it, to claim the Netherlands for France, because they were formed from the alluvium of French rivers?"

Instantly the Chaperon ceased to admire Tibe's new and expensive collar, and opened a silver chain bag, also glittering with newness, which she had in her lap. From this she brought forth a note-book of Russian leather, and began to write with a stylographic pen, which had dangled in a gold case on a richly furnished chatelaine. This little lady had "done" herself well since yesterday.

"I shall take notes of everything," she announced. "That bit about Napoleon goes down first."

"Surely, you knew, Aunt Fay," said the Mariner, with a warning in his lifted eyebrows.

"I don't know anything about Holland, except that it's flat and wet," she replied, defying him, as she can afford to do, now that, once an aunt, she must be always an aunt, as far as this tour is concerned. "It's not the fashion in my part of Scotland for ladies of position to know things about foreign countries they've not visited. It's considered frumpish, and though I may not be as young as I once was, I am not frumpish."

She certainly is not. The real Lady MacNairne does not dress as smartly, or have such an air of Parisian elegance as this mysterious little upstart has put on since assuming her part. Save for the gray hair and the hideous glasses, there could scarcely be a daintier figure than that of the Mariner's false Aunt Fay.

"However," she went on, "my doctor has recommended a tonic, and I shouldn't wonder if a spice of information might be a mental stimulant. Anyhow, I intend to try it, and ask questions of everybody about everything."

All this she said with a quaint, bird-like air, and I began to be impressed with the curious fascination which emanates from this strange, small person. I am in her secret. I know she is a fraud, though of all else concerning her I am in ignorance—perhaps blissful ignorance. I have none too much respect for the little wretch, despite her gray hairs; yet, somehow, I felt at this moment that I was on her side. I was afraid that, if she asked any favor of me, I should run to do it; and I could imagine myself being ass enough to quail before the mite's Lilliputian displeasure. As for Starr, I could see that he dared not say his soul was his own, if she laid claim to it. He might raise his eyebrows, or telegraph with his eyelids, but a certain note in that crisp, youthful-sounding voice, would reduce him to complete



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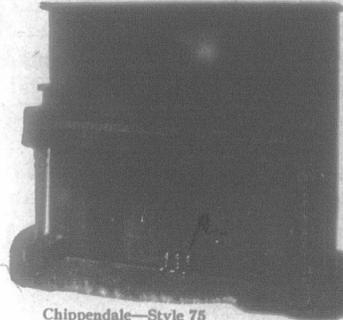
For years we have sold a piano containing the highest grade action, hammers, strings, etc. for \$100 less. Our claims were investigated and proved by 1,200 Canadian families who bought Sherlock-Manning Pianos last year.

SAVE \$100 YOURSELF

We repeat our offer—the best piano that can be produced, for \$100 less and backed by a ten year guarantee, behind which stands the great plant you see below.



Sherlock-Manning Piano Company, London, (No Street Address Necessary) Canada 80



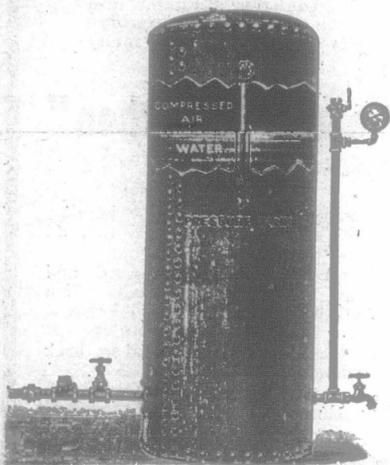
Chippendale—Style 75

Write Us To-day Just send a postcard to Dept. 4, requesting the proof and a copy of our handsome art catalogue L FREE.

Look for Us at The Western Fair

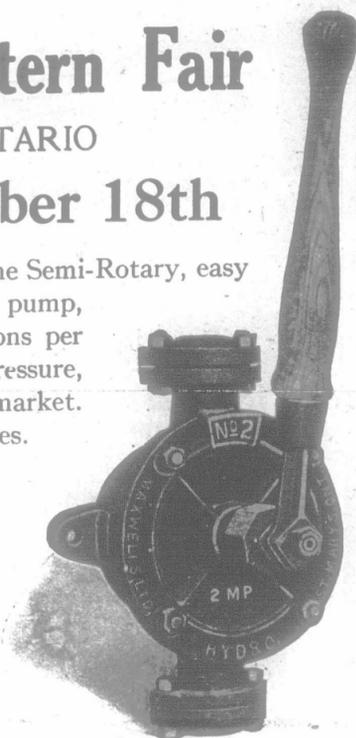
MACHINERY HALL, LONDON, ONTARIO

September 10th to September 18th



The L. E. S. system with the Semi-Rotary, easy action, lever handle, hand pump, with a capacity of 500 gallons per hour, force to 60-pound pressure, equal to any pump on the market. Write for circulars and prices.

London Engine Supplies Company Limited
83-85 Dundas Street LONDON, 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.

FOR SALE—Three months old, thoroughbred rough-coated Scotch collie pups, sable and white; very best stock; sire from Otterburn Diamond imported; dam from Kilmarnock Conqueror imported. Male pups with pedigree \$10. H. Sider, Marshville, R. R. No. 1.

FOR SALE—First-class 50-acre farm; clay loam; good buildings. Missouri Township, Oxford County. Easy terms. For further information Apply: E.W. Bossence, 287 Hale St., London, Ont.

GOOD general servant wanted for farm; good home and good wages to competent person; references required. Mrs. K. Mackenzie, Bellevue Farm, Kincardine, Ont.

WANTED—Position as working manager on good farm by Canadian, married. Practical experience in mixed farming and management of Pure Bred Stock for show purposes. Can furnish the best of references. Box M, Farmer's Advocate, London.

WANTED—Two Reliable Men to work on dairy farm. No. 1 must be experienced in feeding and caring for all farm stock also good with horses and machinery, married man preferred; No. 2 wanted for delivery wagon, must be good milker and good with dairy machinery; must be of good habits and reliable. L. D. Phone, Griesbach Bros., Collingwood, Ont.

Running Water on Every Floor!
Write us to-day for particulars of the EMPIRE WATER SUPPLY SYSTEM for country homes. Durable, efficient, no trouble to operate, costs little. We make hand, windmill, gasoline and electric outfits.

EMPIRE MFG. CO., LIMITED
1200 Dundas Street, London, Ontario

PEEL COUNTY FARM
FOR SALE
Hundred and fifty acres stock farm, Peel County half a mile from railway depot, forty miles from Toronto; eight-roomed dwelling; bank barn; poultry house; bearing orchard; seven acres bush—beech, maple and hemlock. Price Forty-five Dollars per acre. JOHN FISHER & CO., Lumsden Building, Toronto, Ont.

Sow Rye and Vetch this fall on your corn and potato land for next year. Plow under when ready to plant, and reap a greatly increased crop. Home-grown seed of hardy strain at \$2.25 per bus. f. o. b. Niagara. Apply: NIAGARA LAND & FRUIT CO., Niagara-on-the-Lake.

Cloverdale Large English Berkshires Sows bred, others ready to breed; boars ready for service; younger stock, both sexes, pairs not akin. All breeding stock imp. or from imp. stock. Prices reasonable. C. J. Lang, Burketon, Ont. R.R. 3

Clean Timothy Seed
No. 1 Government Standard at \$5.50 per bus.
No. 2 Government Standard (No. 1 for purity) at \$5.00 per bus.
Bags extra, at 30c. Freight paid if two or more bushels are ordered.
Good clean fall rye at \$1.30 per bus. Bags free.
GEO. KEITH & SONS, TORONTO
Seed Merchants Since 1866

subjection, in what our German cousins call an augenblick. No wonder that Tiberius—who looks as if he could play lion to her martyr without a single rehearsal—fawns, crawls, and wriggles like the merest puppy at the lifting of her tiny finger, when she wills—as is seldom—to be obeyed by him. All must feel the same queer power in the woman, be we dogs or men.

"Well, I'm glad you got your country back from Napoleon," said Miss Rivers. "Nobody, except the Dutch, could have made it so cozy, so radiantly clean and comfortable. Dear little Holland!"

I laughed. "Dear little Holland! Yes, that's the way you all pet and patronize our Hollow Land, and chuck it under the chin, so to speak. You think of it as a nice little toy country, to come and play with, and laugh at for its quaintness. And why shouldn't you? But it strikes us Netherlanders as funny, that point of view of yours, if we have a sense of humor—and we have, sometimes! You see, we've a good memory for our past. We know what we're built upon.

"Think of the making of Holland, though I grant you it's difficult, when you look at this peaceful landscape; but try to call up something as different as darkness is to light. Forget the river, and the houses, and the pretty branching canals, and see nothing but marshes, wild and terrible, with sluggish rivers crawling through mud-banks to the sea, beaten back by fierce tides, to overflow into oozy meers and stagnant pools. Think of raging winds, never still, the howling of seas, and the driving of pitiless rains. No other views but those, and no definite forms rising out of the water save great forest trees, growing so densely that no daylight shines through the black roof of branches. Imagine the life of our forefathers, who fled here from an existence so much more dreadful that they clung to the mud-banks and fought for them, a never-ending battle with the sea. That was the beginning of the Netherlands, as it was of Venice, and the fugitives built as the Venetians built, on piles, with wattles. If you've seen Venice, you'll often be reminded of it here. And what rest have we had since those beginnings? If not fighting the sea, we had to fight Spain and England, and even now our battles aren't over. They never will be, while we keep our heads above water. Every hour of day and night some one is fighting to save the Netherlands from the fate of Atlantis. While her men fight she's safe; but if they rested, this 'peaceful, comfortable little country' would be blotted out under the waters, as so many provinces vanished under the Zuider Zee in the thirteenth century, and others, at other times, they have been swept away."

"Do you think our motor-boat could

We Want Your Samples
of FALL WHEAT and FALL RYE
also FLAX and new crop ALSIKE CLOVER
Highest prices paid.
State quantity, origin of Fall Wheat and price f.o.b. your station.
Sample Bags mailed on application.

Rennie's Seeds
TORONTO

Live Broilers
We are open for shipments of live spring broilers and for live poultry from now on. Highest market prices paid, according to quality. Write us for quotations. Prompt returns, and crates promptly returned.
HENRY GATEHOUSE
Wholesale and Retail Poultry, Game, Fish, Eggs and Vegetables
348 Dorchester St. W., MONTREAL

Young Poultry
Fed Purina Scratch Feed, twice daily, with Purina Chicken Chowder always before them, will mature quickly and lay early. Checkerboard bags. At your dealers.
The CHISHOLM MILLING CO., Ltd.
Dept. A, Toronto.

ride on the flood and drag 'Waterspin,' if any of the most important dykes or dams happened to burst?" inquired the Chaperon. "I hope so, for what you've been saying makes one feel exactly like a female member of the Ark party."

Everybody laughed; but her joke pricked me to shame of my harangue.

"Nothing will 'happen to burst,'" I assured her. "We Dutch don't lose our sleep over such ifs." Every country has something to dread, hasn't it? Drought in India, earthquakes in Italy, cyclones and blizzards in America, and so on. Our menace is water; but then, it's our friend as well as foe, and we've subdued it to our daily uses, as every canal we pass can prove. Besides,

there's something else we're able to do with it. The popular belief is that, at Amsterdam, one key is kept in the central arsenal which can instantly throw open sluices to inundate the whole country in case we should be in danger of invasion."

"But, you'd drown your land and yourselves, as well as the enemy," exclaimed Aunt Fay.

"Better drown than lose the liberty we've paid for with so much blood. The old spirit's in us still, I hope, though we may seem slow-going, comfort-loving fellows in everyday life. When we make up our minds to do a thing, we're prepared to suffer for the sake of carrying it through."

Again I met Miss Van Buren's eyes, and I think she realized that I am typically Dutch.

(To be continued.)

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.
A Minor.
Can a minor of 18 years buy land and hold land, property which he intends to pay for with his wages? He is working out with a farmer.
Ontario. J. J. C.
Ans.—Yes.

Grass Seed for Low Land.
We have two acres of ground which is pretty wet and springy, and would like you to tell us what kind of grass seed would be best suited for it. This is a rented farm, and the proprietor does not see his way clear to drain it in the meantime.
A SUBSCRIBER.
Ans.—Red top grass and alsike clover would probably do as well as any kind of seed on such low land. The query does not state whether it is for grass or for pasture. For the latter we would recommend a mixture of red top, 5 lbs.; Kentucky blue grass, 4 lbs.; timothy, 4 lbs.; alsike clover, 2 lbs.; red clover, 3 lbs. For hay, omit the Kentucky blue grass.

Weight of Hay in Mow.
What amount of hay would be in a mow 20 x 13 x 5 1/2 feet, and give a good rule for measuring hay in the mow?
SUBSCRIBER.
Ans.—So much depends upon the quality of the hay and the amount of pressure to which it has been subjected, that no very definite answer can be given to this question. A correspondent who has bought a considerable quantity of hay "by the lump," informs us that a ton of fine timothy and blue-grass hay will occupy 450 cubic feet when several loads of grain have been piled on top of it. He estimates that coarse clover and timothy would occupy about 475 cubic feet under the same conditions, and about 500 cubic feet where no grain covers the hay. These estimates are based on quantities of from eight to ten tons. Accepting these figures, your mow would contain from 2.8 to 3.2 tons of hay.

Gossip.
Since the advertisement went to press in this issue, W. J. Beaty, of Jamefield Farm, Guelph, Ont., writes that he has bought the Sprucedale Stock Farm, St. Thomas, and will transfer all his herd there. Sprucedale Stock Farm of 300 acres is one of the finest stock farms in Canada, and has every accommodation for producing high-class stock. Having already one of the leading herds of dairy Shorthorns, dairy-test winners, and R. O. P. cows, it is Mr. Beaty's purpose to develop the herd still more, and the Sprucedale Stock Farm offers this possibility.

Questions and Answers. Miscellaneous.

Report of Beekeepers' Association—Fall vs. Spring Planting.

1. Kindly inform me where I could get a report of the Ontario Bee-keepers' Association for 1914.

2. Will berry bushes and other small fruits thrive as well if moved in the fall as they will if transplanted in the spring?

HURON.

Ans.—This report may be obtained by addressing the Ontario Department of Agriculture, Toronto.

2. In the case of raspberries, it matters little whether they be transplanted in the fall or in the spring, but perhaps more success will accrue from transplanting currants and gooseberries in the fall, as they start to grow very early in the spring. There is some danger of winter-killing when small fruits are transplanted in the fall, but this system, however, has been followed with considerable success. A great deal depends upon the preparation of the soil for the plants, and the state of maturity they may be in at time of planting. In many cases where early-fall planting has been followed, the plants have not arrived at a sufficient stage of maturity, and winter-killing or winter injury has resulted.

Septic Tank.

Will you kindly send me plan or any information on the construction of a septic tank?

P. G.

Ans.—In an issue of "The Farmer's Advocate," March 25, 1915, plans of different types of septic tanks appeared, also a plan of the system of field tile. This article described the construction of a septic tank in full, and space will not permit of a full description here. However, the leading points to bear in mind are that the septic tank as it is usually built contains two compartments, and the last compartment where the valve is placed should not be more than three feet nor less than 2 1/2 feet deep. For every occupant of the dwelling there should be at least three cubic feet of space in each compartment, and for every cubic foot of space in one compartment, or in one half of the tank, there should be 13 feet of 4-inch field tile laid. The soil pipe from the house carries the disposal to the large compartment, and here, through the efforts of bacteria, decomposition takes place and liquids result, which are carried over by an overflow pipe to the second compartment. The automatic valve at the bottom of this tank trips when the tank is filled to a certain height, and the effluent passes out into the field tile and hence into the soil. We would refer you to our issue of March 25 for further particulars.

Turnip Lice.

Could you tell me, through the columns of your paper, what will prevent turnip lice, or what would combat them? I have a nice field of turnips, and every year they are badly damaged by a small green insect that we term as turnip lice. Would a solution of Paris green and water sprinkled over them kill them, or do you know of any better remedy?

F. S. G.

Ans.—Paris green and water would be of no use in combating the turnip louse. The insect lives by sucking the juice from the plants, and on account of this peculiar character it is necessary to spray with contact poison. The means of control for the turnip louse may be enumerated as follows: (1) Where possible, all the refuse of plants should be got rid of in autumn by feeding or plowing down, because the eggs are laid on this. (2) Turnips or cabbage should not, if it can be helped, be planted in the same field two years in succession. (3) As soon as a plant, here and there, is seen to be infested, spray such plants very carefully with one pound common laundry soap dissolved in boiling soft water, then diluted to four gallons. The insects should be hit hard with the spray mixture to make it penetrate through the gray, waxy covering on their bodies. A boy to help in examining the leaves and turn them up to the spray will be of great assistance. Later spraying with the same mixture is sometimes necessary.

Trade Topics.

MANY THOUSAND MEN REQUIRED

For the Harvest in Western Canada. Thousands of men will be required from Ontario to help in the great work of harvesting the Western crop, and practically the entire task of transporting this great army of harvesters to the West will fall to the lot of the Canadian Pacific Railway.

Excursions from points in Ontario to Manitoba, Saskatchewan and Alberta will be run, and special trains operated, making the trip in about thirty-six hours, and avoiding any change of cars or transfers.

"Going trip West," \$12.00 to Winnipeg.

"Return trip East," \$18.00 from Winnipeg.

Consult C. P. R. Agents regarding particulars in connection with transportation west of Winnipeg.

GOING DATES.

August 19th and 26th—From Kingston, Tichborne Jct., Sharbot Lake, Renfrew and East in the Provinces of Ontario and Quebec, including intermediate stations and branches.

August 21 and 26—From Toronto, Sault Ste. Marie, Ont., and East in the Province of Ontario, including intermediate stations and branches, but not East of or including Kingston, Tichborne Jct., Sharbot Lake or Renfrew.

August 24th and 28th—From Toronto and stations West and North in the Province of Ontario, but not including stations on line North of Toronto to Sudbury and Sault Ste. Marie, Ont.

For full particulars regarding transportation West of Winnipeg, etc., see nearest C. P. R. Agent, or write M. G. Murphy, District Passenger Agent, Toronto.

The travelling staff and local agents of the Cockshutt Plow Co., Limited, Brantford, operating in Western Ontario, have recently signified their willingness, through their sales manager, W. S. McFarlane, to supply the Militia Department with a Lewis Machine Gun for the use of Canadian soldiers at the front. Their offer was gratefully accepted by the Minister of Militia, and the gun will be forwarded to "the boys" just as quickly as it can be obtained. A considerable number of the men from this organization are either on the battlefield or in training camps in this country, and their conferees at home felt they could not show their appreciation of the services these men were rendering their King, country, and friends, in any better way than by helping to supply the equipment so necessary to-day at the front. The gift of the Cockshutt agents may offer a suggestion to other organizations of how they, too, could help. H. Cockshutt, president of the company, has given a gun, and the employees in the factory have also given one.

Fresh from the Gardens

of the finest Tea-producing country in the world.

"SALADA"

TEA

B 74

Sealed Packets Only.

Try it—it's delicious. BLACK GREEN or MIXED.

Advertisement for Redpath Extra Granulated Sugar. Includes illustration of a woman and a man with a bag of sugar. Text: "Be Sure the Grocer Sends Redpath EXTRA GRANULATED SUGAR with the fruit you order for preserving. Tell him, too, that you want it in the Packages originated for Redpath Sugar — 2 or 5 lb. Sealed Cartons or 10, 20, 50 or 100 lb. Cloth Bags. Then you will be sure to get the GENUINE REDPATH—Canada's favorite sugar for three generations—the sugar to whose preserving purity you can safely trust good fruit. CANADA SUGAR REFINING CO., LIMITED, MONTREAL. 135"

Penniless Old Men

You know many of them—men who in their prime made plenty of money, but who spent as freely as they earned. Old age finds them in a sorry plight.

You can escape their bitter experience if you will. A few dollars saved each year and invested in an Imperial Endowment will provide for your comfort in old age. Or it will take care of your family should death call you early.

Write for a free copy of our very interesting booklet entitled "Penniless Old Men." Address:

THE IMPERIAL LIFE Assurance Company of Canada HEAD OFFICE - TORONTO

Branches and Agents in all important centres

Copyright 1915



Gossip.

The advertisement went to press in issue, W. J. Beaty, of Janesville, Ont., writes that he has the Sprucedale Stock Farm, St. Catharines, and will transfer all his hard Sprucedale Stock Farm of 300 one of the finest stock farms in and has every accommodation for the highest class stock. Having one of the leading herds of dairy cows, dairy-test winners, and R. W. is Mr. Beaty's purpose to the herd still more, and the Sprucedale Stock Farm offers this position.

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Miscellaneous.

A Minor.

A minor of 18 years buy land and property which he intends to work with his wages? He is working with a farmer.

J. J. C.

Yes.

Grass Seed for Low Land.

I have two acres of ground which is wet and springy, and would like to tell us what kind of grass seed would be best suited for it. This is a farm, and the proprietor does not want to clear it in the usual way.

A SUBSCRIBER.

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Weight of Hay in Mow.

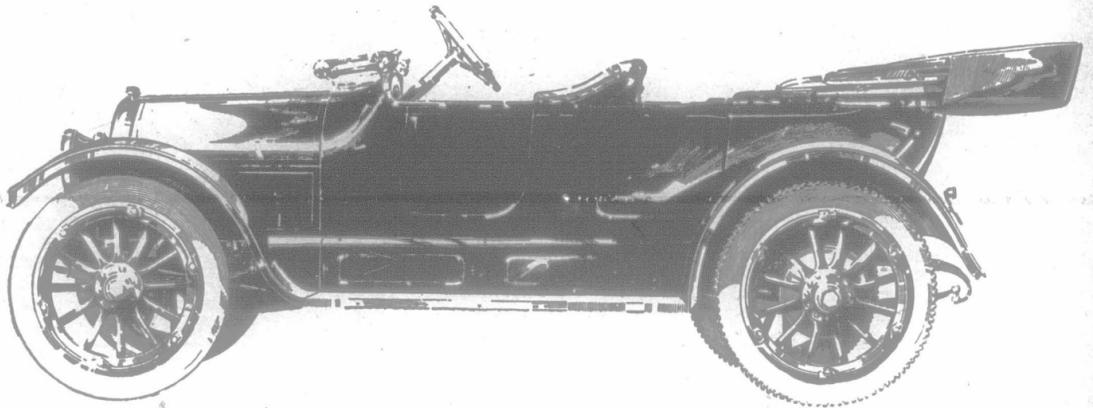
How much hay would be in a mow 10 feet long, 5 feet wide, and 5 feet high, and give a good rule for measuring hay in the mow?

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Overland

TRADE MARK REG.



The Best Four We Ever Built

Compared with our famous \$1425 Model of last season:—

This season's model has the *same* thirty-five horsepower, four cylinder motor.

But it is lighter and is therefore *higher powered*.

It has the *same* convenient arrangement of electric control switches placed on the steering column.

Added conveniences are a *one-man top—dimming* head-

lights—*adjustable* pedals—start-
ing button in *toe-board*.

Ignition is *again* by high-
tension magneto.

In detail, finish, mechanical
fineness—this newest Overland
gives you practically all there was
in the \$1425 Overland, *even more*
power and *more conveniences*.

And it costs you \$375 *less*
than our largest four of last
season.

Specifications

35 Horsepower motor
High tension magneto ignition
5-Bearing Crankshaft
Thermo-syphon cooling

Underslung rear springs
33" x 4" tires; non-skid in rear
Demountable rims; with one extra
Electric starting and lighting



The Willys-Overland of Canada, Limited, Hamilton, Ont.

Six Cylinder, 7 Passenger Touring Car \$1600 f. o. b. Hamilton

Overland
TRADE MARK REG.

\$ 1050

Model 83 f. o. b. Hamilton, Ont.
Roadster - \$1015

This is the largest 4-cylinder Overland
that will be produced this year

The Lowest Price We Ever Made

Year after year we have demonstrated this fact beyond dispute:—

That the making and marketing of automobiles in large quantities enable us to produce cars *at less cost per unit* than if they were produced in small quantities.

Each season we increase the production, *not a few cars but often tens of thousands of cars.*

Each year this means a corresponding reduction in the price to you.

For 1916 we are doubling our capacity.

It is this gigantic production plan that enables us to offer the very finest four-cylinder car we have ever made at a price which is *less than half* that charged for a similar car a few years ago *and \$375 less than our largest four of last season.*

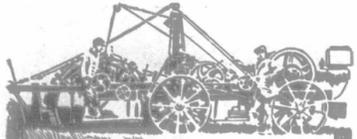
Specifications

- | | |
|--|---------------------------------|
| Headlight dimmers | Left-hand drive, center control |
| Rain-vision, ventilating type, built-in windshield | One-man top; top cover |
| Instrument board on cowl dash | Magnetic speedometer |

Handsome Catalogue on Request. Please Address Dept. 186.

The Willys-Overland of Canada, Limited, Hamilton, Ont.

Six Cylinder, 7 Passenger Touring Car \$1600 f. o. b. Hamilton



**Get a Line on
The Buckeye
at the Fair**

YOU'VE heard about this wonderful ditch digging machine. You've read about the money it has made and saved for farmers. But perhaps you've never seen the machine itself in operation. You should, and here's your chance. We'll exhibit the latest type of

**BUCKEYE
TRACTION DITCHER**

A perfect trench at one out

at the Canadian National Exhibition Toronto, Aug. 28 to Sept. 13. A Buckeye representative will show how simply and easily the Buckeye operates and will demonstrate its capacity by actual work.

Put your drainage problems up to this man in charge of our exhibit. Let him tell you how to solve them with the Buckeye. He will show you how you can cut from 100 to 150 rods of perfect ditch a day and make from \$15 to \$18 a day doing contract work for your neighboring farmers.

Get the Buckeye Book of Facts T at the fair or direct from us.

**The Buckeye Traction
Ditcher Company
Findlay, Ohio**

Builders also of Buckeye Open Ditchers and Buckeye Gas Engines for Farm use

TRADE MARK
Wilkinson Climax B
REGISTERED
**Ensilage and
Straw Cutter**

Our "B" machine, built especially for the farmer. A combination machine—it will cut and deliver green corn into the highest silo or dry straw or hay into the mow. 12-inch throat, rolls raise 6 inches and set close to knives—solid, compact cutting surface. Can change cut without stopping. Can be reversed instantly. Direct pneumatic delivery. Knife wheel carries fans. No lodging, everything cut, wheel always in balance. Steel fan case.

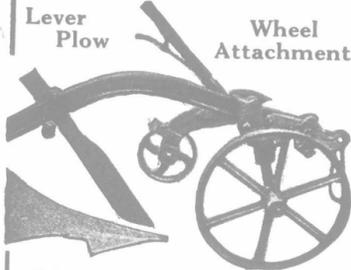
Made in two styles—mounted or unmounted. We also make larger type machine for custom work. Ask your dealer about this well-known machine and write us for new catalog showing all styles.

**THE BATEMAN-WILKINSON CO.,
LIMITED**
418 Campbell Ave.
Toronto, Canada



THE DICK

Lever Plow Wheel Attachment



will fit all makes of single walking plows. Any boy that can drive a team is capable with this Attachment of doing as good work as the best plowman. Write for full particulars and illustrated catalogue.

DICK AGRICULTURAL WORKS
Bolton, Ontario

**Questions and Answers.
Miscellaneous.**

Book on Gardening.

Do you know of a book on market gardening in Canada? If so, kindly give address of firm or publishing-house where it may be procured. G. J.

Ans.—At present we do not know of any book on market gardening published in Canada dealing particularly with Canadian conditions. Green's Vegetable Gardening, or Watts' Vegetable Gardening, may be procured through this office, but they are published in the United States. A bulletin compiled by S. O. Johnston, and published by the Ontario Department of Agriculture, deals with this line of gardening, and may be procured free of charge by requesting same from the Department.

Lump Jaw.

I have a 2-year-old heifer, in calf, which have a two-year-old heifer, in calf, which has a hard lump on her right jaw. It has been there about five months. She sometimes has a little cough, but is in very good condition. Please give me a sure remedy. J. J. C.

Ans.—This is lump jaw. Give the heifer iodide of potassium three times daily, commencing with one-dram doses, and increasing the dose by one-half dram daily until iodism is produced. This condition is recognized by any or all of the following: Water running from eyes and mouth, refusal of food and water, or the skin becoming scurfy. When these symptoms become well marked, discontinue the treatment for three or four weeks, after which it may be repeated if necessary. This cannot be guaranteed as a sure cure, but is the most effective one known.

Changing Seed—Treating Grain for Smut.

1. If oats or barley be properly cleaned for seed and used constantly on the same soil for twelve or fifteen years, should they yield as well as though the seed had been changed in the meantime?

2. Will it cause grain to produce more by changing from clay to sandy soil, or vice versa?

3. If a field is slightly infected with smut, would it be better to get grain from a non-infected field, or to treat the grain?

4. Give directions for treating.

E. H. W.

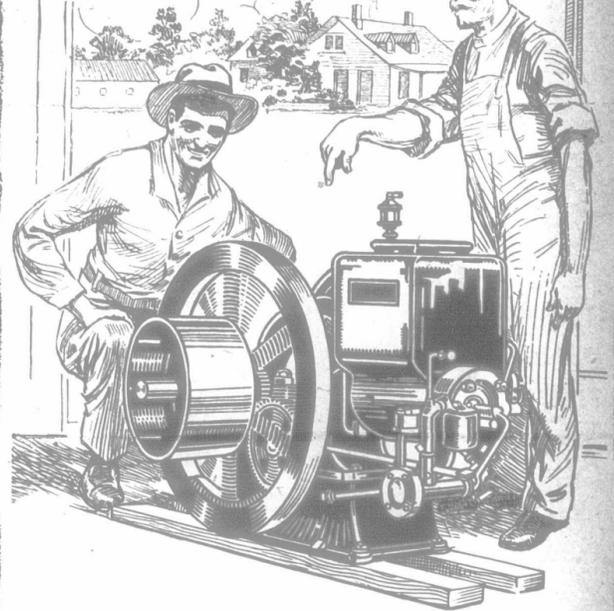
Ans.—1. Experiments have shown that if grain of any one variety is selected properly each year, that an increase instead of a decrease in yield may be obtained under the same climatic and soil conditions. It appears natural for grain to "run out," and if changed to a different soil and different conditions, sometimes a difference in yield is noticed, but the theory that "run out" varieties will be renewed by changing them to different soils is quite exploded.

2. This question is partly answered in the first query. We would not expect quite as good yield from the sandy land, not on account of the change, but owing to the nature of the soil. Clay soils are usually stronger than sandy soils, and if the seed be selected with care, the matter of changing from one type of soil to another need not be considered.

3. It matters not what kind of a field the seed is selected from, it should be treated for smut.

4. For the loose smut of oats, mix one-half pint of formalin in 21 gallons of water. Place the seed to be treated in a coarse sack, fill the sack about three-parts full and immerse in the formalin solution for 20 minutes. During the treatment raise the sack up and down several times in the solution to insure wetting every grain it contains. After treating, spread the grain out on a clean floor or canvas where it can be stirred and allowed to dry sufficiently to be sown. This treatment just explained is for stinking smut of wheat, loose smut of oats, and covered smut of barley. In some cases it is more convenient to sprinkle the grain, in which case one pint of formalin is mixed with 10 gallons of water. The grain is placed in a heap on a clean floor, and the formalin solution sprinkled over it. By shovelling and sprinkling every grain at last becomes moistened, after which the piles are covered with sacking and left for three or four hours. At the end of this time spread the grain out to dry.

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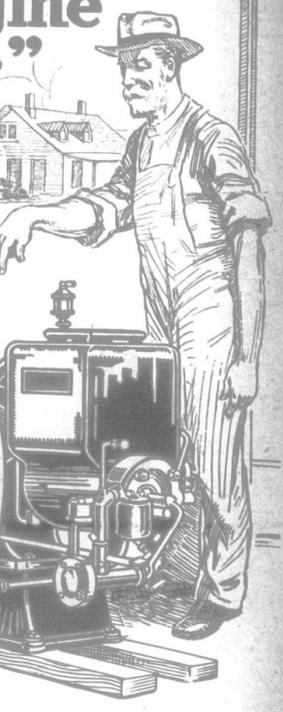
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SAVE-TH-HORSE
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FRANCIS MCKENNA
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I have a horse, eight years old, that had two
bone spavins, one on each hock. I sent him to a
veterinarian and had the worst one operated on,
cutting open the bunch perpendicularly with the
limb. I let him rest three months. I would not
consent to cutting again, but began to try liniment
and blisters. I had about concluded to give him
away when a friend in Burlington, Wis., told me
about your Save-the-Horse, as he had used it
with most favorable results. I did so and found it
to be all that he claimed.
It was the best investment I ever made, as I
would not part with that horse now for a hundred
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No blistering or loss of hair, Horse works.
Every bottle sold with Signed Contract to
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Questions and Answers.
Veterinary.

Calves Suck Each Other—Abscess.
1. Calves run in a lot and are fed at
the fence. Have you any device to keep
them from sucking each other?

2. Calf had a lump on its navel. We
lanced it and liberated matter, but it is
not healing.
W. H.
Ans.—1. We know of no device that
will do this, except keeping each by
himself during meal-times.

2. Make a free opening with a sharp
knife, and flush out the cavity three
times daily with 1 part carbolic acid to
20 parts water. In some cases some of
the tissue becomes so diseased that it is
necessary to dissect it out before the
wound will heal.
V.

Capped Elbow—Thrush.

1. Horse has a shoe boil. I lanced
it two months ago and have been using
a strong liniment and Creolin lotion on
it since, but pus forms every day. He
has no shoes, and I keep him in a box
stall. It is partly calloused.

2. Give treatment for thrush in horses'
feet.
J. R.
Ans.—1. Even though he now has no
shoes, it is possible that he still lies
with the elbow pressing upon the heel.
Your harnessmaker will make for you,
or get for you, a "shoe-boil pad" to
buckle around the pastern. This will
prevent pressure upon the point of the
elbow whether he has shoes or not.
Open it up freely, and as you say there
is a callous portion, it would be good
practice to have that carefully dissected
out. At all events, use no more liniment,
but keep clean and flush out the
cavity three times daily with a five-per-
cent. solution of carbolic acid, that is,
one part carbolic to nineteen parts
water.

2. Keep in thoroughly dry quarters.
Clean out the cleft of the frog and put
a little calomel into it, working it down
to the very bottom with the back of
your knife blade or other instrument,
every fourth day until it dries up.
V.

Miscellaneous.

Turnip and Mangel Seed—Yields of
Grain Crops.

- 1. In what counties of Ontario is
mangel and turnip seed produced profit-
ably?
- 2. What is the usual yield per acre of
the above seeds?
- 3. What quantity of sugar beets is
considered a good yield?
- 4. What is the average yield in On-
tario of flax, buckwheat, and rye?
- 5. What is the best thing an Ontario
farmer can do with rye straw?
- 6. What is the average yield of pota-
toes in Ontario?
J. O.

Ans.—1 and 2. The production of tur-
nip and mangel seed in Ontario is yet
a new industry, and a new branch of
vegetable gardening. The profit result-
ing from the production of this seed will
depend very much upon the care and
skill exercised by the grower. It is,
therefore, impossible to say in which
counties of Ontario the seed can be pro-
duced most profitably. In almost any
county where the soil is suitable seed
can be produced, but we have never
heard of one county being superior to
another in this respect.

3. Fifteen tons of sugar beets per acre
is considered a fair yield, but much
larger returns have been received in
many cases.
4. The average yield in Ontario of
buckwheat and rye, according to a re-
port of the Bureau of Industries, is 17.6
bushels and 16.7 bushels, respectively.
Flax will average in the vicinity of 10
bushels per acre.

5. The soil upon which Ontario farm-
ers usually sow rye is very light. Bas-
ing our opinion upon this fact, it would
be advisable, we think, to use the straw
for bedding and thus add humus to the
soil.

6. The average of potatoes per acre
in 1913, according to the Bureau of
Industries, was 119 bushels. In 1912
it was 134 bushels, and for the 10
years, 1902-1911, it was 113 bushels.



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Despite 3 Price-Cuts
Goodyear prices are 37 per cent
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mainly to tremendous growth that
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rival tire on op-
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Then you
will learn what
thousands



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For Sale—Herd header, one Red 18
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a son of the noted sire Right Sort,
imp. eleven of his get won 14 prizes
at Toronto last fall. Visit our farm, see Right Sort and our this year's show herd 12 head all by him.
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JOS. MCCRUDDEN, Manager Farm 1/4 mile from Burlington Jct.

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We have five young bulls of serviceable age
that we will sell at moderate prices. In Clydes-
dales we have eight imported mares with foals. We can spare some of these, and will sell these
worth the money, or would consider some good Shorthorn females in exchange. We also have a two-
year-old stallion and a pair of good yearling fillies. Station: Burlington Jct., G.T.R.
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Herd headed by Nero of Cluny
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sale: A number of young bulls and heifers, also young cows sired by Missie Marquis,
with calves at foot.
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Scotch—SHORTHORNS—English

If you want a thick, even fleshed
heifer for either show or breeding
purposes, or young cows with calves at foot, or a thick, mellow, beautifully-fleshed young bull, or
a right good milker bred to produce milk; remember I can surely supply your wants. Come and see.
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For this season's trade we have the best lot of young bulls we ever bred. Wedding
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These are a thick, mellow, well-bred lot. Heifers from calves up.
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Having bought out two Shorthorn
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The Bateman-Wilkinson Co., Limited
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No. 3
Sod or
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Purpose
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25 styles
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Dairy Shorthorn Bull

Fortuna's Gloster = 100584 =, calved March 1914. Dam Fortuna 13th = 62797 =. Official production in R. O. P. 8626 lbs. milk, 307 lbs. butter-fat in 311 days. This young bull will prove a desirable animal to head a dairy herd. Address:

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Present offering—20 cows and heifers and a few extra choice young bulls; they are bred so that they will produce money makers in the dairy and steers that will be market toppers and the prices are so low it will pay you to buy. Come and see them.

Stewart M. Graham - Lindsay, Ont.

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For Sale—Our stock bull Scotch Grey 72692; one of the finest aged Roan bulls in Ontario, also 11 others from 6 months to 2 years old and a dozen females of the profitable kind.

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Herd headed by the two great breeding bulls Newton Ringleader (Imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex.

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Three bulls, 11 months, a number of younger cows with their calves, cows in calf and yearling heifers for sale. Good individuals. Good Pedigrees. Inspection solicited.

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L.-D. Phone. Erin Sta., C.P.R.

SHORTHORNS, bulls, females, reds, roans, size, quality, breeding mikers over 40 years, cows milking 50 lbs. a day. The English, Rothchild's bull Mortimer in herd, the kind you want. Prices easy.

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Shorthorns and Swine—Have some choice young bulls for sale; also cows and heifers of show material, some with calves at foot. Also choice Yorkshire sows.

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Peter Christie & Son, Manchester, Ont.

The Potato.

Solanum Tuberosum, otherwise the potato, is the most used and most popular member of the vegetable kingdom. Next to wheat, its intrinsic as well as its aggregate value, is the highest of all the foodstuffs. In 1914, the potatoes produced in Canada amounted in quantity to 85,672,000 bushels, and in value to \$41,598,000. This statement of fact is sufficient to indicate the important place that the potato holds. In Ireland, when the potato crop failed the people starved, and the rest of the English-speaking world felt constrained to send relief. Canada, with its vast extent of territory, its diverse soil, and its diverse climate, is hardly likely to have to go through a similar experience; but it is not alone the welfare of our own domain that we have to consider in these matters, but the demand that is likely to arise elsewhere, a demand that has to be satisfied, and a demand that means gold to the country that possesses the wherewithal.

A pamphlet of the Publications Branch of the Department of Agriculture, Ottawa, which can be had free for the mere trouble of asking, deals in a complete and comprehensive manner with the subject. The Dominion Horticulturist, W. T. Macoun, states that at the Central Experimental Farm one variety yielded 700 bushels, and another variety on the same soil only 154 bushels per acre. This fact shows how important it is to know the variety best suited to the soil. It is also shown that it pays to import seed from cooler to warmer climates. Some of the most reliable early varieties, Mr. Macoun says, are Irish Cobbler, Rochester Rose and Early Ohio, and of medium or later varieties, he gives the preference to Carman No. 1, Gold Coin, Empire State, Green Mountain and Wee MacGregor. British varieties, he adds, which have done well in Canada, are Table Talk and Davies' Warrior.

It would perhaps be as well to give in brief a few of the suggestions made in the pamphlet for the best cultivation of the potato:

Sprouting before planting should be avoided by keeping in a cool cellar.

The best results are obtained by planting the sets immediately after cutting.

If disease is discernable soak for three hours in one pound of formalin to thirty imperial gallons of water.

Marketable tubers so as to have at least three eyes to a piece, are the best kind to set.

The most suitable soil is a rich, deep, friable, warm, sandy loam, with good, natural drainage.

The more thoroughly the soil is prepared the better the results will be.

Delay planting as nearly as possible to within a week of the last frost.

Plant the sets four to five inches deep for the main crop, and twelve to fourteen inches apart in rows two and one-half feet apart.

As a rule, the crop will increase in proportion to the number of times the potatoes are cultivated during the growing season.

Protect the tops from injury.

Eight to twelve ounces of Paris green to forty gallons of water, or two or three pounds of arsenate of lead to the same quantity of water, being sprayed, will destroy infesting insects.

Use Bordeaux mixture to control early and late blight. Three to four sprayings will be required.

Bordeaux mixture is made in the proportion of six pounds bluestone and four pounds of lime to forty gallons of water.

Dig your potatoes in dry weather and store in a dry, cool, well-ventilated cellar, kept at a temperature of from 33 to 35 degrees Fahrenheit.

Questions and Answers.
Miscellaneous.

Principal of Veterinary College.
Kindly give the name of the principal of the Ontario Veterinary College.

Ans.—The principal of the Ontario Veterinary College is E. A. A. Grange, V.S.M.S.

You Need a Silo

Every Farmer who Feeds Dairy Cows, Beef Cattle or Sheep can save the Price of a Good Silo Every year by Feeding Silage

NEXT winter when dairy products are bringing the best prices and your cows are practically dry because they have only dry feed you will realize how much you need a silo.

Why not put the silo up now? You still have plenty of time and when you bear in mind that the silo will actually pay for itself before the first year you can easily afford it. In fact no man who feeds dairy cows, beef cattle or sheep can afford to be without silage.

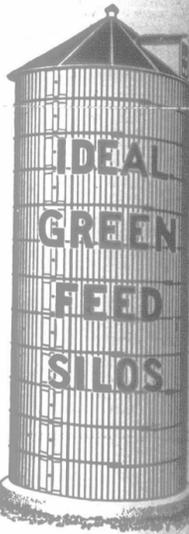
Ask any man who is feeding silage and he will tell you his silo is one of the best investments he ever made. It cuts down his feeding costs, increases his profits, his stock thrive better and there is less work.

Let us have your order now for an Ideal Green Feed Silo. We can ship it promptly, and you will get it in plenty of time to have it erected and ready for filling this Fall.

Ask for prices, terms and complete information regarding this silo. You cannot buy as good a silo for less money and no matter how much you pay you will not get a better silo than the Ideal Green Feed.

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Our address has been changed to **A. F. & G. AULD, R. R. No. 2, GUELPH, ONT.**

Maple Shade Shropshires

A few shearing rams and ram lambs are for sale. They are the right kind and out of imported ewes and sired by an imported "Buttar" ram. You may order any time now for delivery later.

WILL A. DRYDEN, Brooklin, Ontario

Robt. Miller Still Pays The Freight

And in addition he can furnish great, strong thick fleshed Shorthorn bulls at a price that will surprise you. Many of them bred to head good herds and improve them. Many of them of a kind that will grow into big weights and bring more money in the market than you are asked for them now. Some high-class heifers for sale too. Write for what you want.

ROBERT MILLER, STOUFFVILLE, ONTARIO

Northlynd R. O. P. Shorthorns and Jerseys

For Sale—Our noted sire of big milkers, St. Clair = 84578 = a Clara-bred son of Waverly. Several of his sons out of R.O.P. dams; also Shorthorns and Jersey females. Official records in our speciality.

G. A. JACKSON, DOWNSVIEW P. O., ONTARIO, WESTON STATION.

Shorthorns

Pure Scotch and Scotch topped—Booth. Also five (5) young bulls from ten to twenty months old, of the low down, thick kind, good colors—reds and roans. Prices reasonable.

G. E. Morden & Son, Oakville, Ontario

Janefield Dairy Shorthorns—R.O.P. cows and dairy test winners combined with the best of blood. Many cows weigh 1,000 lbs. and giving over 10,000 lbs. milk per year. Whole herd test over 4% butter-fat. Guelph and Ottawa Winter Fair dairy test winners. Cows in calf to Darlington Major (Imp.) 91279 (11,000) and Braemar Victor 98751. Both purely-bred dairy bulls. Young cows and heifers for sale.

W. J. BEATY, Janefield, 1 mile from Guelph, Guelph P.O.

Meadow Lawn Shorthorns

Five Scotch bulls, 16 months old, from good milking dams. Low-set, thick, deep, well formed, growthy fellows, showing breeding, quality and scale. You are invited to inspect them.

Bell Telephone. **F. W. EWING, ELORA, R. R. No. 1**
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Willow Bank Stock Farm Shorthorns and Leicester Sheep. The imported Cruickshank Butterfly Roan Chief = 60855 = heads the herd. Young stock of both sexes to offer. Also an extra good lot of Leicester sheep of either sex; some from imported sires and dams.

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Shropshires

ale. They are the right kind and ont "Buttar" ram. You may order any

Brooklin, Ontario

Saves The Freight

hed Shorthorn bulls at a price that will improve them. Many of them are a kind of down, thick and smooth with good heads and money in the market than you are asked for for what you want.

STOUFFVILLE, ONTARIO

Shorthorns and Jerseys

78 = a Clara-bred son of Waverley. Several sey females. Official records in our specialty. WESTON STATION.

ch and Scotch topped—Booth. Also five 60 ills from ten to twenty months old, of the thick kind, good colors—reds and roans. asonable.

Morden & Son, Oakville, Ontario

Shropshires

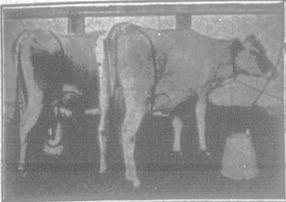
Five Scotch bulls, 16 months old, from good milking dams. Low-set, thick, deep, well and scale. You are invited to inspect this G, ELORA, R. R. No. 1

Shorthorns and Leicester Sheep. Chief—60865—heads the herd, young stock of Leicester sheep of either sex; some from es Douglas, Caledonia, Ont.

Lump Jaw

The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains to-day the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durable bound, indexed and illustrated. Write us for a free copy. FLEMING BROS., Chemists, 111 Church Street - Toronto, Ont.

HINMAN THE UNIVERSAL MILKER



Made in Canada
HINMAN MILKERS ARE BOUGHT by the SHREWDEST BUYER S. Meet us at the MODEL BARN at Toronto Exhibition. Price \$50.00 per unit. H. F. BAILEY & SON, Sole Manufacturers for Canada, Galt, Ont., Can. Dept. H

CREAM

Where are you shipping now? And what are you getting for your cream? We want more individual shippers and more men to gather cream for us. Write for our proposition.

Silverwoods Limited LONDON, ONTARIO

Highest Cash Prices paid for GINSENG

We are the largest buyers of Ginseng in America and pay the highest market prices, in cash. If you have wild or cultivated Ginseng, send for our latest price list.

DAVID BLUSTEIN & BRO. 158 W. 27th Street, New York, U.S.A.

Maple Grove Holsteins

If you are in need of a bull to improve your dairy herd, and want one that you can feel proud of, then get a son of the great King Lyons Hengerveld.—You can buy him right.

H. Bollert, R.R. No. 1, Tavistock

HOLSTEINS

One yearling bull by King Segis Pontiac Duplicate, whose dam is a g. daughter of King Segis; 18 bulls under a year old, one from a 29-lb. cow and sired by a son of Pontiac Korn-dyke. Females any age.

R. M. HOLTBY, R.R. 4, Port Perry, Ont.

The Maples Holstein Herd

Offers bull calves from sisters of Calamity Snow Mechtild, at 2 years 15,000 lbs. milk, 722 lbs. butter, R.O.P. 24.45 lbs. butter 7 days at 3 years. All calves sired by Canary Hartog. Two nearest dams 29.89 lbs. butter 7 days, two grand-dams average 115 lbs. milk in one day. Write: Walburn Rivers, R.R. No. 5, Ingersoll, Ont.

RIDGEDALE HOLSTEINS For Sale.

One bull calf ready for service, and 3 young bulls, one of them sired by King Segis Pontiac Duplicate; also 2 young cows. Prices low for quick sale. R. W. Walker & Sons, R.R. No. 4, Port Perry, Ont. Manchester, G.T.R.; Myrtle, C.P.R. Bell Phone

AYRSHIRE COWS WANTED

Write particulars and price to GORDON LAMB, R.R. 4, Goderich, Ontario

Questions and Answers. Miscellaneous.

Grass for Silage.

1. Can you keep wild hay grown on marsh land in silo mixed with corn? If so, how many tons of the hay would you advise putting in a hundred-ton silo mixed with the corn, and what length to cut?

2. Which is the proper way to put in cement floor for silo, level, or sloped like basin, with drain from center?

3. Could you mix clean straw with the green corn for filling silo?

H. S. C.

Ans.—1. We have had no experience with wild hay in a silo. Some claim alfalfa or red clover does all right. We would not advise a heavy percentage of grass if you do try it, about one load of grass to ten or twelve loads of corn, cut the same as the corn.

2. Drain from center.

3. Better mix the straw in next winter when feeding.

Pigs Scabby.

I have a bunch of ten pigs four months old. On weaning them some became slightly crippled, and after they were turned out a couple of months they became covered with a large scab and humps came on their backs, and growth almost seemed to cease.

1. What caused those scabs to come on the pigs?

2. What would one use to destroy the scabs?

A SUBSCRIBER.

Ans.—1 and 2. With crippling, pigs very often get scabby and filthy, and humps appear on their backs. Also, they may have sunburned, which would likely cause scabbing. Wash them thoroughly with soap and water, using a brush. Then apply some healing preparation, as sweet oil. Feed on sloppy feed and encourage exercise. Protect from the weather by erecting a small shelter in one corner of the pasture. The stunted growth is caused by the crippling. As soon as they can get around well they will begin to thrive.

Cow Holds up Milk.

I have a cow that seems to be in perfect health, but does not give her milk down regularly. For instance, she will only give about half her milk at one milking, and at the next she will give it all, and the balance of what she should have given the previous milking. That is going on all the time, except a few times when I would knead her udder for five or ten minutes before milking, but even that treatment does not have the desired effect sometimes. W. M.

Ans.—This is a bad fault, generally due to nervousness in the animal. The only thing we can advise is quietness in handling the cow. Do not dog, run, or otherwise excite her. Knead the udder before starting to milk. Has a calf been sucking her? Cows often act this way when a calf in being weaned. Keep calves out of sight and hearing at milking-time. Some cows get the habit of holding up their milk. Where this becomes established they generally prove unprofitable.

Veterinary.

Fatality in Calves.

Some of my calves have died suddenly. They were about two months old. They are fed water and — calf meal. They took slight diarrhea which only lasted a day, and in about two days they became so weak they had difficulty in standing, and soon died. As soon as they were dead, maggots came out through the skin. In fact, one had maggots before death. W. M.

Ans.—No doubt death resulted from weakness, due to diarrhea. Change the food. Give them milk (whole milk if you can, but if not give skimmed milk), add to the milk one-quarter of its bulk of lime water, keep them in the stable at least during the day, and give them cut grass. Also give them a little chopped oats with the hulls sifted out. There is some mistake about the maggots. They are not bred beneath the skin. There must have been some raw surfaces upon which the flies deposited their eggs, or else the diarrhea lasted longer than you think, and the skin around the anus became inflamed and raw as a result, and the flies blew there. V.

DISPERSION SALE

31 Head Purebred Holsteins

Some splendid young bulls and heifers, also the two herd sires will be sold, Prince Rouble

Hartog De Kol and Lewis Prilly Mercena Hartog, on

Wednesday, September 15th, 1915

AT GLENESCOTT FARM (near London)

SALE COMMENCES AT 1.30 p.m. (rain or shine)

FOR CATALOGUE WRITE:

T. B. ESCOTT

LONDON, ONT.

Sizes for 2, 3 and 4 horses.

THE BISSELL DISK



has made a great record throughout all Canada. There are good reasons why this is so. Balanced Right—Does not hump up. Improved Plate—Cuts and turns soil over. Hitches well Back—Easy draught. This Disk has several imitators, but no equal. None genuine without the name "BISSELL." Test trials given on hard land with anything that cultivates. Write Dept. W for free Catalogue. 92

T. E. BISSELL CO., LIMITED, ELORA, ONT.

Don't fail to call and see us at Toronto, London, Ottawa Exhibitions

King Segis Walker whose dam, granddam and great granddam have records over 30 lbs., the greatest producing and transmitting family of the breed. I have for sale some of his Sons combining the blood of Pont. Korn-dyke, King Segis and King Walker, the greatest trio of bulls obtainable. King Segis Walker's oldest daughter with her first calf has just completed a record of 24 lbs. butter in 7 days.

Send for Pedigree and Photo.

A. A. FAREWELL,

OSHAWA, ONTARIO

HOLSTEIN CATTLE

Canary Mercedes Pieterje Hartog 7th heads our herd. His dam gave 116 lbs. milk in one day and 6197 in sixty days and made 34.60 lbs. butter in 7 days. There are more cows in our herd giving over one hundred lbs. of milk a day than any other in Ontario. We have both bulls and heifers for sale.

D. C. FLATT & SON

R. R. No. 2,

HAMILTON, ONT.

Long-distance Phone

LAKEVIEW STOCK FARM, Breeders of High-Class Holsteins

Bronte, Ont. E. F. OSLER, Prop. Offer for sale some choice young stock of both sexes. T. A. DAWSON, Mgr.



HOLSTEINS

Do you want a young herd header backed up by generations of record-makers, g. sons of an ex-world champion? If so, write me. Am now booking orders for Hampshire and Chester White Swine. C. E. KETTLE, Wilsonville P.O., Ontario Long-distance telephone from Waterford

HOLSTEINS At Hamilton Farms

For Sale:—cows and heifers in calf to our great herd sires Prince Hengerveld of the Pontiacs, son of King of the Pontiacs and King Isabella Walker, son of King Walker. If you want a grandson of King of the Pontiacs, write us. We have some splendid bull calves. F. HAMILTON, St. Catharines, Ont.

Humeshaugh Ayrshires

We have several February, March and April, 1915, bull calves, bred from some of our best imported and home-bred females, which we offer at good value for quick sale. Alex. Hume, & Co., Campbellford, Ont., R.No.3



Glenhurst Ayrshires

For 60 years I have been breeding the great Flos tribe of Ayrshires, dozens of them have been 60-lb. cows; I have lots of them get 60 lbs. a day on twice-a-day milking. Young bulls 1 to 10 months of age, females all ages. If this kind of production appeals to you write me. James Benning, Williamstown, Ont.

Sunny Hill Holsteins

Present offering: two choice bull calves from tested dams four and five months old, sired by a grandson of King of the Pontiacs. 158 A. R. O. daughters. Both calves are good individuals. Price \$75 each for quick sale. WM. A. RIFE HESPELER, ONT.

Stonehouse Ayrshires

Are a combination of show-yard and utility type seldom seen in any one herd. A few choice young males and females for sale. Write or phone your wants to Stonehouse before purchasing elsewhere. Hector Gordon, Howick, Que.

HILLHOUSE AYRSHIRES

Show-ring winners. Dairy test winners. 75 head to select from. Bull calves and females of all ages for sale. Before buying, come and inspect our herd and get prices. F. H. Harris, Mt. Elgin, Oxford Co., Ontario.

Brampton Jerseys

We are busy. Sales were never more abundant. Our cows on yearly test never did better. We have some bulls for sale from record of Performance cows. These bulls are fit for any show ring. B. H. BULL & SON, BRAMPTON, ONTARIO

WHEN USING WILSON'S FLY PADS

READ DIRECTIONS CAREFULLY AND FOLLOW THEM EXACTLY



HIGHEST PRICES PAID FOR

HIDES, WOOL, &c.

JOHN HALLAM, LIMITED
TORONTO

Oxford Down Sheep

"The Champion Oxford Flock of America"

Winners at Chicago International, Toronto, London, Winnipeg, Regina, Brandon, Saskatoon, Edmonton, Calgary and Lethbridge Fairs. Present offering:—75 ram and ewe lambs, 46 yearling ewes (some fitted for show), also 15 yearling rams which will make excellent flock-heads. Consult us before buying. **PETER ARKELL & SONS, Teeswater, Ontario**

ALLOWAY LODGE STOCK FARM

Angus, Southdowns, Collies

Special this month:

Yorkshires

ROBT. McEWEN, Byron, Ont.

IMPROVED Yorkshires

FOR SALE—Young sows just being bred, also a few choice pigs, both sexes, 12 weeks old (only a few left). All will be registered.

WELDWOOD FARM
FARMER'S ADVOCATE
London, Ontario

Morrison TAMWORTHS & SHORTHORNS
Bred from the prize winning herds of England. Boars and sows all ages 150 head to choose from. Choice Shorthorns both sexes, good milking strain, one Clydesdale colt two-year-old bred from imp. stock. **CHAS. CURRIE, Morrison, Ontario**

IMPROVED YORKSHIRES—Overstocked. We offer one champion silver sweepstake sow coming two years old guaranteed in pig, one year-old boar extra type, and any number of young pigs, to be sold weaned three weeks hence and later. **POMONA FARM, COBURG, ONT.**

Tamworths Young sows bred for fall farrow and some choice young boars. Registered. Before buying write for prices. **JOHN W. TODD, R. R. No. 1, Corinth, Ont.**

Poland China and Chester White—Choice stock of any age, either sex, both breeds. Order early. Prices easy. **GEO. G. GOULD, Essex, Ont. R. R. No. 4.**

SUNNYSIDE STOCK FARM
Chester White Swine—Champion herd at Toronto and Guelph. Also Dorset Horn Sheep, young stock of both sexes for sale. **W. E. WRIGHT & SON, Glanworth, Ontario**

Elmfield Yorkshires A few young sows bred, also young boars and sows 2 to 3½ months from choice breeding stock. Can supply pairs not akin. **G. B. MUMA, R. R. No. 3, Ayr, Ont. Phone Ayr R.R. 55 ring 2. G.T.R., Paris or Drumbo; C.P.R. Ayr.**

CLEARVIEW CHESTER WHITES
For many years my herd has won the highest honors at Toronto, London, Ottawa and Guelph. For sale are both sexes of any desired age, bred from winners and champions. **D. DeCoursey, R. R. No. 5, Mitchell, Ont.**

Tamworths Buy your hogs now, as they will be very scarce this fall. I have a nice lot of boars and sows four to five months old; prices reasonable. **Herbert German, St. George, Ontario**

Poland-China Swine Duroc Jerseys Berkshires and Chester Whites, also Dorset Horn sheep. Young stock of both sexes. Come and see, write or phone. **CECIL STOBBS, Leamington, Ontario Phone 284.**

Please mention "The Farmer's Advocate."

Questions and Answers. Miscellaneous.

Line Fence.

A and B own a farm each, along side each other. A keeps a flock of sheep and B has none. Has B to keep up a line fence to keep A's sheep out of his crop, or has A to look after his own sheep? **SUBSCRIBER.**

Ans.—Unless it is in a wooded section, each must build and maintain half the line fence.

Solid Cement Wall.

Referring to the question asked in your paper re cement wall for house. We built a kitchen wall in this way, and lathed and plastered it, and it is all right. We plastered on the outside with cement with a little lime left natural color, and blocked and marked with white. It looks well. The main part of the house was brick of poor quality, often damp inside. It was given a coat of same outside dressing, ¼ inch deep, blocked and lined, and has done well.

R. C. M.

Subsoiling.

I would like to know if there is an implement made for subsoiling. I know there are subsoil plows, but I have heard there are detachments to fit any plow. If you know of any manufacturer who makes them, please print it in this week's paper. **J. M.**

Ans.—Manufacturers of implements of this class would find it to their interest to advertise in our columns. We would suggest that you write to some of our advertisers who manufacture other lines of agricultural implements. They may be able to give you the desired information, and possibly the necessary plow parts.

Heifer With Calf.

I have a young Holstein heifer twelve months old now, and a good size for her age. I also have a young Jersey bull calf the same age. These were in pasture together until May 20, and I note now this young heifer is springing. I am sure she is in calf. She would be about eighteen months old when she would drop her calf. Would you advise me to feed her in order to have her abort now, or let her drop her calf in due time. If you would have her abort, what would you feed her to obtain this result? Would it be harmful to her later? **E. P. T.**

Ans.—Under no consideration attempt to force an abortion. Feed well, and develop the heifer in so far as possible before time for calving. Give good care afterward, and allow a rest after her first milking period before breeding again. She may yet grow into a valuable cow if properly cared for. Anything fed to produce an abortion would be dangerous.

Chickens Weak.

I have some White Leghorn chickens which are about half-grown. I have fed them on chop and water, and I also gave them buttermilk to drink. They eat well and seem healthy, but they seem dizzy. They will pick at the feed, then stagger backwards. They can't seem to walk, but seem scared that they are going to fall, and try to brace themselves with their legs and only flutter along, then go backwards. Even when they are sitting down their heads keep bobbing. One has been like this for five or six weeks, and eats as well as ever, and seems to be growing as good as the others. Another is getting like it now, so we thought it must be some disease. Would you please give the name of disease if possible, and state whether there is any prevention or cure, and if so, what it is? **A. M.**

Ans.—You have been forcing the young chicks too much with mash food. Try whole or cracked grain morning and night, and the mash at noon. Give free range if possible. Continue the buttermilk and supply grit. Too much mash causes leg weakness. Whole wheat would certainly be better morning and night.

THE 1915 CENTRAL CANADA

EXHIBITION OTTAWA

September 10-18

Exhibits From Home Farm and Factory

\$25,000 IN PRIZES

10,000 DISPLAYS

FREIGHT PAID on exhibits of live stock from Ontario and Quebec. Returned free by railways.

New \$5,000 Dominion Government Grant
All added to premiums for utility classes of horses, cattle, sheep, swine and poultry. Unprecedented upward revision of Prize List.

ENTRIES CLOSE SEPTEMBER 3rd

This Exhibition is unsurpassed for shows of animals and poultry. New \$50,000 hall for displays of grain, fruit and vegetables. Write for Prize List, Entry Forms, Programme of attractions, etc., to **E. McMAHON, Manager, 26 Sparks St., Ottawa**

Fire!!! Lightning

Protect your crops, your cattle—and your buildings. Any building you erect can be made better if you get our expert help. No charge for plans. Ask for "Better Buildings" the best book of its kind on fire-proof farm buildings.

STEEL TRUSS BARN'S PRESTON SHINGLES ACORN IRON READY MADE BUILDINGS

The Metal Shingle & Siding, Company, Limited, Preston

OK CANADIAN POTATO DIGGER

MADE IN CANADA

SAVE HALF

Digs clean and thorough. Saves half the cost of digging with plows. The lightest draft. New stone shield. Side delivery of vines. In sizes and styles to suit every need.

Farmers mentioning this paper may have a FREE copy of our 48-page book, "Money in Potatoes."

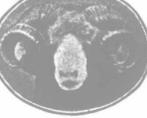
CANADIAN POTATO MACHINERY CO., Limited GALT, ONT.



Forster Farm Dorsets

Sheep breeding was never so bright as now. Our large flock of Dorsets are this year stronger than ever in numbers and in quality. For sale are shearing rams and ram lambs, shearing ewes and ewe lambs, strictly high-class.

Forster Farm, - Oakville, Ont.



Farnham Farm Oxford and Hampshire Downs

Flock Established in 1881 from the best flocks in England

We are offering a splendid lot of yearling rams and ram lambs for flock headers or show purposes. We ourselves have retired from the show ring to hold nothing back. We are also offering one hundred Oxford range rams and 80 yearling ewes and ewe lambs. All registered, prices reasonable.

HENRY ARKELL & SON, Route 2, GUELPH, ONT.
Guelph, G.T.R.; Arkell C.P.R. Telegraph, Guelph, Long-distance phone in house.

Shropshires and Cotswolds for Sale—Yearling rams and yearling ewes, a few imported 3-shear ewes, an extra good lot of ram lambs from imported ewes. I expect an importation of rams of both breeds from England 1st of August. Prices very reasonable.

JOHN MILLER, Claremont, Ont.
Claremont, C.P.R., 3 miles. Pickering, G.T.R., 7 miles. Greenburn, C.N.R., 4 miles.

DUROC JERSEY SWINE, JERSEY CATTLE

In Duroc Jerseys we have either sex of any desired age, bred from winners and champions for generations back. In Jerseys we have young cows in calf and young bulls, high in quality and high in producing blood.

MAC. CAMPBELL & SONS, NORTHWOOD, ONT.

Newcastle Tamworths and Shorthorns Boars ready for service. Sows due to others bred and ready to breed and a lot of both sexes ready to wean. Descendants of imp. and championship stock. Several extra choice young bulls and heifer calves, recently dropped; grand milking strain, 2 bulls 5 and 8 months old. All at reasonable prices.

A. A. COLWILL, NEWCASTLE, ONTARIO Long-Distance Telephone

ELMHURST LARGE ENGLISH BERKSHIRES

From our recent importation of sows, together with the stock born. Suddon Toronto, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.

H. M. VANDERLIP, Breeder and Importer, GAINSVILLE, ONTARIO
Langford Station on Brantford & Hamilton Radial.

Sunnybrook Yorkshires and Shropshires

Your opportunity to secure stock bred from our CHAMPION hog which is winner of twelve firsts and five CHAMPIONSHIPS in the last four years and has never been beaten. Are offering choice runs of the best breeding. Stock guaranteed as represented. **Wm. Manning & Sons, Woodville, Ont.**

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 From Home
 Farm and
 Factory
 Stock from Ontario and Quebec.
 Government Grant
 of horses, cattle, sheep, swine and
 of Prize List.
 PTEMBER 3rd
 of animals and poultry. New
 vegetables.
 gramme of attractions, etc., to
 5 Sparks St., Ottawa

WILLING WITNESSES

DAY by day we are receiving enthusiastic testimonial letters from policyholders whose Endowment contracts are now maturing.

These are our willing witnesses who come voluntarily into court and testify to the good faith of The Mutual of Canada.

No wonder! For they are receiving from \$110.00 to \$190.00 for every \$100.00 invested in premiums, to say nothing of the protection they have enjoyed.

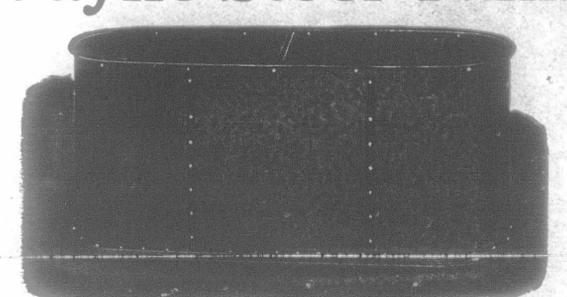
The amount of the return, of course, varies with the term of the Endowment. Don't speculate! Take an Endowment policy and share in the prosperity of

THE MUTUAL LIFE ASSURANCE COMPANY OF CANADA
 WATERLOO, ONTARIO

Average of 55 lbs Honey Per Colony.

The Crop Report Committee of the Ontario Bee-keepers' Association met on Wednesday, August 4. Three hundred members reported from all parts of Ontario, showing an average of 55 pounds per colony. There is about an average crop, and the quality is excellent. The buying power of the public is below the average, however, and it is likely that prices will range slightly lower than those recommended by the committee last year. In fact, some honey has already changed hands at prices recommended below. Selling should be brisk at these prices as the market is clear of old honey and the high prices of sugar is causing householders to turn to honey as a substitute for canned fruit; considering that it requires no preserving, but can be stored in a dry place regardless of temperature without even removing it from the tin. One case was reported where berries were allowed to waste, and sixty pounds of honey purchased to save the expense of picking and canning the berries. The prices recommended by the Committee are as follows:

Wayne Steel Tanks

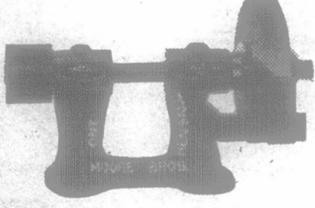


So useful on every farm. They have many advantages over cement and wooden structures for convenience and durability, and being easily moved from place to place, as use may require. All sizes and moderate in price. If your dealer does not handle the WAYNE, let us hear from you direct.

WAYNE OIL TANK & PUMP COMPANY, LIMITED
 WOODSTOCK, ONTARIO

STEEL TRUSS BARNS
PRESTON SHINGLES
ACORN IRON
READY MADE
BUILDINGS
 Company, Limited, Preston

The "Little Giant" Emery Grinder



Weight, 33 pounds.
 Stone, 7-in. diam., 1 1/4-in. face.
 From our agent or prepaid from works,
\$7.00

MOORE BROS., HENSALL, ONT.

DISPERSION SALE OF Sunnybrook Holsteins
 33 HEAD
 Tuesday, August 31, 1915, From one to four o'clock p.m.

Our entire herd of Pure Bred Holstein Friesian Cattle will go to the other fellows at these prices. They will get good value whether we do or not. Four of them are good young males, nearly ready for service; Sired by Segis Prilly Veeman and from R.O.M. dams.

Twenty-nine are first class females, only one over 7 years old and only 5 over four years old. This is choice stuff in excellent health and pink of condition. In calf by such renowned sires as Segis Prilly Veeman, Idylne Paul Veeman and Grace May Fayne.

Most of the milkers are tested, making R.O.M. records from 11 lbs. as Jr. 2 year olds to 21 lbs. as mature cows.

Prospective buyers can do no better than inspect our goods, attend the sale and invest in as good stuff as the district contains. Write for catalogue to the Proprietors or to the Auctioneer. There will also be six extra good young horses and a quantity of hay and oats sold.

Farm 30 rods from C.P.R. station at Stratfordville.

Train arrives at noon from Woodstock, Ingersoll and Tillsonburg, connecting with all East and West bound trains. Free lunch on lawn.

Captain T. Merritt Moore,
 Auctioneer, Springfield, Ont.

JAMES & CECIL NEVILL,
 Proprietors, Stratfordville, Ont.

POTATO DIGGER
SAVE HALF
 thorough. Saves half the cost of
 ws. The lightest draft. New stone
 livery of vines. In sizes and styles
 need.
 this paper may have a FREE copy
 book, "Money in Potatoes."
DIAN POTATO MACHINERY CO.,
GALT, ONT.

GRAND TRUNK RAILWAY SYSTEM

Gossip.
 A BIG HOLSTEIN SALE.

Farm Dorsets
 bright as now. Our large flock of Dorsets
 in numbers and in quality. For sale
 shearing ewes and ewe lambs, strictly high-

Oakville, Ont.

Harvest Help Excursions
\$12 TO WINNIPEG
 August 19 and 26
 August 21 and 26
 August 24 and 28

From stations Kingston and Renfrew and East in Ontario and Quebec.

From stations Toronto to North Bay, inclusive, and East, but not including Kingston, Renfrew or East thereof.

From stations in Ontario North and West of Toronto but not including line Toronto to North Bay.

For particulars as to tickets West of Winnipeg, etc., apply to any Grand Trunk Ticket Agent.

We draw attention to the advertisement in this issue of the big dispersion sale of Sunnybrook Holsteins to be held Tuesday, August 31, at the farm of James and Cecil Nevill, Stratfordville, Ont. This sale comprises 33 head, 29 females and 4 bulls. Some good horses and choice hay will also be sold. These cattle are tested R. O. M. performers, and should draw a large crowd of bidders. See the advertisement for full particulars.

Write for Our Special Offer Pays for Itself in 7 days



Mixing concrete with this 1915 Model Hand Mixer saves you time, labor and money. You get a better mix with less cement. Write for catalogues.

WETTLAUER BROS.
 Improved Concrete Machinery
 178A Spadina Avenue TORONTO, ONT.

The Help Problem

in the farm is solved by the telephone. It enables the farmer to obtain help when it is needed, a very important necessity these days.

We have a very interesting bulletin "A Telephone on the Farm." It explains how every farming community can build and own its independent telephone system cheaply. It tells you how to get market and weather reports, the latest news, etc.

It will be sent free if you write for Bulletin No. 1011.

Stromberg-Carlson Telephone Manufacturing Co.
 23 Richmond St., W., Toronto, Canada

ord and Hampshire Downs
 from the best flocks in England
 of yearling rams and ram lambs for flock
 themselves have retired from the show ring
 offering one hundred Oxford range ram
 lambs. All registered, prices reasonable.

Route 2, GUELPH, ONT.
 C.P.R. Telephone, Guelph,
 telephone in house.

A Gold Mine on Your Farm
 You can double your profits by storing up good green feed in a

BISSELL SILO
 "Summer Feed all Winter Long"

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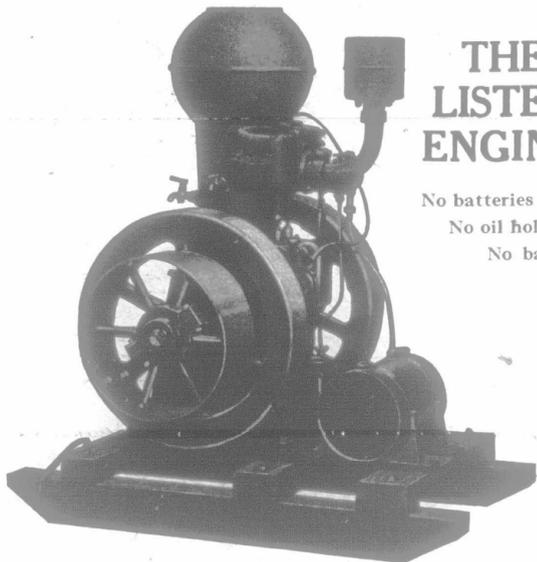
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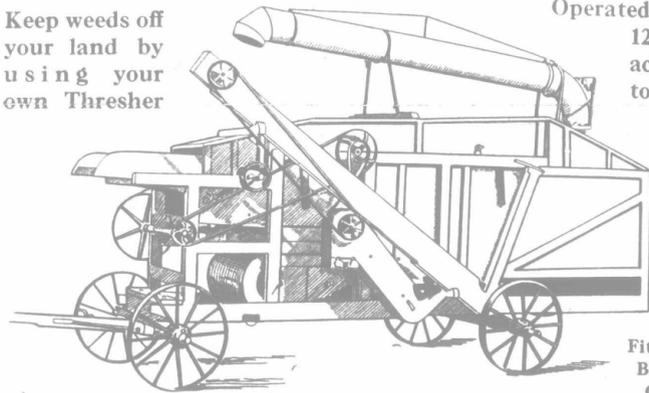
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Keep weeds off your land by using your own Thresher



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Fitted with Blower or Carrier

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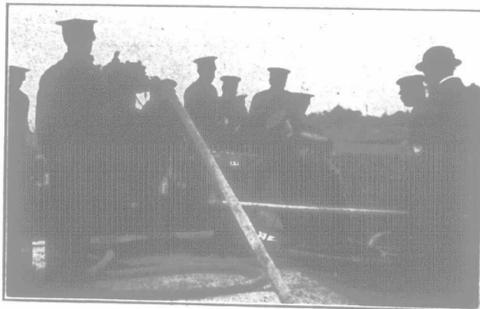
"Cleans the grain well, and the blower works fine."

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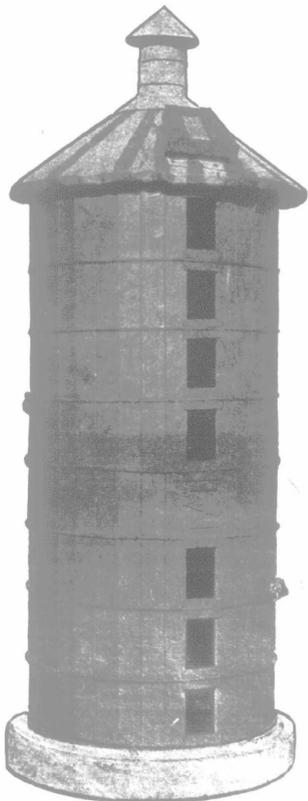
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5 Horse-power will operate it



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Made of selected Canadian No. 1 spruce. Staves side and end matched, dispensing with metal spline.

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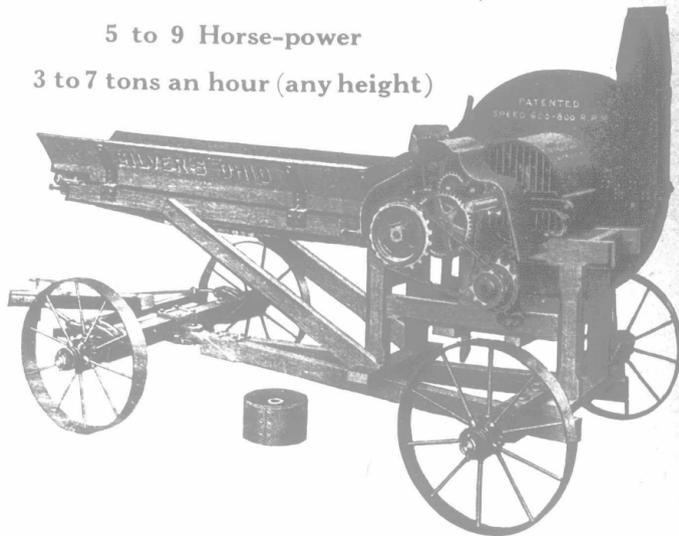
Staves specially treated UNDER PRESSURE with wood preservative.

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5 to 9 Horse-power

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