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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

\* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE \*

REGISTERED IN ACCORDANCE WITH THE PATENT ACT OF 1872

Vol. LII.

LONDON, ONTARIO, JULY 5, 1917.

No. 1298



The dawn of "More bread and better bread" arrived the day the sun first shone on

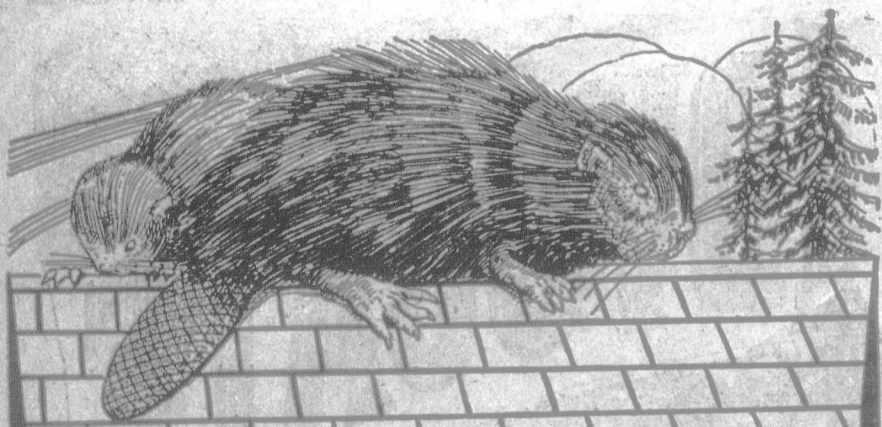


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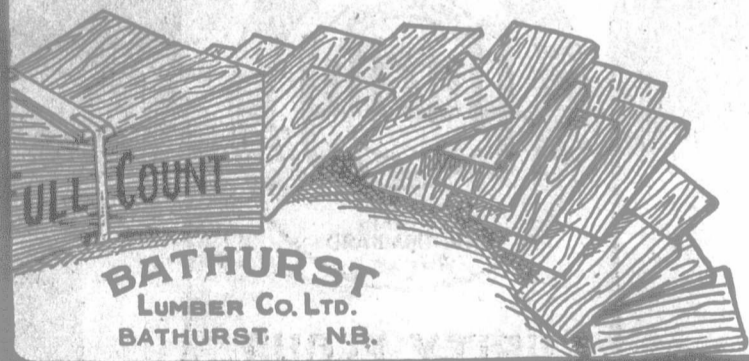
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from the local freight station and the corresponding inflow of money.

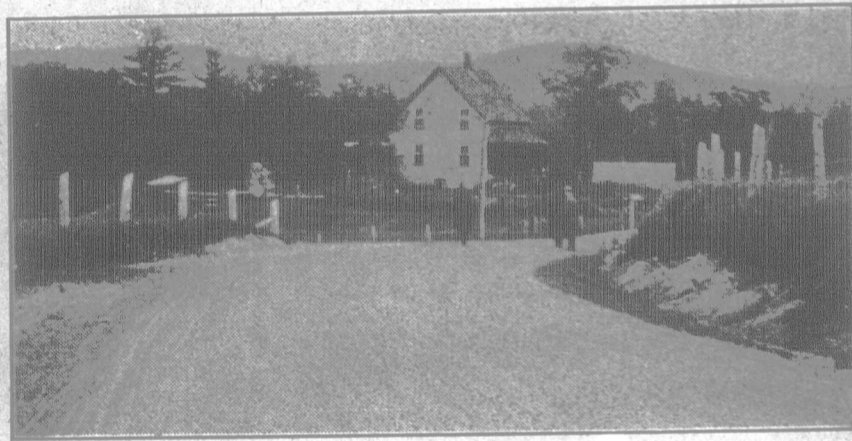
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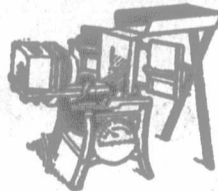
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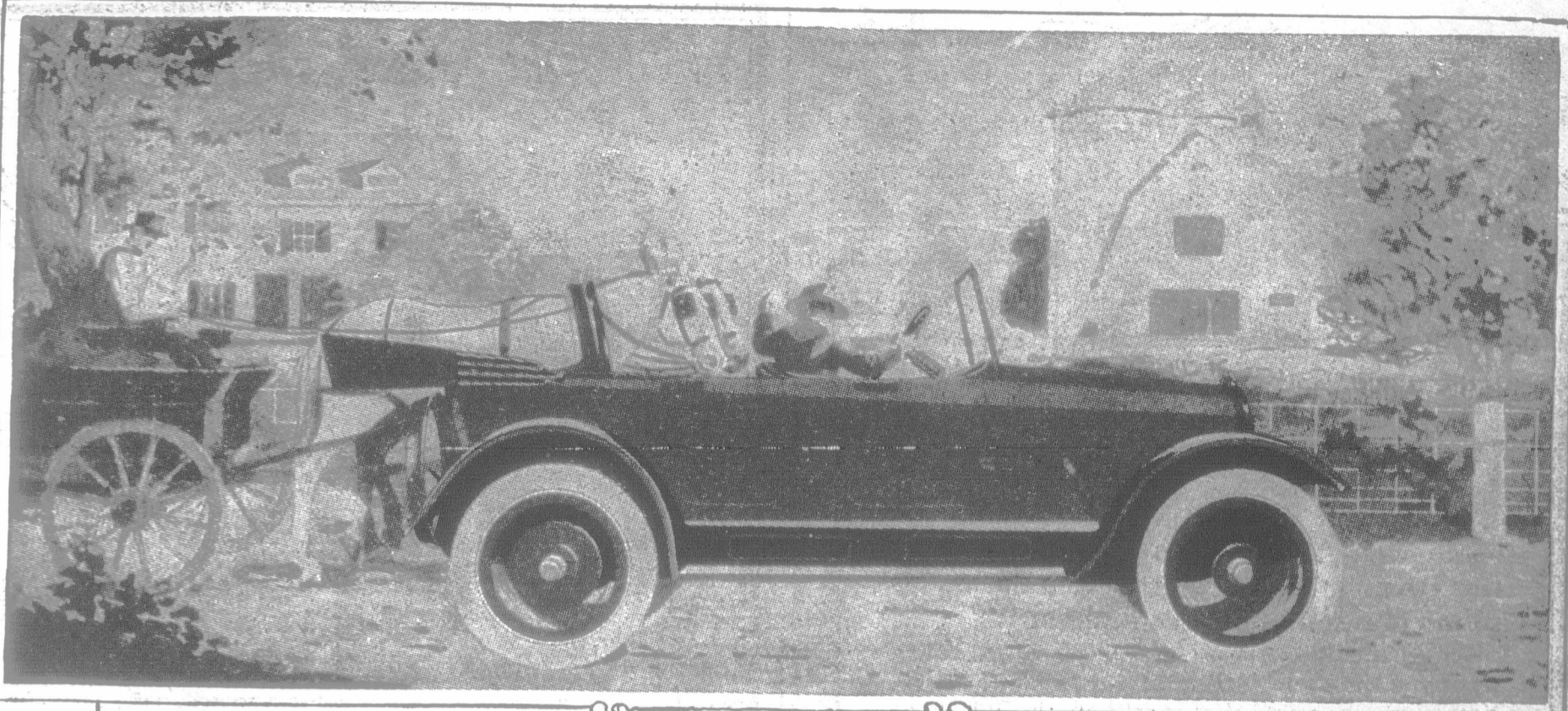
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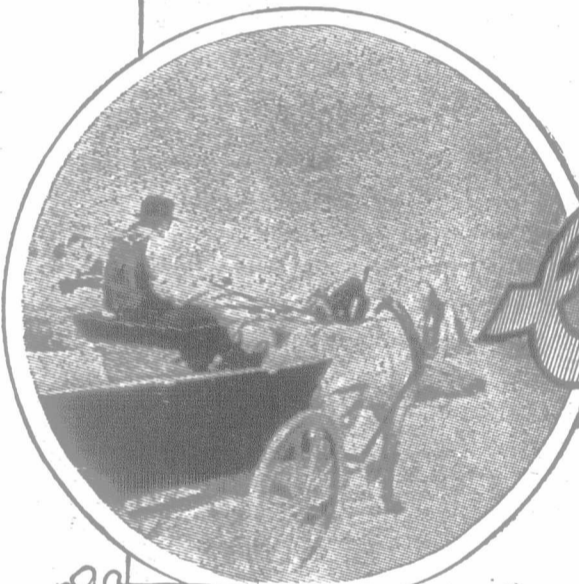
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Night

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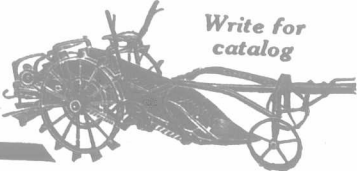
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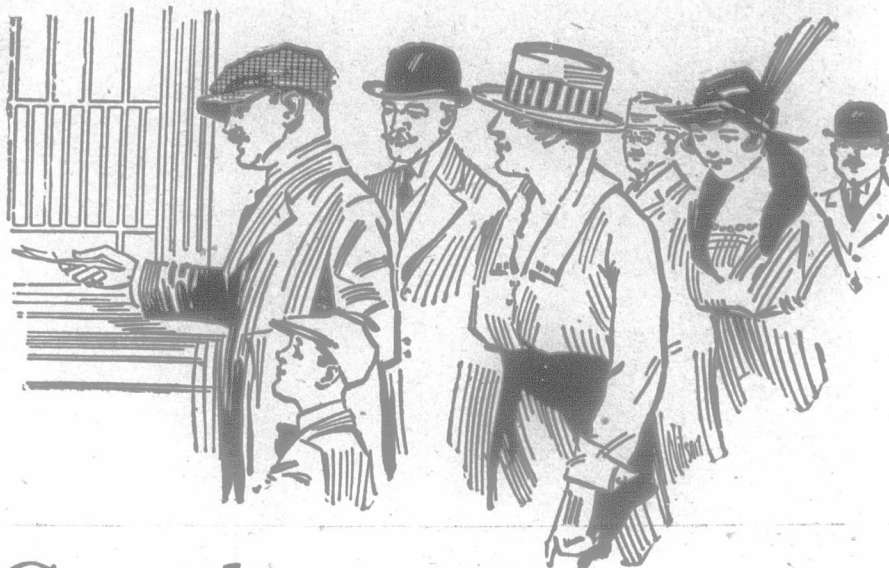
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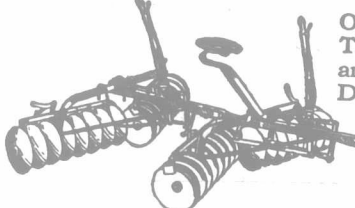
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# The Farmer's Advocate and Home Magazine

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LII.

LONDON, ONTARIO, JULY 5, 1917.

1293

## EDITORIAL.

Daylight saving does not help the farmer.

There should be some small specialty on every mixed farm.

It doesn't seem logical to take the men and leave the money untouched.

The Huns have been hanging the Poles and now the latter are organizing to pole the Huns.

We get hundreds of questions on holidays for hired men, but never one on holidays for the farmer.

The food controller in Great Britain puts food production on the same level in importance as fighting. A nation must be fed to fight.

The United States is going to send 100,000 aeroplanes to France and no one has yet suggested that Uncle Sam was "Up in the Air."

Some call sweet clover a weed. We have just harvested a field of it at Weldwood and it was about the most profitable weed crop we have seen in a long time.

Canada is fifty years old and quite a robust youngster notwithstanding a few doses of unpleasant political pills which from time to time cause slight derangements of digestion.

A certain section, or sections, of Canada may have had unfair treatment in enlistment, but that should be no excuse for objecting to a fair method by which to back up our heroes now.

It was gratifying to hear a member of Parliament state that all the brains of the House were not on the front benches. The so-called back-benchers have a duty to perform in helping to bring order out of chaos some of the front-benchers have succeeded in mixing up.

Some politicians are now attempting to reassure Quebec by stating that conscription would not hit Quebec as hard as it will other Provinces. All should understand that an unfair conscription will be resented much more strongly than an Act which applies to all men and all resources on a fair basis.

People seem to forget that high prices are in themselves the surest remedy for high prices in farm products. As soon as prices go up to a high level producers are encouraged to increase production of the particular product in demand, and when they have produced abundantly and sometimes when yields have not been high prices bump down.

The day cannot be lengthened by setting the clock ahead. Why not let those who want longer hours of evening daylight start work one hour earlier in the morning and stop one hour earlier at night, and leave the clocks as they are? The question is one for firms to decide for themselves. Agricultural conditions cannot be readily adapted to meet such a change.

The one big obstacle against a referendum on conscription is the time which would be lost in getting the mandate of the people. If it could be done quickly the voice of the people would strengthen the hand of the Government in whatever course they follow. Success can only come with the people behind the course taken, which we have no doubt would be immediate conscription.

## Conscription.

For months we have believed that conscription is the only fair and democratic system of fighting any great war and we have favored its application in Canada if it is so applied as to take in all the resources of the country. Canada has a duty to perform—an honor to uphold and there is no time for hedging. But if men must go into the service of the country, money and all other resources should be organized to serve the country at this time. And there must be all fairness and system in the operation of conscription of men and all resources. It has been suggested by some that conscription would not hit the Province of Quebec as hard as it would the other Provinces at the present time because the young men of that Province had married at an early age and because most of them were farmers and production must be kept up. Everyone is agreed that production of food must not lag, and those who know how to farm and would be of more value farming than fighting should not be taken overseas. It is not a question of bravery or cowardice, it is a question of placing all eligibles where they will be of most service to the cause of democracy and of systematizing everything so as to throw Canada's greatest weight of men, money and resources into the fight. Every man who can do better work on the land than at the front should be left, but agriculture in any Province should not be allowed to be used as a safe retreat for men not needed on the land, or men who know little about it but leave some other work to escape being drafted into military service. The rural districts in Ontario and most of the Provinces have done well in recruiting as well as in production, and, stripped of men for farm work, they see no reason why all should slip by the military service officer in Quebec. Canada is ready for any law which will back up the boys at the front by organizing fairly at home, and it is a wise precaution to so frame laws that once passed public opinion will back them up to such an extent that they may be enforced without trouble. Universal service must fall equally on all Provinces, all people and on all resources. Canada wants a system fair to all, with the men from all Provinces used alike.

## Fifty Years Old.

On July 1, fifty years ago, the birth of the Dominion of Canada took place through the union of Upper and Lower Canada, as then constituted, with Nova Scotia and New Brunswick. Nova Scotia was the real leader in the movement which finally brought about Confederation, then a big idea and still a big idea, growing bigger as years go by. Prince Edward Island did not come into the union at first but later joined up, while Newfoundland left the matter in abeyance and has not yet seen fit to throw in its lot with the other United Provinces. Now would be a good time to come in.

Growth has been steady. From four Provinces joined up at first and five later when Prince Edward came in, the country has developed and extended until at present there are nine great Provinces and the possibilities of the country reveal themselves as development gradually takes place. Who knows what the next fifty years may bring forth in this great Dominion of the New World and the North? Already we hear the Peace River District called "the Province beyond the Peace." Only the fringe of Canada's natural resources has yet been touched and the great union of Provinces may be added to in numbers and certainly will grow in strength as decade follows decade in the next half century.

The fathers of Confederation won the greatest peace victory in Canada's history. Cementing the Provinces of a young nation together was a problem which required the best efforts of real statesman and

Canada had them. The young nation created within the Empire—the great democratic idea has prospered as only democracy can up to the present stage where world war, waged at the behest of autocracy, finds Canada on the side of humanity and in the fight to the finish. These are the greatest and most trying times since Confederation and it behooves our present-day leaders in thought and action to emulate our statesmen of a half century ago and live up to the opportunity which is theirs. Canada's honor is at stake in this fight. Democracy must be upheld. The country must be bound together and the men already on the firing line must be backed up. Foresight and statesmanship should eliminate political intrigue and the young nation only 50 years old is on the threshold of rapid advancement in growth and affairs.

## So-Called Daylight Saving.

Sir George Foster has introduced a Bill in the House of Commons calling for the adoption of daylight saving Canada over. Sir George has spent his life in Finance and Commerce. He never had to harvest crops in catchy weather. He never had to cultivate and hoe weedy corn and mangolds between showers, otherwise he would understand that the dew falls at night and doesn't dry off until well after seven o'clock as our timepieces now run, and that the best time to kill weeds is not early in the morning, one hour before seven, but after the sun is well up and burning on his way. The hour between five and six p. m. in haying, hoeing and harvesting is far more valuable to the farmer than the hour between six and seven a. m., which would be in the ten-hour day under daylight saving, excluding the hour from five to six p. m. as it now stands.

In any consideration of tampering with the clock as man has set it by the sun—people in rural districts should be considered. In Canada upwards of 50 per cent. of the people live on the land and agriculture is, this year even more so than ever before, the most important industry. Above all things it is imperative that farmers get all the help possible in harvesting their crops. Farm proprietors work from sun to sun for the most part and so the measure will not decrease or increase their hours of labor, but the hired help, considerable of it from towns and villages, will figure on starting in the fields at seven by the clock and quitting at six unless under special arrangements of hiring, and that seven and six should remain as for years and not be advanced one hour as suggested by the Bill. Surely city and town folk can find time enough with their one afternoon a week off and their shorter hours of labor to hoe their back-yard gardens without being fooled by advanced clocks into getting up one hour earlier in the morning that they may ring off work one hour earlier at night. Surely thinking people could get up to start work at six, seven or eight by our clocks, in place of seven, eight and nine and quit one hour earlier at night without changing the clocks. Tampering with the timepiece has no advantage only to fool people into believing that they save an hour daily without getting up any earlier in the morning and such fooling cannot work on the farms. The so-called daylight saving is no good for towns, as an Act or by-law, unless made Dominion wide. Dominion wide it will interfere with agriculture, therefore it should be left entirely to firms, and any who desire to start and quit work one hour earlier should make their own arrangements and leave the clock as before. There is just so many hours of sunlight no matter what any man in his wisdom may do with the clock, and he who would make the most of it must rise early and work late by the sun, no matter what the clock says. If daylight saving hours are to apply to Canada, agriculture should be excluded. It fools picnickers, joy-riders, lawn bowlers and summer-resort frequenters and occasionally a



## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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back-yard gardener into thinking that he gains time, but it would hinder the farmer in his work if his hired help adhered to the new time and two sets of time make for much inconvenience. Therefore we say let the townspeople arise an hour earlier than they do and quit an hour earlier at night if they wish, but leave the clock run on as before.

### Mixed Farming With a Speciality.

Ontario and Eastern Canada is a mixed farming country. The production on most farms one year with another depends very largely upon how well the farming operations are mixed. There is a difference between mixing and jumbling. The most successful operators of mixed farming generally figure on combining a number of branches which work well one with another toward a successful whole. There is very often a main branch or leader. For instance, on some farms dairying may be the leader with bacon hogs making use of the by-products resulting therefrom and a good second in importance. These require clover, corn, roots, grain and bedding which divides the work nicely over the season, permits of a rotation of crops on the entire farm, makes it possible to grow a little wheat in many instances which increases the supply of bedding and may leave a little grain for sale if not required for feed—the whole a mixed farm with a speciality or two, dairying and hogs. The same can be worked out with beef cattle and sheep with a few hogs. Each system puts live stock in first place as a speciality. Each system makes it possible to breed and raise a few horses and to keep a profitable flock of hens. They both make for maximum crops and returns from the land. Any farm operated on a mixed farming basis should, to be the best success, have a speciality in live stock. The mixed farm with no speciality is often a muddle. There is not enough of any one thing to make good returns and there is just enough of all to break even. A speciality such as outlined means more stock to the farm, more fertilizer, bigger crops and a better cropping system, all of which mean better farming and bigger bank accounts.

Corn and weeds cannot both do well in the same

### Choose an Honest Job and Stay With It.

BY SANDY FRASER.

I hae been thinkin' sometimes that gin there's ony chance for a mon wha has become discouraged like, an' isna' makin' muckle o' a success o' his fight wi' circumstances, it's for him tae get hauld o' a story o' the life o' some mon that has been through the mill before him, an' wha has come out on tap o' the pile in the end. What has been done by one mon can generally be done by ony ither mon, gin he mak's up his mind tae it. I mind the time I wis a young chap, I used tae be pretty doon-hearted at times wi' a' the bad breaks I wad be makin'. I began tae think at last that gin there wis ony chance whatever tae dae the wrang thing, that wis the thing I did. But by guid luck I got hauld o' a book about that time, that gave a sort o' a life history o' a mon that wis about as guid as mysel' at gettin' intae scraps in his youthful days. But he stuck tae his job in spite o' a' kinds o' hardship an' he won out in the end. Sae I says tae mysel', "Sandy, gin you're no as guid a mon as that ither chap, ye want tae get tae wark an' find it oot, sae that ye can pit the blame on yer ancestors". There's naething like the force o' example tae get ye back on tae the track again, wi' steam up an' a' ready for anither run.

I wis readin' an account the ither day o' that chap across in the States that owns a' those five-an-ten-cent stores in the different toons an' cities there. It seems that he is the biggest retail merchant in a' the world, or that ever wis in the world, an' that he owns the highest an' handsomest building in New York City, which is sayin' a good deal, as ye will ken, gin ye've ever been there. He has mair than forty thousand people warkin' for him a' thegither, an' his hale business is valued at about sixty-five million dollars. He isna' what ye wad class as a failure in his ain particular line at ony rate. In fact maist o' us think enough o' money tae let him pass for a success.

Weel, this same chap got off tae a vera poor kind o' a start. He didna' even ken enough tae stay on the farm on which he wis born, but he must gang aff tae the city tae mak' trouble for himsel' an' ither there. For some years he held the Grand Championship in the green class wi' na chance for the title tae pass tae ony outsiders. The first three months he warked for naething an' boarded himsel'. At last he struck a job at six dollars a month, but he made sic a poor fist o' the business that his wages were cut doon instead o' bein' raised. Then he heard about anither place an' managed tae get it at ten dollars a week. This encouraged him tae get married an' start house-keepin'. But it wisna lang before his wages were reduced again. This wis mair than he could stand an' he made up his mind tae gae intae business for himsel'. His first five an' ten cent store wis no great success, an' juist aboot this time his health broke doon an' he wis aff the job for a couple o' months or mair. When he got gaein' aboot again he started up four or five mair stores, but three o' them went tae the wall, an' in his efforts tae keep things goin', oor young chap frae the country got himsel' intae the hospital again.

Hooever, he wis gettin' wiser a' this time, an' he finally came tae see that he wis warkin' along wrang lines. He quit tryin' tae rin the whole show himsel' an' started in tae act as general manager, pittin' the responsibility on ither, an' juist directin' things as he saw they needed it. His change o' fortune came wi' his change o' ideas aboot wark. Frae that time he has kept comin' ahead till noo it is his idea tae finally hae a store in ilka city in the world. I wouldna' be surprised tae see him dae it either, for there's na keepin' a guid mon doon, ye ken. Noo, as I said, it does a chap guid, at certain times, tae read aboot a mon like this. When things hae no' been gaein' weel wi' us there's aye some kind o' a deil in us that tells us tae throw the hale thing up an' quit tryin'. An' the maist o' us feel unco' tempted tae listen tae this sort o' thing. But gin we dae, we're done. It's by stayin' on the one job that we ever get enough experience tae mak' a success o' it. All things come tae them that wait—an' wark. I'm minded o' a chap that I knew some years back. At the time o' the rush tae the Klondike he threw up his job an' went aff wi' the crowd. He warked for a couple o' years up north, but the hard wark an' the cauld weather were ower muckle for him, so he sauld out an' cam' back hame. The mon that bought his claim didna' hae it mair than a couple o' weeks when he struck the gold that wis there waitin' for the ither chap, gin he had sand enough tae hae stuck tae his shovel an' pick. But hame he came an' bought a farm, an' started in tae mak' a fortune oot o' the dairy industry. Aboot five years o' it was enough for him. He cam' tae the conclusion that the hardest way ever invented to mak' a livin' wis by feedin' coos an' squeezein' the milk oot o' them ilka night an' mornin'. Sae there wis an auction sale o' live stock an' implements, an' anither move wis made. This time it wis to a fruit farm, an' it sounded as though it might be all right tae hear him talk aboot it. But it has turned oot tae hae its drawbacks like a' his ither ventures, an' I hear he wad move again gin he didna' hae tae tak' the farm wi' him. We've a' heard that three moves are as bad as a fire, but I think it's worse, for when a chap has moved that often he gets the habit, an' it's a bad one, but one isn't apt to get into the habit o' havin' fires. But that matter aside, the point is that there seems tae be juist one sure way tae get onywhere in this world, an' that is by choosin' some honest job an' then stayin' wi' it lang enough tae gie yersel' a chance tae climb tae the tap o' it. But that five-an-ten-cent chap that I wis tellin' ye aboot learned anither thing that wis worth knowin', an' that wis that gin ye want

yer business tae grow tae a guid respectable size ye've got tae tak' on help an' ken how tae manage it. I dinna' think I'll be gaein' intae that matter juist at present, hooever. I may hae a word tae say on the subject later on, gin I think I hae had experience enough tae warrant me in expressin' an opinion. But the auld wumman has juist tauld me tae come tae my supper, an' since one way tae manage yer help is by keepin' them in guid humor, ye ken I mauna' keep her waitin'.

### Nature's Diary.

A. B. KLUGH, M. A.

To the farmer, some knowledge of the sciences, such as botany, zoology, chemistry and physics, is most valuable. We might even safely say that such knowledge is absolutely necessary for intelligent agriculture, that without such knowledge farming operations are carried out by "rule of thumb," which is a very poor rule indeed.

Of these sciences botany is certainly not the least important and perhaps it is the most important. Botany is an extremely wide subject, wider than most people are apt to think. It is commonly thought of as a sort of ornamental study which consists in pulling flowers to pieces and giving a name to each little piece, and perhaps of collecting, pressing and mounting a certain number of plants. This idea of botany is undoubtedly due to the old and pernicious system of teaching the subject which was in vogue in the schools and which is now fortunately being replaced by a better system. Upon this point let me not be misunderstood; it is necessary that the student of botany should learn the parts of plants in order not only that he may understand their structure, but that he may be able to classify them—to tell the family to which a plant belongs, but this should be the foundation-work and not the aim and end of the subject, and any system which leaves off at this point is like teaching a man how to excavate a cellar and build a foundation without giving him the slightest idea how to proceed about the erection of the structure which is to rest upon that foundation. Botany takes in not only the study of the anatomy of plants and their classification, but also the conditions under which they live, the way in which they perform their life processes, their uses to man as crops and as drugs, their troublesomeness to man as weeds, the manner in which those forms known as fungi affect other plants which man is cultivating, the determination of those species most useful as food for those forms of wild animal life which it is desirable to propagate, the study of the forest and the improvement of the timber crop, and, in its broadest sense, even the vitally important study of bacteriology, since bacteria are really a form of plant life.

Many of these phases of botany are of great importance to the farmer, but the two which touch him most closely are the recognition and control of fungous diseases and weeds.

It is scarcely necessary in an agricultural country to define the term "weed"—every farmer knows only too well what sort of a plant is meant, but at the same time it is a word which is often wrongly used. The term is often applied to any wild herbaceous plant, even when it is growing in its natural habitat and is not intruding on agricultural land. A weed is often defined as "a plant out of place", so that in this sense a stalk of wheat in a cabbage patch would be a weed. But this is hardly a good definition and it seems to me that a far better one is "a plant which persists in growing where it is not wanted", as this brings in the character of persistency which is one of the main attributes of weeds. Without this persistency a plant cannot become a weed, and when we come to analyze this character we find that it may be due to one or more of many factors, the two most usual factors being hardiness and rapid multiplication. Practically all our worst weeds are immigrants from older lands, plants which have proved themselves successful in the struggle for existence for centuries in their respective countries and are continuing this success in the New World.

The ways in which weeds cause a loss to the farmer are manifold. They rob the soil of water and of plant-food; they crowd out useful plants; they attract injurious insects and harbor fungous diseases; some are poisonous to stock, others are injurious to animal product, as those which produce burrs to become entangled in wool, and those which taint milk; and all of them are a constant source of expense to the farmer in combatting them.

It is of much importance that the farmer should be able to ascertain the names of weeds which he finds on his land. Often an extremely noxious weed will first appear in a locality in the form of a single plant or a very small patch, but as nobody happens to know its name or its reputation, it is allowed to seed and spread until it brings notice upon itself by becoming a pest. If it had been recognized at first its inroad might have been literally "nipped in the bud". When travelling through the country I always make a point of drawing the attention of the owners to any weeds I notice just becoming established on their land, and in this way I have been able to prevent the introduction of some noxious species into many localities. In some instances the removal of a single plant has turned the trick.

In the recognition of weeds one of the most important things to acquire is the ability to tell at once to what family a weed belongs. When the family is known it reduces the number of possible species to comparatively few. Anyone who follows the description and figures of the different weeds with which I shall deal from time to time should soon acquire this ability to recognize families.



# THE HORSE.

## When a Horse Transport Sinks.

All the sufferings of horses in the war have not taken place on the field of battle. They, too, have gone down victims of the Hun undersea craft. In 1916 the "Georgic" was sunk with 1,200 horses on board. The Germans shelled the ship and finally torpedoed her. Dr. O. E. McKim thus described, in the New York World, what happened:

"After the torpedoing . . . very soon the seas were piling over the well-deck of the hatches. So heavy was the backwash that every once in a while a horse would be picked up bodily by it and swept into the ocean, right over the bulwarks, which were at least 8 feet high. You may get some idea of what sort of a sea was running when you realize that twenty-five or thirty of the animals were carried clear off the 'Georgic.'

They swam round and round in the icy water, some of them for hours. A splendid chestnut struck out straight for the raider. I recognized him as one of my pets. So close did he get that I could hear his breath coming in rasping sobs. You have seen a man tired from swimming approach a raft and have heard him pant with relief as he was within reach of it? This is exactly how the chestnut was panting—almost sobbing for breath. It was exactly like the swimmer reaching for safety just before he is spent. I could not stand it. Rushing to the German commander, I begged him to shoot the animal rather than leave him to struggle his life away trying vainly to claw up the side of the raider as he was. The commander took careful aim with his Mauser pistol, which had an adjustable stock that made it capable of being used like a rifle, and fired. It took four shots to end the poor creature's misery. . . . Another grey horse which I recognized swam for probably an hour and a half round and round the 'Georgic' before the water closed over his head. . . . I love horses—always have. It was terrible."

## More Good Horses Needed—Must Use Better Mares.

It seems that horse-breeding conditions are none too satisfactory, even in the Old Land, if we are to judge from some articles published in British agricultural papers. We hear complaints in Canada of the scarcity of really good horses, and the comparatively large numbers of inferior animals. A writer in "The Farmer & Stockbreeder" has some things to say which indicate the same conditions in England where there is a scarcity of choice brood mares, especially of light blood. The writer of the article here quoted believes that the mare has more influence on the offspring than she is commonly accredited with.

"The question of horse breeding and of raising the standard of our horses is a very complicated one, and it would almost seem that the complications increased as the subject is discussed and the number of horses expands. How important it is that efforts should be made to place the industry on a more satisfactory footing is evident from a fact that came to my knowledge the other day. A gentleman, buying horses for the Government, passed in review four hundred horses of sorts. He bought four! It will, no doubt, be said that the gentleman in question was too fastidious. What is certain is that he has been amongst horses all his life. But to return to the question. The fact of a large proportion of undesirable points to the fact that good brood mares, or even passable ones, are likely to be too few for our requirements, at any rate at first, and the question which presents itself for solution is a difficult one. It is, of course, the ordinary light horse—the horse that has to stand the burden and heat of the day—that I am especially referring to, and the position seems to me to be something like this: If we could find the mares, we have the stallions, or at any rate sufficient stallions to give us a fair start.

"A very general opinion seems to prevail that the improvement of horses comes from the use of good stallions, and so it does in a measure; but that is only a partial truth. Here and there we come across a horse whose stock, no matter what the mare may be like, is all good. I have known two, perhaps three, such stallions in my time, but they are naturally scarce. Far more frequent is the horse which will sire good stock from one mare, and indifferent stock from another, both mares being to all appearances of equal merit. I have been told that thousands have been spent, and are being spent in providing stallions—a very limited number of thousands, by the way, compared with the sums spent on matters of secondary importance—and that all has been done that is necessary. The rest is only a work of time. But all practical men know that 'grading-up' is a slow process. When the big boom in Cleveland Bays was on, in the eighties, men sold high-class mares that should have been kept, thinking to 'grade up' from those which were left. It is only where men refused to part with their mares till they had some of the same blood to take their place that the high standard has been reached. Whether the stallion or the mare is the more important factor in breeding horses of high class will probably never be a matter of scientific certainty. The horse is generally supposed to have the most influence on the shape and what is known as the 'quality' of the offspring, and also to have greater influence on his courage. This, however, is perhaps more apparent than real, for it must be borne in mind that the horse, being generally Thoroughbred, is sure from that fact alone to have his particular attributes more

distinctly marked, and therefore more easily transmissible, than the more sluggish-blooded mare. It is perhaps more a question of pedigree than of sex, and what I have seen—it is not much, I grant—of the half-bred whose dam was Thoroughbred tends to confirm the theory.

"Never breed from an unsound horse or an unsound mare, says the theorist; and in great measure the theorist is right. Yet, follow his generalization to its logical conclusion, and there would have been fewer sires of merit on the Turf. And so one sometimes sees amongst the million of fresh particulars a common, insignificant mare breeding high-class stock. I can remember one or two such mares, but because there are a few such it does not necessarily follow that any mare may be mated with, say, a premium stallion with the certainty that she will breed a foal that will sell at a good price. It is just possible, of course; we have incidents such as those to which I have referred to fall back upon, but the gamble is too big, and the man who breeds from an inferior-looking mare without some reliable history to fall back upon, which will justify his action, is asking for trouble.

"The importance of pedigree in the brood mare cannot be overrated. And by pedigree in this particular I do not mean Thoroughbred pedigree, or any registered pedigree in particular. I mean established type, the result of generations of ancestors of a similar type and character. When there is this established type in the brood mare, the breeder can look forward with considerably more confidence to the result of his enterprise. It is this established type in the Cleveland Bay and the Yorkshire Coach horse which makes the crosses between the Thoroughbred and those breeds generally so successful—or, perhaps it would be safer to say that it is one of the principal factors of success. So it is of great importance to get to know as much about the pedigree of the mare, and especially as much about her female ancestors, as is possible. I think it is within the range of possibility that, if ever there is any accurate knowledge on the subject, it will be found that the female ancestors have most to do with this establishment of type.

"The Arabs for thousands of years have worked out the pedigrees of their famous breed through the female line. Many Cleveland Bay breeders have done the same, though without any special theory on the subject. I like to see a really good mare come in at the top end of the pedigree on both sides, said a well-known breeder to me once, and his preaching was followed by his practice with the best of results. Amongst Thoroughbreds we frequently see, when the horses are good performers, that one mare figures in the pedigree on both sides."

## Showing Heavy Horses.

EDITOR "THE FARMER'S ADVOCATE":

Fitting and showing Clydesdales requires a great deal of patience and knowledge, also experience. In the first place, great care should be taken when unloading off cars to avoid accidents. At that time the horses are anxious and become excited. Travel them very slowly to the exhibition grounds, taking notice they are all going sound. Stable them comfortably, offer them water and a little hay, encourage them to settle down in the strange stable and see that they have a comfortable bed to rest on until the next meal. The large exhibitions continue a week or more. The animals are generally on the ground two days before judging takes place, and during that time the boys have located where all the best animals are, discussion takes place about the winners in various classes. Don't get discouraged whatever you fear. Show your animals, and if necessary to take a back seat in the prize-list look pleasant and feel you did your best. Before leaving home for the show, have all necessary trimming done to the legs,

especially getting the feet well shod, having the feet level and the horse walking and trotting close and straight. If possible avoid all this work on the fair grounds. You hear a great deal about fitting for the ring. It is no trouble to fit a good animal. He doesn't require much skilled labor, it is the faulty ones that require the time and skill. In the first place, you must know his weak points, and do all you can to improve these points if possible. Give plenty of exercise twice every day, feeding very little grain, increasing the bran supply. Allow a pinch of saltpetre once a day, this should keep their legs clean and free from swelling. Two days before judging the legs should be rubbed with some clear, pure seal oil mixed with some sulphur. This will make the hair silky and smooth, when washed, and dried with clean, white sawdust, doing considerable hard rubbing, attending to the ankle joints particularly, an hour before entering the judging ring. The mane should be rolled neatly, tail tied up, if animal is above two years old, using ribbons of nice color, plain and neat. Have the bodies of matured animals well groomed. I don't believe in grooming a colt, let them be shown with a good rough, healthy skin.

Lead animals into the ring with a good halter. Train them to stand squarely on their legs, walk and trot when required. The groom should have a keen eye on his animal all the time, never allowing it to stand twisted or in any wrong position. Keep a watchful eye on the judge when he comes your way, and make a special effort to have the animal standing perfectly, for many a prize is lost because a well-trained animal has a poor groom. If you are beaten, take whatever ribbon is handed you and look happy. Be a sport, go back again with a strong determination to be the owner of a winner. Sask. "HORSEBREEDER."

## LIVE STOCK.

### Bloating, Tympanitis, Hoven or Blown in Cattle.

This condition, known by many names, consists in distension of the rumen with gas. The most fruitful cause is a sudden change from dry food to an unlimited supply of green food of any kind, principally to the different varieties of clover, and more particularly when the clover is in flower. It frequently occurs from the voracity with which cattle that have been kept on dry food all winter consume green fodder. Hence it is more prevalent in the spring than at other seasons. It results from feeding too freely on green food of any kind, especially that upon which dew or rain is present, and more particularly when frosted, hence is not uncommon in the fall when cattle are allowed to consume clover, rape, turnip tops, etc., when frosted. Any food that readily ferments, if taken in sufficient quantities to temporarily check digestion, will readily form gases and cause bloating. It is often present during choking, the mechanical impediment being the cause, by preventing the escape of gas through the gullet. Sudden changes of diet of any kind may cause the trouble, or insufficient secretion of saliva may have the same effect. While some of the above-mentioned causes usually precede an attack, it is not unusual to notice a well-marked case for which no well-marked cause can be traced. Such cases are doubtless due to some unsuspected, and not well understood, temporary derangement of the digestive glands and muscles of the rumen. Any condition that causes torpidity of the rumen may cause bloating, even though no change of food or consumption of food of a dangerous nature has taken place. Torpidity of the rumen occurs in debilitating diseases, in fact, in most diseases of the ox,



Refreshing the Horses in Harvest.



also from the introduction of excessively cold material, as frosted fodder into the organ.

**Symptoms.**—The patient commences to exhibit signs of uneasiness, lying down and rising frequently, and kicking at the belly. Rumination is suspended and food refused. There is a general depression, protrusion of the muzzle, projection and congestion of the eyes, increased flow of saliva, and generally moaning during expiration. The back is arched, and there is more or less well-marked swelling on the left side, more pronounced in the space between the point of the hip and the last rib. If this part be pressed with the finger it will yield, but at once regain its former condition when pressure is relieved. If tapped with the fingers a resonant, tympanic or drum-like sound will be heard, hence the name "Tympanitis." Distension of the rumen causes forward pressure upon the diaphragm (the division between the abdominal and lung cavities) hence lessens the space of the lung cavity and causes difficulty in respiration in proportion to the degree of bloating. In many cases forcible ejection of faeces per rectum is noticed. In most cases eructations of gases of a special odor will be noticed. The bowels soon cease to act, and breathing becomes more difficult as the tympany increases. The brain frequently becomes involved to some extent, the patient becoming blind, staggering and falling. Death may occur quickly from rupture of the rumen, rupture of the diaphragm, suffocation or absorption of gases.

**Treatment.**—Preventive treatment consists in avoiding sudden changes of food, especially from a dry to a moist or green ration, but even the reverse. All changes should be made gradually. When cattle that have been used to dry fodder are to be turned out on grass, especially a variety of clover, it is good practice to give a moderate meal in the stable, then turn on grass for a few minutes, say 20 to 30 minutes. The next day leave on grass for a longer time, say 40 to 50 minutes, and continue to gradually increase the period, in order that the animal will become less inclined to engorgement, and the digestive organs gradually acquire the power to perform their new functions. In a few days it will be reasonably safe to allow the cattle to remain on the pasture. Much greater danger exists, at any time, in allowing cattle that are not accustomed to green fodder, to partake of it when damp with either rain or dew. Frosted grass, rape, turnip tops, etc., are very dangerous under all conditions.

**Curative treatment** must be directed to remove or neutralize the gases that are present, and prevent the formation of others. It will depend upon the severity of the disease, and the extent of the distension of the rumen, whether it will be wise to attempt immediate removal of or administer drugs to neutralize, the gases. When bloating is not excessive, hence little danger of death occurring quickly, the administration of any drug that will neutralize the gases may and should be effective. For this purpose probably oil of turpentine (commonly called spirits of turpentine) is the best simple remedy. This is given in 2 to 4 fluid-ounce doses, (an ordinary tablespoon holds about 1/2 fluid ounce) according to the size of the animal and the state of distension. It is wise to administer it in some vehicle to prevent irritation to the mucous membrane. The best vehicle is raw linseed oil, 1 to 1 1/2 pints. When oil is not on hand melted butter or lard or whole milk answers the purpose well, but the turpentine will not mix with water, at the same time when oily vehicles are not readily obtainable it may be given in water if the bottle be constantly shaken. Hyposulphite of soda in 1 to 1 1/2 oz. doses mixed with about a pint of warm water also gives good results. Carbonate of ammonia in 4 to 6 dram doses, or bicarbonate of soda (baking soda) in 1 to 1 1/2 oz. doses also acts well, but none of the drugs mentioned act so well or so promptly as oil of turpentine.

The Kentucky Experiment Station highly recommend the administration of about 1/2 oz. of formalin in a quart of water, and cite many cases in which it has given excellent results. The writer has not experimented with this drug on account of always being able to get good results from oil of turpentine. At the same time the use of formalin is worthy of a trial, but it must be remembered that it is a very strong astringent and irritant, hence must be diluted with at least a quart of water.

In addition to administering the dose (whatever we select) it is good practice to put a hay rope, piece of wood or something about 2 inches in diameter, into the mouth and fasten it there. This tends to cause a working of the jaws, and facilitates the escape of gas through the oesophagus. If the desired results be not obtained in an hour the dose may be repeated. In cases where bloating is extreme there is danger of death resulting quickly from rupture of the organs mentioned, or from suffocation. In such cases we cannot wait for the action of medicines given by the mouth, relief must be prompt, the gases must be removed by surgical or mechanical means. In some cases the passing of a rubber tube down the oesophagus to the stomach will give immediate relief. The mouth must be kept open by an ordinary gag, a mouth speculum, a clevice or other device; the tube, (about 5 or 6 feet of ordinary 1/2-inch garden hose does well) is oiled and carefully passed until the end enters the rumen. If that part of the rumen be not blocked with semi-solid contents, the gas will immediately escape through the tube, but if it is the gas cannot enter the tube.

In such cases an opening must be made into the rumen on the left side, at the most prominent part between the point of the hips and the last rib, through the skin, muscle and wall of the rumen, through which the gas will escape and give practically immediate relief. The hair should be clipped off, and the seat of opera-

tion, the instruments and the hands of the operator disinfected with a 5-per-cent. solution of carbolic acid, or one of the coal-tar antiseptics.

An instrument called a *trocar and canula* is the proper one to use. It consists in a metal tube, with a sharp-pointed metal rod running through it, the point of the rod extending for some distance longer than the tube. An incision may be made through the skin with a knife or the trocar forced through without an incision. It is forced well into the rumen, the trocar then drawn out, which leaves the canula or tube inserted, through which the gases escape. When this instrument cannot be procured in time, an opening may be made with a knife and the lips of the wound held apart to allow escape of gas. Unless the opening be quite large no after treatment is required other than keeping the wound clean and occasionally dressing with an antiseptic. When the proper instrument is used after treatment of any kind is seldom necessary.

In all cases it is good practice, after bloating has disappeared, to administer a laxative of about one pound of Epsom salts or 1 1/2 pints raw linseed oil and feed lightly on laxative feed for a few days.

WHIP.

### The Origin of Dual-Purpose Shorthorns.

Much interesting reading has been penned regarding the history and development of the Shorthorn breed, but chapters relating to the work of Thomas Bates and the excellence of the Kirklevington herd are fascinating to all. An article in the 1916 Live Stock Journal Almanac, written by Horace G. Regnart, is reminiscent of early Shorthorn days, and we have taken the liberty of reproducing it at this time. Famous animals as well as famous men are mentioned in this story which follows:



Thomas Bates.

Economic forces, such as the closer settlement of the prairies and cattle ranges throughout the world, are tending to make the consumer more and more dependent upon the dairyman for his supplies of beef as well as of milk. This state of things will give the dual-purpose cow a position of increasing importance in the world's economy.

The Bates Shorthorn represents the highest type of the dual-purpose animal. When we read the history of the early Shorthorns we are constantly reminded that even from the earliest times the Shorthorn cow and her ancestors were of the dual-purpose type. Writing in the year 1744, William Ellis, of Little Toddesden, says: "Of all the cows in England I think none come up to the Holderness breed for their wide bags, short horns and large bodies, which render them the most profitable beasts for the dairyman, grazier, or butcher." One of the Collings bought a cow, Daisy, "of very neat shape and very inclinable to make fat, and her family milked as well as the Duchesses," and he had no doubt she was by Masterman's bull. The ancestors of Maynard's Favorite were "great milkers and had to be milked before calving." Hubback, we read, was "one of the quickest feeders known, and his dam was a small cow but good milker and quick feeder." The Princess tribe were noted milkers. Colling's Bright Eyes, by Favorite, gave 30 quarts a day; Duchess, by Daisy Bull, gave 28 quarts.

#### Milk and Beef Combined.

Most of the early breeders of what we may call "Modern Shorthorns," dating from the birth of Favorite 252, developed the breed upon the lines of beef production and neglected milking qualities; but Bates, on the other hand, clung tenaciously to and improved the old dual-purpose characteristics of the breed, and in-

sisted upon heavy milk yields when selecting the foundations for his herd or his out-crosses. In fact, it soon became a saying, "Booth for the butcher and Bates for the pail." When Sir Charles Knightley found that he had, to a very large degree, lost the milking qualities of his cattle, he brought back the milk by the use of Duke of Cambridge 12742, of pure Bates breeding.

Bates, however, did not neglect the feeding qualities of his cattle. He was an all-round improver. He checked the amount of feed consumed by each beast with the amount of milk produced, or the rate of growth, or increase in weight, and compared the amount of butter produced from a given quantity of milk; and finally submitted the carcass of his animals to what he called the test of the palate. He claimed that during 35 years' breeding he had effected such an improvement in Shorthorns that, with a third less consumption of feed, they gained a third more weight, and that whilst their milking qualities were unimpaired, the milk yielded a third more butter. We have confirmation of this in the well-known conversation between Mr. Bates and Christopher Mason, of Chilton, when the latter said, "You can go on breeding Shorthorns because they pay you in milk, butter and beef; but we cannot do so unless we sell them at high prices to breeders."

Bates also differed from his contemporaries in the manner in which he selected the foundation of his herd. Instead of being content to use Ketton and Barmpton bulls on the ordinary cows of the district or such as he had at hand, he purchased over 200 of the best-and-best bred cows he could find, and by a most rigorous selection he reduced these to less than 10, from which the Duchess, Waterloo, Wild Eyes, Oxford, Red Rose and Foggathorpe tribes are descended. In addition to these, he kept a few of the next best on a farm belonging to one of his tenants, and from these are descended the Barrington, Darlington and a few other tribes; whereas many very favorite families of to-day, such as the Frosts and Musicals, are descended from cows that were rejected from the Kirklevington herd. Bates breeders then have just ground for their contention that their cattle are the purest and best bred in existence, and that no other breed of animal has ever been subjected to such a methodical and searching test.

#### The Danger Period.

After Mr. Bates' death and the dispersal of the Kirklevington herd in 1850, a craze sprang up for purity of blood, which was opposed to Mr. Bates' real aims and methods of breeding, and, besides being unscientific, was bound in the long run to result in great danger to, if not in the total extinction of the breed. In addition to this the milking qualities were no longer prized, but were allowed to fall off.

Subsequently a reaction set in, and successive crosses of Cruickshank and other blood were used, which did indeed restore the ravages caused by injudicious inbreeding, but at the cost of the entire loss of milking qualities, Bates character, and dual-purpose characteristics.

Fortunately, however, there were some few individuals who resisted both these extremes, and the chief of those to whom we are indebted for the revival of the Bates cattle is the late George Taylor, of Cranford. His aim was, if possible, to improve upon the original type of Mr. Bates' cattle, as far as utility points (beef and milk) were concerned, whilst maintaining the frame and stylish carriage, and keeping in view the what is a *sine qua non* of a dual-purpose animal, early maturity, and economical feeding.

Therefore, in the later eighties he set about to pick up where he could a few of the best specimens of Bates cattle that were then in existence, and thus started a foundation which included Barringtons, Darlington, Waterloos, Wild Eyes, Red Rose, and Foggathorpes (Duchesses were only added later), and to these were added some representatives of Sir Charles Knightley's Furbelows, and also a few animals of good dual-purpose type descended from the stock of Mr. Mason, of Chilton.

#### Beau Sabreur and His Successors.

He was lucky in getting possession of Beau Sabreur 74049, a bull bred by F. J. S. Foljambe, to whom a very considerable portion of the credit for the success of the Cranford herd is due. He was by Leonidas 59260, a bull bred by Mr. Cruickshank from his Lovely tribe, and his dam was Beauty, a deep milking cow of Sir Charles Knightley's Quickly tribe, which had sufficient Bates blood in her pedigree to ensure Beau Sabreur nicking with the Cranford cows.

Beau Sabreur was used with the greatest possible measure of success for eleven or twelve seasons, and succeeded in improving the frames and depth of flesh without impairing in the slightest degree the milking qualities of his daughters. He was then followed by no less than five of his sons out of Cranford matrons, to wit, Becket Beau 101487 out of Barrington Duchess 21st, a 952-gallon cow; Cardinal 98304, out of Lady Carlisle 4th, a 914-gallon cow; Waterloo Beau 85039, out of Lady Molly Waterloo, a 1,134-gallon cow; Waterloo King 97628, out of Waterloo Rose 2nd, a 1,134-gallon cow, which won second Inspection Prize at the Tring Show in 1905; and Wild Prince 16th 78179, out of Wild Erin, which won first prize in the milking trials, silver medal, and divided the Shorthorn Society's prize at the London Dairy Show, 1902, and had a record of 987 gallons. Five of his grandsons were also used in the herd, viz.: Stadborough Cran 104038 by Lord Stadborough, out of Darlington Cran, which was first at the Royal Show 1905; Waterloo by Richmond, out of Waterloo Cranford 22nd, highly commended at the London Dairy Show 1908, and gave 716 gallons with her first calf; Saloms Freemason 100526 by Kirkcharm, out of Fedora, which gave 742 gallons with her



first calf; Richmond 100290 by Wild Prince 16th from Red Rose 2nd, which gave 1,004 gallons, and Regulator 109891 by Waterloo King from Red Rose 14th, with a record of 1,015 gallons. These sons and grandsons of Beau Sabreur were constantly interbred.

Another very successful out-cross was Sir Millicent 100675 by Prince William 86970, a Waterloo bull with a good deal of Scotch blood in him, out of Red Millicent, a deep-milking cow of Mr. Thompson's Millicent tribe, descended from a Booth foundation. Another was Rowbury 75491 by Lord Lavender, a Scotch bull, out of a deep-milking cow.

The Result.

Mr. Taylor was successful in producing a herd of cows which comprised very heavy milkers. The majority giving 1,000 gallons, or thereabouts, in the year, and some considerably more, and he was at the same time, in the vast majority of cases, able to combine with this a wealth of flesh and the general characteristics of the Bates blood, and to produce calves which were quick growers and economical feeders.

The prices which Cranford cattle have been fetching at public auction is a matter of common knowledge. To refer briefly, at the dispersal sale after Mr. Taylor's death in 1912, 187 head averaged £82, the highest price being 500 guineas. From that time prices gradually rose till the recent sale at Tring Park, when the females of Cranford breeding averaged £120, and a three-year-old Duchess of Barrington made just under £1,000, and her month-old calf £150.

In view of the great future which undoubtedly lies before the dual-purpose cow, and taking into consideration that the Cranford cattle represent the acme of that type, it cannot be said that these prices are to any great extent excessive; but, in face of these facts, it is a matter of considerable surprise that Mr. Taylor's example of resuscitating the milking qualities of Bates cattle has not been more widely followed. It is an easy matter to find bulls of Cranford blood in which the best Bates blood is combined with heavy milking qualities, and which are an admirable cross for Bates cows which happen to be deficient in milk.

One was very forcibly reminded of this fact at the recent Calthwaite sale. Here some magnificent specimens of Bates type and character were offered to the public, and although milk had not been specially studied, yet as evidence as to the extent to which milk is ingrained in the Bates blood, a considerable number of the animals in the catalogue bore every trace of being heavy milkers, and practically the whole of the animals offered only required one or two crosses of the right bulls to produce dual-purpose cattle of the very highest type.

Oxford Balance, which many will remember as probably the pick of the heifers at the Cranford dispersal sale and which made 200 guineas, was a granddaughter of a Calthwaite cow, the two Cranford crosses being Richmond 100290 and Beau Sabreur 74049.

Bates cattle, in addition, have some 200 years or more of careful breeding behind them, during the greater part, if not the whole, of which the dual-purpose type was kept in view, and this cannot fail to be a very great asset to anyone starting a herd, as in consequence of their old and concentrated breeding, they can, with ordinary care and intelligence, be made to breed true to type, which is a great advantage to anyone who has been disappointed time after time with the usual lottery of breeding.

Selling a Piece of Ontario's Wool Clip.

The maiden effort of the Ontario Sheep Breeders' Association this year in the co-operative arena met with a splendid success for they handled over a quarter of a million pounds of wool at unprecedented prices in this country. The grading system has been a success and we believe the dealers and manufacturers have made good their pledge to meet the sheep breeders half way if any movement should be initiated to improve the quality as well as the price of the Ontario product. At the Annual Meeting of the Dominion Sheep Breeders' Association in Toronto last February, a representative of the Textile Journal promised sheep raisers that the manufacturers would do their part and meet the producers half way if the wool clip could be graded, standardized and improved. Whether the representative was actually the mouthpiece of the trade we do not know, but events indicate that the dealers and manufacturers have accepted the responsibilities imposed upon them by his utterances and have made good the pledge. The United States is hungry for wool and the quantity of Australian product released seems only to have whetted that appetite. The demand, the world over, is abnormal and unprecedented, so the Guelph prices are quite in keeping with the times. To aid in a further analysis of the situation we reproduce here the prices received at Guelph, which were published last week:

Table with 3 columns: Grade, Weight, Price per lb. Rows include Fine medium combing, Medium combing, Medium clothing, Low medium combing, Coarse, Lustre, Rejects, Gray and black, Locks and pieces, Tags, and Washed wool (a small lot).

Every year Ontario shepherds and farmers shear and get rid of, one way and another, about two million pounds of wool. Some of it is sold in the grease while the other part is washed either on the sheep's back or in a tub. It may be stored in a dry place until sold or it may not be, in which case it is objectionable. The fleeces may be tied with paper twine so as not to impair the wool, or it may be tied with binder twine, the sisal strands of which get mixed with the fibre decreasing the value of the fabric made therefrom. In still other cases the neck piece is used to tie the fleece which makes the part so employed hard to unravel. Clothing and combing wool, used for two entirely different purposes, go in together along with different colors, locks, tags, etc. To the manufacturer this is only a mass which he must separate, grade and sort before it can be handled in the mill. After this it must be scoured to remove the grease and dirt, then the manufacturer has wool which can be milled. Is it any wonder that the grading done through the co-operative system and the proper care taken of the wool meet with appreciation?

Those who have contributed to the Ontario Sheep Breeders' grading system will, no doubt, be pleased with the price, but naturally a few consignments went astray. This is to be expected when such a quantity of wool comes from so many different shippers. Nevertheless the blame for these few misfortunes cannot be laid at the door of the co-operative grading system.

The prices received at Guelph cannot fail to add tone to the wool market in Ontario and while it is too bad that more wool was not handled in this way, those who preferred to sell otherwise will benefit indirectly through the movement they failed to patronize and assist. It has helped every producer of wool and rendered particularly good service to those who accepted

and has been the practice for years and years. As a more concrete example which bears out our contention that what everyone does is more or less wrong, we need only mention the universal increase in swine throughout the three Prairie Provinces in 1914. Alberta alone had in the vicinity of one million pigs, one-third as many as could probably be found in Canada to-day. Manitoba and Saskatchewan were likewise well stocked. The result all hog raisers will remember. This was the outcome of lack of organization and information as to what the other fellow was doing. Abattoirs were unprepared, the marketing machinery was inadequate, feed prices rose suddenly and confusion followed. One function of local swine associations should be to communicate one with the other, get reports from all sections, study the markets, home as well as foreign, size up the situation and base conclusions on actual as well as probable future conditions in the country. In this way the ill effects of the mob method of dealing would be partially overcome and those organized would be in a position to enjoy the good years and to some extent escape the misfortunes of the lean ones.

There are advantages apart from those already mentioned that should accrue to a local organization. One breed of bacon type could be accepted by the association as its ideal and pure-bred sires of extra good quality could be purchased for use in the community. If this method were followed consistently the district would soon be in a position to turn out a uniform lot of hogs, the quality of which would have to be recognized by the trade.

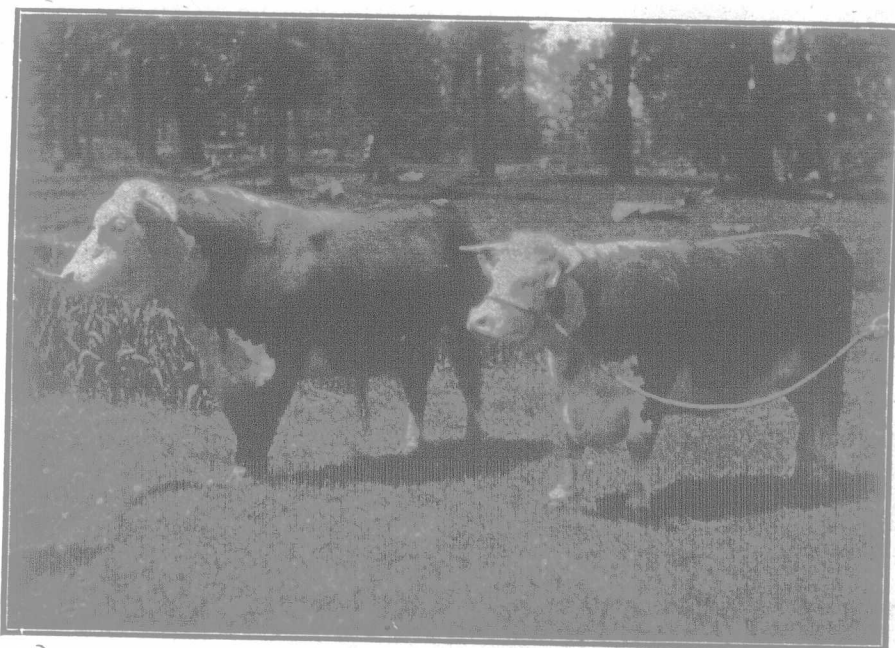
Community breeding would lead up to co-operative marketing whereby producers would receive the full value of their hogs and could demand payment according to grade or quality. The almost entire absence of this

method of payment has been one of the greatest deterrents to the development of the bacon industry in Canada.

Co-operative marketing should go hand in hand with co-operative buying of feeds and equipment in large quantities. This does not necessitate going beyond the local dealer unless circumstances require it. Established trade and good dealers will usually quote reasonably on large cash orders and a cash system of trading could be established by funding the security of the organization. Beyond this there are large central co-operative associations dealing in all kinds of farm supplies. The quality of mill feeds might well be improved and an organization of buyers would be in the best position to handle the matter.

Farmers' Clubs, Young Farmers' Improvement Associations, and all kinds of rural organizations could adapt themselves to this work, but the district should be compact, well defined and not too large.

Swine associations could be made of inestimable value to producers in studying and equalizing conditions, buying and marketing, improving breeding stock and the quality of the product, controlling disease, solving feeding and housing problems whereby production might be cheapened, and through the achievement of these objects the industry would be put on a more stable basis which would result in better markets and greater remuneration.



A Pair of White-faced Beef Makers.

it as a medium through which to market their product. The Live Stock Branch at Toronto, for its management of the work, and the Live Stock Branch at Ottawa for the expert graders, deserve the appreciation of all Ontario sheep breeders for the achievement.

Local Swine Organizations to Promote the Industry.

There have been many good farms bought and paid for with hog money, but the farmer who is most successful in this direction is the one who studies the business and stays with it through fat and lean years. It is so easy to increase or decrease pig stocks that too many sell out when prices are low and build up again when values range high. In this way they suffer all the misfortunes of the poor markets and are never in a position to enjoy the good ones. We believe that farmers would profit by a local organization through which they could advance shoulder to shoulder and feel the touch of their brother man when danger threatened. Agriculturists act and plan independently of each other and since the situation is seldom analyzed as it should the general conditions at the time suggest the same step to all, yet when 75 to 90 per cent. of the farmers affected adopt a certain principle and arrive independently at the same conclusions the balance is turned in the opposite direction and they were ostensibly all wrong. For instance, unfavorable climatic conditions over a large portion of the country may curtail the production of grain which at once suggests a scarcity and high prices. Viewed on the surface it is not a fool-hardy move to decrease the live stock to harmonize with circumstances, yet when thousands of farmers do exactly the same thing lower prices temporarily result through the heavy liquidation of stocks, only to be followed by high prices resulting from a decreased supply. What appeared to be a solution of the problem was overworked so the man who held on was right, and the masses were wrong. The majority sold for low prices because of the abnormal supply due to heavy marketing. Prices then advance as a sequence for the country is drained dry. This illustration does not apply to any particular period, or any one province or community. It simply explains the system or method governing the production of hogs

THE FARM.

Cultivating the Corn Crop.

If measures are not taken early in the season to prevent weeds and corn associating there is likely to be trouble before harvest. There is no room in even the largest field for these two plants, and if a firm hand is not kept on the weeds the corn crop is bound to suffer. Not only do weeds take moisture and plant food from the soil that should be left for the cultivated crop, but they seed so profusely that a few noxious plants allowed to mature may contaminate the soil and cause trouble for years to come. During the season that corn makes its most growth there is seldom an over-plus of rain. Frequently there are several weeks at a stretch with barely sufficient rainfall to settle the dust. Now, it is a well-known fact that plants must have a continual supply of moisture in order to reach maximum growth in a given period. Too much or too little rain is detrimental to most crops. However, nature has provided that a good deal of surplus water be held in the soil and given up to the plants as they require it. In this way a crop is tided over a prolonged drought. Man has a part to play in holding this water in the corn field as well as in other fields. Frequent cultivation will keep a fine dust mulch covering the field so as to prevent loss of water by evaporation. But, if this mulch is not present the soil soon dries out and cracks badly. Besides, where the cultivator has not been kept going every week or ten days up to the time the corn tassels, weeds will exact a toll from the soil and return no revenue. It is estimated that one pigweed to every fourth hill of



corn will take sufficient moisture from a ten-acre field to grow about fifty bushels of corn, or, in other words if the weeds are present the yield will be reduced by that much. There are a number of weeds commonly found in corn fields that are equally heavy consumers of moisture. From an economic standpoint the corn field should be kept free from weeds.

Corn is one crop that responds to proper cultivation. Keeping the surface stirred stimulates growth even in a dry season, but, there is a right and a wrong way of cultivating corn, and failure to observe this has resulted in more than one promising crop being given a setback. The corn plant has an extensive root system; the soil between hills or rows becomes filled with fibrous roots or feeders before the end of the season. These roots increase as the plants develop. At first there is only a small bunch right in the row and the cultivator can be run quite deeply without injuring the crop; but, as the season advances the roots spread and may come quite close to the surface, so that a deep cultivation would bring growth to a standstill for a time. Therefore, the best practice is to start with a deep cultivation to loosen up the soil so as to aid in conserving moisture, then run a little shallower with each succeeding cultivation.

A year ago a certain field of corn was making rapid growth. It was cultivated each week by one man who aimed at keeping a dust mulch between the rows. When the corn was about four feet high this man was away on cultivating day, and his brother undertook to do the work. He thought the soil should be loosened up, and gave the cultivator a couple of notches more than his brother had been accustomed to. He was congratulating himself on doing a good job, but when crossing the field at noon he noticed that where he started the leaves were drooping and the crop was beginning to take on a sickly appearance. He was unable to account for this until he learned that he was cultivating about two inches deeper than usual. Evidently the feeders growing quite close to the surface were severed from the plants. At any rate the crop never entirely recovered from the shock it received. Keep the cultivator going, but don't let it run shallow one week and put it in deep the next. Either keep at a uniform depth all season, or else start deep and gradually run shallower as the season advances.

**England's Increasing Cultivation.**

EDITOR "THE FARMER'S ADVOCATE":

Spring cultivation having been completed, the County War Agricultural Committees are now devoting their attention to the great business of increasing the arable acreage for next autumn and spring sowings. The Board of Agriculture are endeavoring, with the assistance of the Committees and the loyal co-operation of farmers, to reproduce as far as possible the conditions which obtained in England in 1875.

The statistics on the subject, dealing with different parts of the country, are in the hands of the local organ-

izers; and the following figures taken from the official records are instructive as indicating agricultural practice forty years ago and recently:

	1875 Acres	1916 Acres
Clover and rotation grasses.....	2,608,106	2,311,267
Other arable land.....	10,967,920	7,990,886
Total arable land.....	13,576,026	10,302,153
Permanent grass.....	10,536,283	14,015,840
Total acreage under crops and grass.....	24,112,309	24,317,933

It will be seen that in the space of forty years the area of land under rotation crops was allowed to decrease by 3,273,873 acres, and at the same time 3,479,557 acres were laid down to pasture. In view of the lessons enforced by the war it is obviously desirable to alter this state of things, and to bring back thousands of acres now under grass to produce food for the population.

The result of fairly exhaustive inquiries by the writer shows that only in comparatively rare instances are the War Agricultural Committees likely to find it necessary to exercise the enormous compulsory powers they possess to enter upon land through the failure of the occupier to speed up production. Furthermore, there has been very little friction in connection with the agricultural survey of land in the counties. This work has been completed, and the preliminary steps are already well advanced in some districts for ploughing in accordance with the recommendations of the experts.

The spirit in which, generally speaking, the Committees are carrying out their duties is illustrated by an incident in East Anglia. Complaint was made that a Committee were pushing forward with work without first submitting details to the Board of Agriculture; and in effect a reply was made that while the particulars would be supplied in due course, the Committee were an executive body, they were practical men conversant with local conditions, and they would not be hampered by red-tape procedure.

There is a strong desire in responsible quarters that the Board of Agriculture should state definitely at the earliest possible moment, for the information of farmers, what crops should be grown next year and thereafter, having regard to national requirements. Only by means of this information issued officially can plans be made with confidence for future cultivation. The value of time and forethought in farming was never more fully recognized than now in view of labor conditions. It has always to be borne in mind that agriculture more than any other industry is subject to rigid limitations, not the least imperative being those imposed by conditions of soil and climate. Every farm, and indeed almost every field on a farm, demands special treatment; and success depends largely on the ability to look well ahead and make arrangements to suit the circumstances in each case.

**Next Year's Program.**

A letter of great importance with regard to agricultural development in relation to the food supply of the country has been sent by the Board of Agriculture to the newly constituted County War Agricultural Committees in England and Wales, indicating the Government's requirements for increased cultivation for the harvest of 1918. The work to be done, it is stated, will demand far greater exertions from the Committees and from farmers generally than anything attempted hitherto. As the task of breaking up grass to the extent of three million acres (the total mentioned by the Prime Minister as comprising the Government land program for next year) will need additional labor, horses and machinery, an undertaking is given by the Board that due attention will be paid to this subject, and also that adequate quantities of seed will be secured. The Committees are urged to bear in mind that their object should be not merely the ploughing up of a given number of acres, but to aim at producing food in such quantities that the nation will be independent of imported supplies. For this purpose the land to be ploughed "must be such that it will produce at least average crops of corn and potatoes." On this point the Board of Agriculture states:

"It will be necessary to plough up some of the good grass land. This country possesses in the good grass land the only reserve of fertility in Europe, and in the present crisis we must make use of it to produce the food which the nation needs. It will be necessary to retain sufficient grass to preserve the dairy stock, since the supply of milk must be maintained to the full, but in this connection every effort should be made to extend the system of arable dairying. The case for a great increase of arable cultivation is overwhelming from all points of view, and . . . it is the duty of the members of the Committee and all the leading agriculturists in the counties to set the example in this matter. It is the earnest desire of the Government that the Agricultural Revolution which is necessary should be a peaceful one. But Committees have been invested with powers to enforce the task which is placed upon them, and in the last resort they must not hesitate to use those powers whenever necessary."

**What Yorkshire is Doing.**

Yorkshire landowners and farmers, convinced that it is a case of needs must when the possibility of food shortage drives, have set to work with truly characteristic zeal to put the plough into several hundred thousand acres of grass and derelict land. The three County Councils have talked over the sweeping project by which 3,000,000 acres with the assistance of 5,000 motor tractors and ploughs, are to be added to the corn-growing area of England, and have resolved, regardless of existing and future difficulties, to obey a request which is really a mandate from the nation. The West Riding's share of the work of conversion is 101,000 acres; that of the North Riding is 91,561 acres; and that of the East Riding will probably be as large as that of either



**The Fathers of Confederation—Canada was 50 years old July 1.**

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|----------------|--------------------|---------------|----------------|--------------------|-------------------|-----------------|-------------------|--------------------|----------------|--------------|----------------|------------|
| Hewitt Barnard | W. A. Henry        | E. Palmer     | Ambrose Shea   | F. B. T. Carter    | John A. Macdonald | Geo. E. Cartier | Thos. H. Haviland | Peter Mitchell     | R. B. Dickie   | W. H. Pope   | J. M. Johnston |            |
| W. H. Steeves  | Charles Fisher     | J. C. Chapais | E. B. Chandler | Adams G. Archibald | E. P. Tache       | Alex. T. Galt   | J. Cockburn       | J. H. Gray         | A. A. McDonald | Oliver Mowat | Wm. McDougall  | J. McCully |
| Edward Whelan  | Col. John Hamilton | Gray          | Geo. Coles     | Alexander Campbell | Hector Langevin   | Geo. Brown      | Charles Tupper    | Thos. D'Arcy McGee |                |              |                |            |



the West or the North. Thus, towards the new corn-producing area that must be added to the arable soil in the 40 English counties Yorkshire has to contribute nearly 300,000 acres. The average per county is 75,000 acres. Yorkshire's share is one-tenth of the total for all England. Northumberland suggests a contribution of 80,000 acres.

Whoever is responsible for the fixing of the figures of 3,000,000 acres more arable land, must have had an idea of reviving the state of things existing about 1872. There were then 474,189 acres under the plough in the West Riding. In 1915 that had fallen to 324,426 acres. When the Premier recently said that all land that was yielding corn 40 years ago must do so again, he did not, of course, expect that dictum to be taken literally everywhere. Forty years ago the lovely valley of the Wharfe was a bright yellow expanse of waving corn every August. But imported wheat since then has turned the vast sheet of waving yellow into the many shades of green that rich soil can impart to well-cultured pasture. Great manufacturing populations in close touch by rail or road wanted meat, milk, butter and cheese; so, as the point has been tersely put, "like the manufacturer who, at very short notice, switches off from Norfolk jackets to khaki or from motor cars to machine guns, the farmer has only got to reverse."

Had not this last plea been a command, Yorkshire farmers, like the farmers of the rest of England, would have expressed their thanks for Government cultivating machinery, for loans to soldiers, and for further State-encouraged help; but they might have asked—where and how are we to get and to house the men and women who, till and after the end of the war, are to cultivate all this arable land? But, after all, the Government has promised assistance all the time. The Board of Agriculture will not persuade men and women to convert the upper reaches of English valleys from sheep pastures into wheat fields without providing them with shelter and food. As to these and all other present and prospective difficulties northern farmers are convinced that they must take short views and do the next best thing, and that is to peg away extracting from every acre of land corn or roots instead of grass or nothing.

Scores of surveyors, assisted by local committees, are carefully inspecting the entire country and reporting as to which area of grass shall be ploughed out. They recognize that it is not every grass field that will succeed with wheat or any kind of cron. In the North Riding alone there are 21 surveyors, numerous committees, and over a dozen tractors and ploughs, arranged for by the Board of Agriculture, at work, and the Government announce that they are prepared to send more machinery. The West Riding County Council has appointed advisory committees and sub-committees by the score, and is entering into the business with infinite zest, in the belief that the Government will find the requisite labor. Many hundreds of acres in the South-eastern district are to be drained and made to grow corn or roots. "If a satisfactory peace comes within a few months the food problem will be just as great as it is now, as the foodstuffs and the tonnage to bring them to England would continue to be short for some time," says Major Dent, one of the most practical authorities in the north of England. Dairy men who think the new move does not affect them, are, in general, agreed, quite wrong. If in future a farmer does not provide winter feeds for his cattle on his own land, he will find great difficulty in buying them; so, it is asked, had he not better provide the feed his stock will need for milk production in winter?

ALBION.

We believe that a fair conscription which organizes not only the man-power of the country but all its resources is the democratic and just means to fight the war now raging, but if conscription causes as much diversity of opinion in enforcement as it has done in passing through Parliament the boys at the front may not get the immediate support most of us would like that they should.

### Would Organize Townships For Labor.

EDITOR "THE FARMER'S ADVOCATE":

I understand there is something of a feeling of resentment among some of our city brethren, because farmers have not responded to their generous offer of help quite as well as they might have been expected to. Different writers have given different reasons as to why this is so. One man tells us that the offer came too late to be of much use during the spring, as farmers had already made arrangements for the season. Another man tells us that help has been scarce for years, and farmers have gradually adopted a system of farming by which they have been able to get along alone. No doubt this is largely true, but I believe there is still another reason which I have not noticed that anyone has mentioned. It is the lack of organized effort among the farmers. The city men have gotten together, and because they have they are prepared to accomplish. The average city laborer would scarcely hear the call for greater production, but some day his employer walks up to him and says: "How would you like to go out on a farm for a few weeks?" Well the fellow has never thought of such a thing but now he considers and says: "What kind of pay would I be able to get?" "You'll get just the same pay as you are getting here; if the farmer doesn't consider you worth it to him we will make up the balance," says his employer. In doing this the employer would be making a sacrifice, but he would be doing it prompted by the same spirit as causes him to give to the Patriotic or Red Cross funds. But the fellow says: "I don't know where to go to find a farmer who would want me."

"Never mind that," says his employer just go ahead to your work we'll let you know where you are wanted and when you are wanted". So the man goes ahead with his work looking forward to his outing in the country and quite likely he will enjoy the change and quite likely, too, the farmer will be glad he tried one of those city chaps for he was a nice fellow to have around the place. Now in the case of the farmer he may have heard that the cities are offering help, but oh! I suppose he won't bother. But, suppose a neighbor called him on the phone and said, "How would you like to try a city man for harvest and threshing?" When you have tried him a while and he doesn't suit just let us know and we will take him off your hands." "All right," the farmer would say, "Send him along as quick as you can get him here." The result would be that farmer would get more land ready for nineteen-eighteen seeding, and from now until the ground freezes is the time to prepare for next year's crop.

But must we get a whole new organization among farmers? To my mind our municipal councils would be doing quite the proper thing to take this matter up and either manage it themselves or appoint others to do it. Surely in every township will be found men glad to do a little in helping on in this great cause in which we are all so interested. The Reeves of the townships have been appealed to, and perhaps many will take the matter up, but there are some who simply don't want to bother. The bothers should not be very great. Suppose a man were appointed on every section of telephone line. Then some one man appointed for the township. Let each of these men keep in touch with this one man. Then the city organization would have to deal with only one man in each township which should be more satisfactory and bring better results. This arrangement could be used also to utilize the supply of local labor and might be of some use in the distribution of seeds, etc. By reporting their activities in the papers occasionally they would keep the matter before their people and thus help to save them from forgetting; for it is a fact a man may hear a stirring lecture on the necessity of thrift and production but will proceed to forget if the matter is not brought to his notice occasionally.

Renfrew Co., Ont.

R. M. WARREN.

### Somewhere in Ontario.

EDITOR "THE FARMER'S ADVOCATE":

Am always looking forward to a visit from "The Farmer's Advocate" every Thursday, knowing that it always has something good for me inside its old yellow hide; many a time when I did not know which way to take I came to it for guidance and help, and I can truthfully say with a clear conscience, it has never directed me in the wrong direction and I guess I can trust it still, for I have always found it real and true to the cause of the farmer. But there is one thing going on in this country that I am going to protest. I can not stand it a minute longer. It is like a man whipping his horses when they are doing all they are able, so I am going to kick clean over the tugs this time and no fooling about it. When the war started in Europe the Germans got to shooting gas at the Allies; now we've got a lot of fellows right here in Ontario shooting gas at all of us farmers and keeping it up too, don't you forget it. A whole host of fellows are "hollering" at us: "Produce more! Produce more!"

It started just before boiling sap time, and with boiling syrup in the day-time and feeding, watering and cleaning over eighty head of horses, cattle, sheep and pigs, and I bordering on the three score years and no man or boy to help me, I have had more than I could do, and just as I got done with the syrup seeding began and bad weather kept on. Then the calves began coming, the lambs had to be looked after, and the wind kept blowing down fences and the windmill, and I had all the chores to do, and now that the cattle and sheep are on grass and the wool in Guelph and the corn and potatoes in, have just got time to write this protest, as the bees may start swarming to-morrow.

For quite a while I was getting a bulletin "Seasonable Hints." Got one nearly every day for a while, and sometimes two, then came another on growing vegetables. One would have been all right, but it came about as regularly as the daily paper, and now the election pamphlets have started, and everyone is trying to holler louder than the other "Produce more!" By hang, I won't stand it any longer, for I expect the fellows that are "hollering" the loudest at us over-worked farmers are spending their time in a comfortably cool office with a good fat salary at the expense of the country, and sitting in an easy chair, sucking smoke from 25-cent cigars.

Now, if the Government want more production why don't they clear some of the hands out of those printing offices at Ottawa and let them either fight or farm so they will be a benefit to their country instead of a burden, as there is room for more men in the war and plenty of good land lying idle in Ontario? Yet what is the use of shouting "Produce more!" when they have laws in Canada to hinder the sale of farm produce?

There is one thing the Ontario Government deserves great credit for, viz., closing the bars in Ontario. We hoped that the Dominion Government would also show their bravery by giving us Dominion prohibition, but if they failed in that we must give them credit for keeping one of the commandments which is hardest for us weak mortals to keep: that we love our enemies. They still seem to love their enemy, and the greatest enemy Canada ever had—booze. If food is scarce and the Government is in earnest and expect farmers to listen to them, why do they allow the destruction of grain to make intoxicating liquors to destroy the man-power of this fair Dominion of ours?

They advise us to get tractors. Have they taken the 40 per cent. duty off so we can get them without being fined, as it were? Have they taken the duty off any farm implements? Not they. They say they want to encourage the farmer. Let me tell them we are full of courage right now, but let them take off the brakes and handicaps.

Now, to the men who have been "hollering": "Produce more!", did you mean it or were you just "hollering?"

Lambton Co., Ont.

BILL THE FARMER.

## Canada's Young Farmers and Future Leaders.

### The Boy's and Young Man's Independence on the Farm

The boy or young man on the farm is a big factor in the improvement of the farm and community as a whole, that is, provided he is the right kind of boy with the right kind of father who is ready and willing to give him an opportunity to develop through actually trying out new things on the home farm. The average older mind abhors change. The man past middle age and who has farmed in a certain way for years is not very likely to deviate much from his well-trodden path, unless some very steadfast pressure is brought to bear upon him. The young man can often accomplish what the Institute lecturer can not, and what the agricultural college has failed to impress upon the farmer of mature years. It is through the younger men that those interested in scientific agriculture can do their best work, and they realize it, and the young man has an influence and a duty. Who can persuade "father" if his son cannot? What will convince him and make him a "booster" more surely than will the success of his boy? Very often fathers are inclined to ridicule some of the new ideas and sometimes properly so, but generally where a method really has merit that merit can be shown by

the boy who takes the proper course in "getting around" his father to allow him to try it, and the influence of the rising generation of young farmers can be made of great value even to the older men.

The writer remembers the case of a young man who took a short course at the O. A. C. some years ago, while there he learned that it is a good plan to plow potatoes down about five inches deep every third furrow on land well prepared. After considerable talk and after getting the influence of his mother with him, the father was persuaded to depart from his way of years, viz., making holes with hoe and dropping by hand, covering only about two inches deep. It took a lot of persuasion but the boy succeeded. The potatoes went in five inches deep every third furrow, and the boy plowed them down to be sure he got them in to suit his notion. The land was thoroughly harrowed the night they were planted and several times before the potatoes came up, and once or twice after they were through the ground. Planted according to his father's method this harrowing would have been impossible and the potatoes would have required hilling up. Plowed in they did not require hilling, and the tubers were down to the moisture and turned out the best crop ever grown on the farm. It was the crop that convinced "father"

and the neighbors round about saw the wisdom of the "boy's" new method. No one can estimate the value of the introduction of the new method into that one neighborhood. It was not a potato-growing section, but each farmer tried to grow enough for his own family and a few besides. The boy's idea saved hand cultivation and gave bigger yields. Many took it up, and yet some there were who were too stubborn to be convinced. Yet the instance just shows how a boy can influence his father and eventually his community if he really has a new idea which will bring results.

We have known many cases where the boy, after a trip away from home perhaps to a sale of pure-bred stock, or, mayhap to a Short Course in agriculture, or even only to a neighbor's farm where choice stock is kept, has become enthusiastic and upon his return home has "pestered" his father into the use of higher-class, pure-bred sires and the purchase of a few pure-bred females. Many a good and profitable herd and flock have been built up from such a start. It is the boy's duty to "pester" his father on such a subject. In fact, the farmer should encourage it rather than appear disgruntled over the boy's enthusiasm. He should be proud of the boy's interest in better agriculture. It is a good sign and an assurance for the future. Get



a boy interested and do everything in your power to maintain that interest, and the family name on the old farm is not so likely to change, as where father frowns on every new idea "John" gets away from home.

And boys, you can often succeed better by explaining things to "mother" first and getting her co-operation to influence "dad." "Mother" is the most sympathetic to boy's appeals. She is always ready to listen to plans for adventures to be made by her boys. Her judgment is generally good. Explain to her first and enlist her help and you are a long way along the new road for "father." "Mother" will always give the boy a chance, but father will often take no chances himself nor is he willing to take any with "Bill," his son. Many a mongrel-bred flock of poultry has been converted into a profitable flock of pure-bred egg producers through the boy working with his mother toward that end. Many a mother has saved enough money out of her butter and eggs to buy a few settings of eggs from pure-

breeds for the boy, and generally the boy has made good. His work with them has demonstrated to his father that there is more money in good hens properly looked after than in mongrels on the manure pile. His mother's help has bolstered him up over the bad places of loss and discouragement until finally, "father," the "man from Missouri," who must always be shown to be convinced, sees that the boy has made good and is then an enthusiast himself.

There is a great deal in variety in grains and other crops. Many a farmer loses yearly by using unnamed and unknown varieties when he could just as well be sowing the best. Many another farmer has been induced to change his variety of grain through the work of his boys who have tried out small plots of tested sorts sent out from Guelph or other centres. The boy heard the new sorts well recommended by men who knew what they were talking about. He persuaded his father to let him try small plots in comparison to their

own varieties. The results did the rest, and the influence of the boy has increased the yield per acre over the whole farm.

These are merely instances. Remember that as fathers grow older they grow more set in their ways, yet they are all proud of the success of any venture on the part of their sons. Fathers who have farmed for years are practical men. They have learned a great deal by experience. They are naturally suspicious of new methods. The rising generation see things differently. They are anxious to improve on former methods. It is their duty so to do. And their influence upon the older men on the land should be apparent. Be sure you are right boys and then show "father." He'll boost for you as soon as convinced. Always remember, however, that his judgment is mature, that his counsel is for the most part wise, that he has been through the mill. Take the precaution to start on a small scale and increase as results warrant.

## Automobiles, Farm Machinery and Farm Motors.

### The New Things For 1918.

Advance information from a great many factories indicates that there are not going to be a large number of radical changes in the 1918 models. Numerous refinements, however, are to be added. We think it is safe to say that power plants will not be altered to any appreciable extent. There are a number of interesting problems that have been worked out, however, chief among which is the installation of a thermostat upon the generator of self-starting cars. This means that the cooling system in the generator will be held back in operation until rapid heating is taking place. Experiments were made with the idea in a cold storage plant, and it was found that the system worked satisfactorily. A big advantage to this inauguration is going to come to people who do a great deal of city driving, with many stops and starts, during the winter months. Some of the new machines are going to have what is known as a butterfly attached to the carburetor, and it is hoped that this device will permit the burning of even the lowest grade of gasoline with good results. A number of 1918 machines will have staggered valves, and it is confidentially expected that the power of the engine can be increased without any addition to either the bore or stroke. Another interesting innovation is going to be the addition of dust caps around the bases of the push rods.

The changes in body styles are many but mostly of minor importance. The sloping windshield, of which we have already seen a little, will be more prominent. In the new styles, those which over-lap have been supplied with rubber bumpers, and those which do not over-lap will, in most cases, have rubber straps. In other words, a real effort is being made to have the windshield rain-proof. In three States of the American Union there are now regulations regarding search lights. The law states that they must not glare, and should not shine higher than 42' at a distance of 75 feet. It is not anticipating legislation when we state that it is not going to be long until this rule will be adopted in Canada, and consequently some of the new cars have lenses instead of sheet glass in the front lights

and others have caps over the incandescent bulbs. Both ideas are calculated to keep the motorists well inside the law. Next season will doubtless see the elimination of three-quarter rear door. Practically all cars will have full U doors, which are certainly more convenient for the entry and exit of tonneau passengers. There seems to be a distinct tendency towards larger and roomier bodies, and the upholstery will in most cars be plaited and buttonless, the purpose of the manufacturer being to provide seats that are not only comfortable, but easily cleaned. Not many changes are worthy of mention in so far as tops are concerned, but, of course, one can readily understand that the sloping windshield will make the top deck smaller, and the general appearance is also altered, in numerous instances, by the installation of gypsy back curtains. These come around on the side of the body in angular fashion and protect passengers from the dust of the rear wheels. Hand pads which appeared on quite a number of models during the current season, will be more generally adopted to prevent the disfigurement of the door tops by dirty or soiled hands, and add to the general attractiveness of the body lines. Holes are being added in the side aprons to facilitate the removal of spring bolts, and holes are also being placed in the drip aprons, of certain designs, to render easier the draining of the crank case. Radiators which were previously considered too small for adequate cooling, are being widened and heightened, and following such a change, the hoods are also being raised. The general effect is to give a straighter line to the top of the body. Some machines which were not good hill climbers on second speed, are being provided with a lower gear ratio for the second. This is going to make owners get a better impression of their cars.

A few years ago there seemed to be a fad for loud colors, but this seemed to die down during 1917 and in 1918 will reach a still more moribund condition. People are beginning to realize that dark colors give the greatest satisfaction for general public driving. It is all right for a wealthy man to have some loud, ornate, decorative effect, but the average motorist is only able to afford one automobile and he is rapidly coming to the idea

that the sober, staid varnishes wear best, both mentally and physically. Most cars will have additions to their instrument board. The high-priced models have always been well equipped in this respect, but even the smaller ones will this year attach extras in the form of oil sight feed glasses, storage battery charge and discharge indicators, carburetor primers, lock boxes, etc. There also seems to be an inclination to make the instrument boards narrower. This provides easier manipulation of the gear and emergency brake lever, as well as a greater view of the foot room.

AUTO.

### Disk Harrow in Road Building.

A recent bulletin published by the Department of Agriculture in the United States recommends the use of the disk harrow for improving earth roads. "Whether or not it is necessary or not to contend with any considerable quantity of sod," says the author of the bulletin, "the use of the disk harrow usually will prove helpful in securing a smooth, uniform road surface with a grading machine. In general it is sufficient to give the loosened material a thorough harrowing after the road has been brought approximately to its required shape, but before the final shaping is done."

This sounds like a very good suggestion. On the great majority of country roads the surface is not built to any uniform grade, with the result the surface is very lumpy. Only a good rain will convince some so-called road builders that their eye is not as accurate as they had imagined. Some people scoff at the idea of putting in a few grade stakes when building our country roads. We would have no good roadbeds on our great railway systems without the use of the level. In such country districts the disk harrow might help to cover a multitude of sins. Of course, everybody gives a little advice on how to build roads. Remember that surface drainage to the side ditches and from the side ditches away is just as important as grading. Water lying in the ditches seeps into the road and softens it.

## THE DAIRY.

Don't neglect the cows' feet. If the hoofs get too long they break, causing lameness. Avoid trouble by trimming the feet a little.

At the Rutherford Jersey sale in Indiana 81 head brought \$11,270. At the Boyd and Dixon sale in the same State 49 Jerseys averaged \$170.81.

If a cow has the habit of sucking herself attach two ordinary rings to a bull's ring and put the latter in her nose. It will not interfere with her grazing.

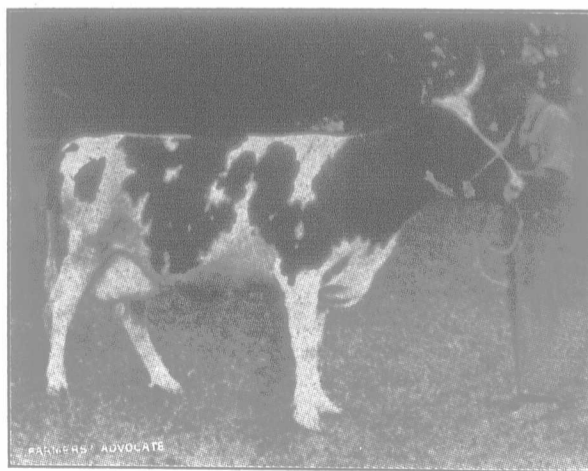
If a cow is milked right up to the time of freshening, she has no chance to build up reserve force to enable her to produce a maximum flow the next lactation.

Disease exacts a heavy toll among young stock every year. A little more care of the dam both before and after the calf is dropped might reduce the mortality.

The New England Ayrshire Club held a consignment sale at Springfield, Mass., and 54 head brought \$34,870. This is high-water mark for Ayrshires. A number of the best were purchased by Canadian breeders, and Ayrshire men may have an opportunity of seeing them at some of the exhibitions this fall.

Theoretically and from a practical standpoint milk is one of the cheapest articles of diet on the market to-day. It contains the substances that go to build up the body and supply energy, and yet this important food is sparingly used in many homes while more expensive foods of less energy value are consumed instead. Drink more milk.

Flushing the womb with a disinfectant after the calf is dropped and continuing the practice daily for two or three weeks, will aid in preventing contagious abortion becoming established in the herd. Infection may be carried by the bull, consequently it is advisable to disinfect his sheath if there is any possibility of him having come in contact with the disease.



Chapmanton Heny (Imp.)  
Champion Ayrshire cow at Ormstown. Owned by R. R. Ness.

### Prevent Tuberculosis Gaining a Foothold in the Herd.

That dread disease tuberculosis is becoming more widely spread, and is the direct cause of a heavy loss of cattle and hogs each year. Serious as this is it is small as compared to the loss of human life from this disease. For many years it was thought that bovine tuberculosis was not communicable to humans, but there is now proof that it is possible for children, more so than adults, to be infected by drinking raw milk. In Circular No. 60, of Purdue University, it is estimated that eleven per cent. of all dairy cattle in Indiana are affected by tuberculosis. While statistics are not to hand for Canada, it is believed that a tubercular test and physical examination would reveal diseased animals in many herds. In the Purdue circular it is claimed that the bovine type may infect man, and that human and avian types may be used in producing immunity in cattle. If marked symptoms were shown on the start

it might be possible to isolate diseased animals and thus stamp out the disease, but in the first stages the symptoms are not sufficiently noticeable to attract attention. Consequently an animal running in the herd may have tubercular lesions in some part of its system and be continually spreading the germs. When physical symptoms are first noticed the disease may be well advanced. When lungs and air passages are affected a cough and heavy breathing are the first indications of trouble. If the digestive tract is affected, a loss of flesh is generally the result. The germs attack the body tissues and form nodules which contain cheesy matter or pus. Possibly many have seen these nodules when slaughtering cattle, hogs or poultry. They are very often noticeable on the liver, and lymphatic glands. As these nodules break down germs escape from the body.

The tuberculin test is a fairly accurate means of determining whether or not a cattle beast is infected. When attempting to control the disease the author of the circular previously mentioned claims that there should be co-operation of farmers, stockmen and dairymen, with the officials in charge of control work. The animals showing clinical symptoms should be slaughtered and the tuberculin test administered to the remaining animals, and the reactors isolated. Barns which have housed infected animals should then be thoroughly cleaned and sprayed with a disinfectant to destroy the germs. Manure piles should be removed to the fields where the animals cannot come in contact with the material. In dark, poorly-ventilated stables the bacillus causing tuberculosis is difficult to kill, consequently every means should be taken. The Bang system of building up a healthy herd from tubercular animals has been found efficacious. The reactors are housed in a barn separate from the healthy stock, and the two herds are attended by different stockmen. Tools and utensils are not interchanged, and every effort is put forward to avoid carrying infection. A calf dropped in a tubercular herd is immediately removed and fed on the milk from a healthy cow. In this way the offspring of valuable breeding animals have been raised in a healthy condition. On the average farm where there is only one set of buildings and one man to do all the work this system cannot be successfully carried



out. However, when an animal shows clinical symptoms it should at least be isolated from the main herd, and so eliminate the danger of spreading germs by means of sputum or excrement. Stockmen should co-operate in preventing the spread of this contagious disease, which not only causes loss of live stock but endangers human life. As a large quantity of milk is consumed in the raw stage it is important that dairy herds be clean. Some towns and cities demand milk from tubercular-free herds, while many consumers in other towns have their milk supply pasteurized. In this way a good deal of danger to public health is eliminated. It is believed that young stock become infected through consuming dairy by-products from infected herds. This is a strong argument in favor of pasteurizing skim-milk and whey to be used for breeding purposes.

Tuberculosis is rapidly becoming more prevalent in hogs. It is claimed that during the past ten years the percentage of tubercular hogs in some large packing houses has practically doubled. This may be due to the fact that the disease is transmittable through dairy by-products. Milk received at the creamery or factory from a few tubercular cows may be sufficient to infect a number of herds of hogs if fed on the by-products.

In order to prevent the herds, becoming infected some breeders of pure-bred stock are purchasing new stock subject to the tuberculin test so that they may avoid introducing diseased animals into the herd. Breeders who can guarantee their herd free from disease are few in number. Stringent measures should be adopted to prevent this disease becoming more prevalent. Now is the time for breeders to strike tuberculosis a heavy blow. Test and examine the herd and if clean all well and good, aim to keep it so, but if there is a reactor in the herd no time should be lost in isolating her from the healthy stock. One or two diseased animals are easier to look after than half the herd, and the loss will not be so great.

At a dairy breeders' association meeting, in the United States, Fred. F. Field, of Massachusetts, gave his experience and methods of eradicating tuberculosis from his herd. He claimed that it is possible to clean up the herd, but one must assume that all the cattle are tuberculous and pasteurize the milk. He advised taking the calf away from its dam at birth and feeding it on pasteurized milk. The stable should be disinfected and whitewashed and large windows put in. A physical examination of the cattle should be made, and cultures taken to see if they are spreaders. This means applying the bacteriological test to samples of sputum, excreta and milk. This must be continued and spreaders kept from the rest of the herd.

Some argue that what we don't know won't hurt us, but, is it justice to humanity, to the dairy industry or to the individual dairyman himself to continue marketing milk from cows which he is not sure are free from this contagious disease? Sooner or later drastic measures will have to be taken to protect human life and the live-stock industry. It does not necessarily mean that a reactor must be destroyed, but her milk should be pasteurized before being consumed raw, and skim-milk or whey treated the same way before it is fed to stock. This precaution alone would considerably check the spread of this disease. A tubercular cow that is a spreader of the disease is a dangerous animal to have running with the herd. Prevention is less expensive than being forced to make a clean-up after a disease has become established. Young men laying the foundation of a herd might well start with tubercular-free animals and aim at keeping the herd clean. In the near future there will be a big demand for such breeding stock, and the men starting first will have the advantage over those who follow the even tenor of their way and keep putting off the day of ascertaining whether or not their herds are clean.

### Delivering and Shipping Milk and Cream.

Very often the quality of milk and cream deteriorates considerably between the point of shipment and its destination, or even between farm and factory. Proper care at the dairy should be followed up in transit, if milk and cream are to be delivered in good condition. There are certain precautions to ensure the products remaining sweet and clean, which do not require much time or extra effort. It is well known that milk products

soon deteriorate if left exposed to the hot sun for an hour or more, but where one man draws milk or cream for a number of patrons the sun reaches a considerable height before the end of the route is reached. If the lactic fluid should be on the point of turning when placed on the stand, the heat and shaking on the wagon might easily render it unfit for cheese making before the factory is reached. This fact might well be taken into consideration, when the milk is returned some morning as sour, instead of the dairymen blaming the cheese maker and vice versa. If shade were provided near the milk stand there would be less danger of the temperature rising to the point at which lactic acid bacteria work rapidly. A large tree on the south-east side, or that side of the milk stand boarded up, would serve the purpose. One can of sour milk dumped in the vats prevents the coagulating material from working properly, consequently there is a loss. For this reason

second or third-grade milk or cream. There should be a spirit of co-operation existing between cheese-and-butter-makers and their patrons.

Typical milk stands are herewith illustrated. The top is about on a level with the milk drawer's wagon so as to facilitate his work; when thirty-gallon cans are used the dairyman has heavy work placing the cans full of milk on the stand, where proper steps or derrick are not constructed. Cans may be slid up on a couple of planks, but even then it is a man's job. At small expense an arrangement can be made that will greatly lighten the work. A post is sunk in the ground about eight feet from the stand with the top about eight feet high. A pole is attached on top of this by a couple of irons which will permit the pole to move up and down as well as be swung around. The end to which the can is to be attached should not be over half the length of the part on the opposite side of post, less than half lightens the lift but makes it harder pulling the end down to attach to the can. This attachment is a crosspiece the width of the can, having a rod at either end long enough to reach the handles of the can. If the pole is properly set on the post not much energy is required in lifting the can to the stand. It is no disgrace to lighten the work as much as possible. Physical strength is not so much the standard of efficiency to-day as it used to be.

Keeping fresh milk cool and where it cannot become contaminated with undesirable flavors, a little more shade around the milk stand and either jacketed cans or covered wagons for marketing will all aid in giving consumers a high-class product which in turn will tend to increase consumption of milk and its products. Many fail to realize that the higher the quality of the product marketed, the better it is for their business.

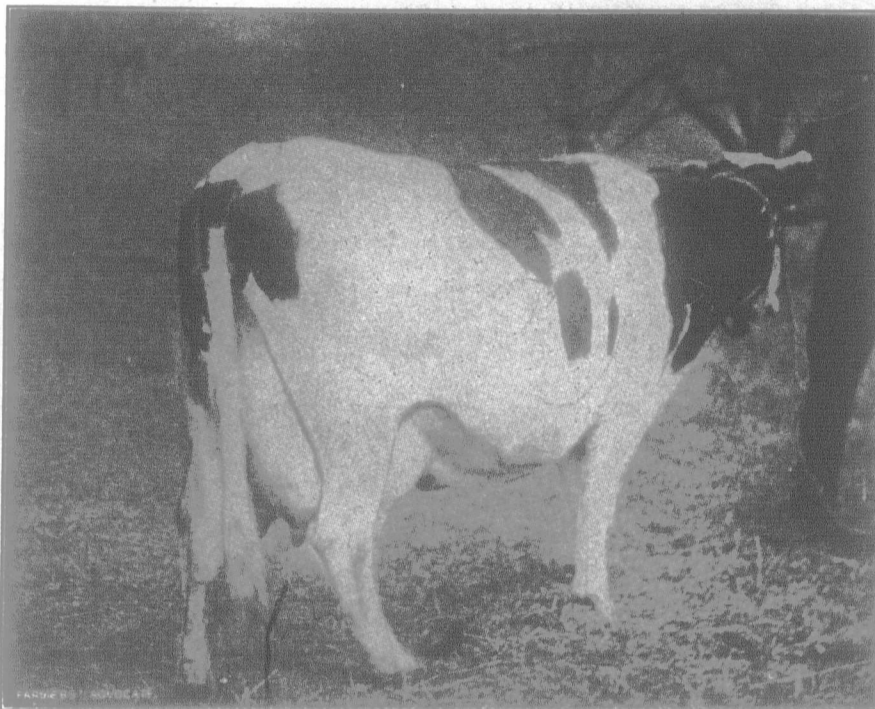
Consumers deal where they get the best service and are willing to pay the extra price. Put up the right class of goods and a market will be found. There is seldom a surplus of first-quality material.

## POULTRY.

### Roosts.

We were in a new poultry house the other day and the only thing we found fault with was the roosts. They were of the old-fashioned ladder type one above the other. Too many farm poultry houses are constructed on the same principle and it is wrong. Roosts are important and yet often carelessly constructed. F. C. Eford Dominion Poultry Husbandman, in Bulletin 87 says of them:

"The American breeds require about 9 inches per hen of roosting space. If more than one roost is required, place the first about 10 inches from the wall and the others from 18 to 20 inches apart. When cold houses are constructed, it is advisable to have only sufficient roosts to accommodate the hens. Roosts should not be placed too high; between 2 and 3 feet from the floor is high enough for most breeds. High roosts give trouble in that heavier birds are not able to reach them and the jumping off the roosts sometimes causes bumble foot and kindred diseases. Roosts should never be constructed on the ladder principle, but where more than one roost is required they should all be placed on the same level. Where roosts are placed one higher than another there is considerable commotion every



Rhoda Parthena Caprice 2nd 14178.  
Seven-day record 502.3 lbs. milk and 23.55 lbs. butter.

every patron should aim at having the milk delivered as fresh as possible. As a rule, from twenty to thirty-gallon cans are used in cheese-factory districts. This entails heavy lifting if they are full of milk, but they economize space on the wagon. The small cans, as shown in the illustrations are generally used when shipping milk and cream and are convenient to handle. On a heavy milk route the wagons are sometimes built to carry two layers of cans. Whichever type of can is used, it is essential that it be of good-quality material, with the seams properly soldered so as to make cleaning as easy as possible. Cans may appear clean to the eye but yet have enough milk adhering in the crevices to contaminate the entire lot. After rinsing with cold water to remove the bulk of the milk, scalding will complete the cleaning. Warm water is not enough to clean any dairy utensil.

When sweet cream is being shipped or drawn some dairymen have a heavily-padded casing for the can so as to eliminate the effect of the air temperature on the cream. This insulating material keeps the product in the can, even when exposed, at about the same temperature as it was in the dairy. In other districts milk and cream drawers have a covering for the wagon which protects the cans as well as themselves from the sun's rays. These factors go a long way towards delivering the raw material of the dairy in a condition that it can be manufactured into the product of finest quality. To aim at anything short of the best is not being fair to the business of which you are a part.

If Canadian cheese and butter are not of the highest standard, both producer and manufacturer are to blame. One cannot saddle it entirely upon the other, although no one can make special grade dairy products out of



Drawing Milk to the City.



A Typical Milk Stand.



night as the hens are getting on to the roost. Weaker hens usually go to roost first and of course take the top places. The strong, vigorous hens, going later, also wish for the top seat, and displace those already roosting. This occurs every night and to avoid it, by all means put the roosts on a level.

"Roosts should not be large. The small edge of a 2 x 4 inch scantling is quite large enough. Round cedar poles serve the purpose very well, but the splitting of the poles causes cracks in which the vermin harbor. Roosts should be made so that they can be cleaned easily, and made movable as all interior fixtures should. It is a good plan to hinge roosts to the wall so that they can be raised in the day-time or for cleaning-out purposes. The roosting quarters should always be on the warmest side of the house, or at least, farthest away from the windows. No ventilation should be admitted through the wall near the roosts; sometimes, when nights are especially cold, a cotton screen is let down in front of the roosts. It is an advantage in that it keeps the roosting quarters a little warmer, but the custom of boarding up the roosting quarters so that there is very little ventilation allowed and no space for cleaning or letting the sun enter during the day, is bad."

### Weed Out The Male Birds.

EDITOR "THE FARMER'S ADVOCATE":

The worker bees put their house in order by killing off all the male bees as soon as their services are no longer required. What a great benefit it would be to the poultry producer and the poultry product consumer if the hens of the flock would likewise dispose of the male birds in those flocks that are indifferently managed. The worker bee permits no star boarder to loaf around and consume the product of her labor. The hen is not like the bee in asserting her rights. If she were, then her verdict would be, "Rooster you must die."

There are over two million five hundred thousand roosters of the various breeds of chickens kept for breeding purposes by the people of our country. Of this vast army perhaps one hundred and fifty thousand have a right to live for another year of service. One hundred and fifty thousand may be good enough as individuals and in breeding to be used in the increase of their kind. What of the two million three hundred and fifty thousand that are usually permitted to live, birds that consume feed, worry the hens and reduce the quality of market eggs?

The function of the rooster is to develop and distribute germ cells, during a short period of three months February, March and April. These germ cells should be distributed only to such egg-laying individuals as are desired to perpetuate the breed. The germ cell is a living organism capable of starting a chain of development, and here is where the mischief lies if they are distributed where they do not serve their proper function in race perpetuation.

The function of the modern hen is to produce eggs, ten per cent. of which may be desired for the increase of the breed and the remaining ninety per cent. for human food. Nine eggs are used for human food where but one is used for hatching. Only one-tenth of the eggs that a hen lays require fertilization. Why fertilize the nine-tenths of the product that is used for human food? The addition of a living germ cell to an egg that is produced for human food does not add anything to its value and may set up a chain of embryo development that will make the egg quite unfit for human food.

Eggs gathered from flocks where the roosters are permitted to run after the hatching season is over, are not desirable for storage. They are not desirable in the pantry during periods of warm weather as high temperatures will start incubation. Eggs in the first stage of decay are not desirable for human food.

It is an easy matter to prevent the fertilization of eggs. If the male bird is just an ordinary one an axe and a block of wood will prevent further mischief. If the male bird is possessed of such merit as would warrant his being boarded for a year to be used in the next season's breeding operations, then give him an enclosure of his own and see that he stays in it.

The cost of food consumed by an ordinary rooster is about twenty cents per month. Can you afford it? If you keep poultry with profit as your object, can you afford to keep a star boarder for nine months and perhaps have him doing mischief all the time?

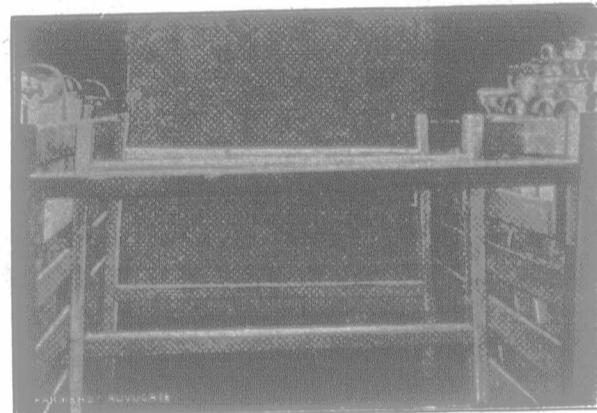
The two million, three hundred and fifty thousand odd, unnecessary male birds are costing the country about three and a half million dollars per year while enjoying life. These unnecessary birds are at the same time doing about ten million dollars damage to the egg-producing business. If every person owning a rooster would manage him as a male bird should be managed the poultry industry would be benefited by additional profits of many million of dollars.—Experimental Farms Note.

### A Few Hints For Summer Flock Care.

On many farms there is a heavy loss in the flock due to various causes. While the birds on free range should naturally be healthier than when in confinement, improper feeding for hot weather and the high temperature apparently lowers the vitality of many. Usually a number of chicks succumb to various ailments, and they are thrown out of the pen with barely a thought given to the cause of death. They may have died of some contagious disease, but no investigation is made until the flock becomes greatly reduced. By taking necessary precautions when the first few died the re-

mainder of the flock might have been saved. A chick or even a mature bird is hard to doctor, and it is often-times advisable to put them out of misery at the start instead of running the risk of spreading disease germs. An endeavor should be made to keep up the vitality of the chicks. It is the strong, healthy, vigorous pullet that makes the profitable hen. Weak, anemic birds seldom lay a sufficient number of eggs to pay for their feed. In the first place the breeding stock should be carefully selected, and then the chicks raised on wholesome feed and kept in sanitary surroundings. Filth and dirt is the breeding place of disease, and it is regrettable that too many poultry houses are not in a sanitary condition during the summer. Give the growing flock new scratching ground occasionally. Some poultry-keepers go so far as to move the coop every day, claiming that in this way birds are kept cleaner and healthier. This is more or less essential with young turkeys, as nothing puts a poult off its feed so quickly as feeding for a length of time off the same ground. The chicks should have a keen appetite and always be ready for their feed, but that does not mean putting them on short rations. Feed them what mash they will clean up in ten or fifteen minutes, then remove the surplus and clean the trough. If the grain is fed in a litter or even in a hopper the birds will not over-feed if given an opportunity to exercise. The care of the growing flock will influence egg production next winter.

In regard to the mature birds they require a little different feed than in the winter. Corn should be eliminated or nearly so, as it is too heating and when fed has been responsible for loss of birds. Wheat is the standard grain for fowl the year round. As it is so high priced other grains can be mixed with it to ad-



Bracing the Load.

vantage. Good quality oats are excellent grain for poultry, and might comprise half the ration during the summer at least. They are not of a heating nature and aid in keeping up the vitality of the flock. Barley can also be fed to a certain extent. The kind of feed and nature of the surroundings go a long way in keeping the flock healthy.

Tuberculosis is one of the most serious diseases the poultry man has to face. It is necessary to watch for this disease summer as well as winter. It is just as necessary to keep poultry houses clean and disinfected in summer as in the cold weather, and even more so. Watch the hens. Any which show signs of going light, grow pale around the head, mope around and sometimes show lameness and diarrhoea should be removed from the flock. Those showing well-marked symptoms should be killed and examined. If their livers are enlarged or show white or yellowish-white raised spots, there can be little doubt but that the disease has gained a foothold in the flock. Kill and burn or bury in lime all those showing disease. Clean up the chicken house. Disinfect by an application of whitewash to which has been added a 5 per cent. carbolic acid solution. Plow up the poultry yards and apply fresh lime. You cannot afford to fool with this insidious disease which is growing more prevalent in farm flocks as the years go by.

## HORTICULTURE.

### Loading Climax Fruit Baskets in Cars.

The fruit and vegetable industry in this country is developing, and the climax basket is extensively used as a container. As co-operative associations extend their business carload shipments are called for, and this necessitates expert or experienced hands in loading. This end of the business is immensely important, for upon the methods adopted or skill exercised in stacking and bracing the baskets depends the quality and ap-

pearance of the product at its destination. In a recent bulletin compiled by Edwin Smith and J. M. Creelman, formerly connected with the Precooling and Cold Storage Plant at Grimsby, are found the following notes and accompanying illustrations on loading cars with climax baskets. The bulletin is published by the Dairy and Cold Storage Branch of the Dominion Department of Agriculture, and we have taken the liberty to quote from it in the following paragraphs.

The climax basket is used largely throughout the fruit regions of the northeastern part of the continent in marketing summer or tender fruits. In Canada the 6-quart climax basket is 4½ inches deep, 15½ by 7 inches at the top, and 13½ by 5½ inches at the bottom, holds from 6 to 10 pounds of fruit, and is used largely for distant shipments of cherries, gooseberries, currants, plums, pears, peaches and grapes. The 11-quart climax basket is 5¾ inches deep, 18¾ by 8 inches at the top, and 16¾ by 6¾ inches at the bottom, contains 15 to 20 pounds of fruit, and is used with shipments of cherries, plums, peaches, tomatoes, vegetables, pears and apples. Larger baskets, 15-quart and 16-quart in size, are used for cantaloupes; smaller baskets, 4-quart in size, are sometimes used with plums and grapes.

In theory all baskets should run lengthwise of the car to give free spaces for the passage of cold air from the ice-bunkers to the centre of the car; baskets crossing the car shut off these currents. In practice, it is difficult to do this, on account of different sizes being loaded in the same car, and also due to injury inflicted on the fruit in so placing. To partially obviate the fault of having baskets running crosswise of the car raised floor racks are used, slatted to accommodate the different sized baskets. These allow a current of cold air to pass freely from the ice-bunkers along the floor to the centre of the load.

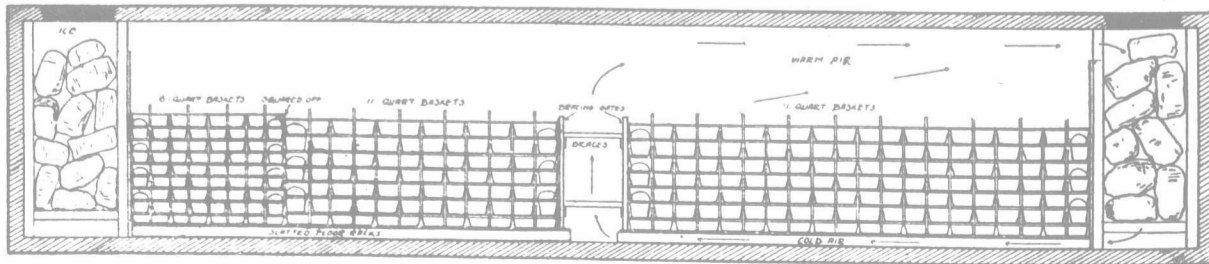
In loading a car of basket fruits, it is first necessary to know the number of baskets to be loaded. Ordinarily between 2,400 and 2,500 6-quart baskets, or 1,200 11-quart baskets, are required to make the minimum carload weight, 20,000 pounds. Baskets are placed along the end of the car and down one side, as far to the centre as the load can be made and allow room for centre bracing. The height of the load is then computed. In case the load is to be made partially of 6-quart baskets and 11-quart baskets, it will be necessary to "square up" the load of one type of baskets, placing them all in one block. Loading is then started from the bunkers and the tiers carried out along the side of the car to the full height of the load. For rapid loading, operations may start at both ends of the car at once. It is necessary that the baskets be kept pressed firmly against the side of the car, and, as the load progresses, every basket should be put in place squarely and firmly so as to keep the baskets touching end to end and the alignment perfect. This is necessary to get a rigid load and to have the load finish satisfactorily both towards the side of the car and at the end, where a bulk-head is to be placed squarely across the car.

In finishing off the last two tiers, an alley will be formed in which it is difficult to work unless the baskets are squared up three-piles or four-piles (meaning that the piles are built up squarely on a base of three or four baskets). It sometimes happens that, due to an odd-sized car or odd-sized baskets, the alley will be too wide so as to make a "loose" load. This can be determined before the load has been made, when the baskets are placed across the end. In such a case, it is advisable to place several baskets crosswise throughout the car to tie the load.

Basket loading does not require as heavy bracing in the centre of the car as boxes, since the handles are effective in tying the load. Six 2- by 4-inch braces are sufficient. They need to be squeezed into place with a sledge-hammer securing the braces with blocks and spikes. The gates should not be farther apart than is convenient for entering the braces—about two feet is sufficient.

### New Varieties of Strawberries.

Considerable work has been done during recent years with the object of originating varieties of strawberries that may combine the good characters of our established kinds without possessing their undesirable qualities or weaknesses. The Horticultural Experiment Station at Vineland and the Horticultural Department of the Agricultural College at Guelph have been devoting considerable time to this enterprise, and this year Prof. J. W. Crow, at the Guelph institution, is fruiting 300 different plants which are selections from over 7,300 plants. Prof. Crow will welcome any strawberry grower during the fruiting season, and explain the parentage as well as the good and bad qualities of the most promising varieties which have been originated. A card addressed to Prof. Crow will bring information as to the season and date of fruiting of these new creations.



Showing Method of Loading a Car with Climax Baskets.



**Mounding up to Combat the Peach Tree Borer.**

The peach tree borer ranks next to San José scale as the most destructive insect attacking the peach. The moths begin to appear about the middle of July in Ontario, and are to be seen up until the middle of September. Egg laying takes place over much of this period. Eggs are laid on the trunk, branches, leaves and occasionally in the ground near the tree. On hatching the little larvæ work their way to the base of the trunk and gradually eat through the bark. Some of them are still very small by winter; others are almost full grown. In Bulletin 241 of the Ontario Department of Agriculture, Prof. L. Caesar recommends the following treatment:

"The customary method, and one that has given fairly good satisfaction, is to examine each tree twice a year, once in October and once at the end of May or in early June, and with a sharp knife dig out and kill all larvæ found. In searching for them the earth should first be removed from around the trunk to the depth of three or four inches, because they often work below the surface. Their presence can nearly always be determined by the masses of gum that exude from the wounds. This should first be removed with the knife or trowel, and then by cutting along with the grain of the bark so as to do as little damage to the tree as possible, the larvæ should be sought out and killed. If earth, to a height of 6 or 8 inches, is heaped up around the trees at the end of June it forces the larvæ to work higher up on the trunk, and thus, when it is removed, they can be more easily found and destroyed. The earth should be put back for winter."

It is not too late now to mound up around the trunks of the trees to force the larvæ to work far enough up the trunk so they can be dug out more easily. In badly infested orchards any precautions such as these are important for the peach tree borer is a serious pest.

**FARM BULLETIN.**

**Our Scottish Letter.**

Since I last wrote, now five weeks ago, great progress has been made by every crop on the farm. It is hard to believe that less than two months ago we experienced one of the worst blizzards known in the lifetime of the oldest inhabitant. The blizzard of 17th April, 1917, will not be forgotten for many a day, yet here we are to-day, at the close of the first week in June, with vegetation as far advanced as it generally is in a normal season, and every prospect of heavy crops of all kinds of produce. The one misfortune is that on account of the prolonged winter and backward spring it was impossible to seed the extent of land which present circumstances called for. In consequence of this, while there is likely to be a satisfactory yield per acre, there is nothing like the extent of acreage which the exigencies of the country seem to demand.

For the nonce the thoughts of agriculturists are being centered rather on the crops of 1918 than on those of 1917. For good or for ill the area to be seeded this year is seeded, and the issue is in the hands of Providence. But we are in the midst of a lightning campaign to greatly increase the seeded area in 1918. The Government is calling upon farmers to break up grass land and grow cereals and green crops. It boldly demands that where the issue is between stock and crop, stock must go. One important exception is made to this demand. Dairy cattle must on no account be sacrificed. The milk supply must at all costs be maintained. The ways and means for doing that are not altogether in sight. Labor is an essential, and feeding stuffs are scarcely less vital. Yet both labor and feeding stuffs are extremely scarce, and there is the possibility that feeding stuffs will be scarcer still during the ensuing winter. A winter supply of milk can only be maintained in Scotland by liberal feeding indoors. The grazing season here is comparatively short, and for profitable milk production it is found necessary to supplement even grass feeding with a small quantity of bean meal or cotton cake. Should the threatened shortage materialize the problem of the milk supply will be serious indeed. Hence one reason for anxiety regarding the great offensive which has begun so auspiciously under Sir Douglas Haig. This milk problem calls for the exercise of the best brain power in our agricultural camp.

Apart from its dairy side, the problem of increased food production is by no means easy of solution. The sea, it has been well said, which was considered Great Britain's strength has suddenly become her weakness. The enemy submarine has altered many things, yet gradually we are obtaining the mastery over it. Each week is showing a reduction in the number of losses of ships belonging to Great Britain and the Allies, and neutral nations trading with our shores. There is reason to believe that we are steadily taking a heavy toll of these U boats. Unfortunately one cannot believe all rumors, but we may at least conclude that the menace is being checked, and that, did we possess enough available shipping, there would be comparatively little fear of famine within these islands. Apart from tonnage scarcity there is, no doubt, a world shortage of cereal crops, and it is necessary for this country to endeavor at all costs to grow enough grain to feed our people nine months out of the twelve. This is the goal of the present crusaders. They are taking each county in detail, and they are telling the Food Production Committees exactly how much fresh land must be put under crop in their respective areas.

At the same time many thoughtful men are discussing these food problems on their merits, and independently of war conditions. They are discussing the problems not as they are rendered acute by the exigencies of War, but as they will remain for solution when the War is over. One writer says, the Empire may become self-supporting on a sound, economic basis, but the United Kingdom cannot become self-supporting save at a prohibitive cost. During war-time no cost can be regarded as prohibitive if by means of it the people can be fed. Even if every bushel of grain be produced at a cost which greatly exceeds the market value of the produce, the grain must be grown. The people must be fed. In the last resort wars are won by the nation which can feed its people for the longest period of time. The War policy of the Government regarding food is to fix a minimum price for the farmer, a minimum wage for the farm laborer, and a maximum rent for the landlord. The farmer may get more, he cannot get less than the guaranteed minimum price; the laborer may get more, he cannot get less than the guaranteed minimum wage, but the landowner may have the rate of interest on his mortgages raised, his costs for repairs greatly enhanced, and his own wages bill substantially advanced, but he cannot advance the rents of his tenants, who are not moving, one penny. This has been criticized as very unfair to the landowner, but such is the temper and mood of the times, that no one troubles much about this and each goes his several ways. It has been well said that as things are there are really three prices for all farm produce; there is the fixed price which Government guarantees to the producer; there is the sale price at which the stuff may be sold in the open market, and there is the production price, the figure at which the crop could be raised and harvested. Increased crop production can only be attained by intensive farming. Many thoughtful men maintain that the Government scheme begins at the wrong end. In place of urging an extension of cultivated area, a premium should be put upon more intensive cultivation of the area already under crop.

There can be no doubt that to a certain extent this is a sound proposition. It becomes increasingly evident that there is a vast amount of really bad farming in this country. It is only here and there that one meets with land that is growing its limit. Even in the same parish on adjacent farms there are great differences to be observed. The man who manures liberally reaps bountifully. In a paper read this week to the Farmers' Club, London, Allan C. Young maintained that there is a point beyond which intensive farming cannot be prosecuted and leave a profit. This is contrary to general experience. All who have studied the question are agreed that some outside authority should be appointed to determine whether a farm is being cultivated to the best advantage. The difficulty is to know how to constitute such a third party with powers. Some would call such an authority a Land Court, another would give it the name of a Rent-Regulating Court, while a third happily suggests that it be designated a Board of Conciliation. The essential and surprising fact is the universal argument that in the interest of the Commonwealth neither landlord nor tenant can be allowed to cultivate a farm in a slovenly and unproductive way. If the State is to guarantee a minimum price for farm produce, the State will demand and exercise the right to supervise the operations of every man to whom the guarantee is given. A farmer will do his best, provided he understands his business, when he enjoys security of tenure, has his rent fixed by a third party at a rate which is fair to all parties, and is guaranteed adequate compensation for improvements effected by him should he be compelled to relinquish these improvements to another before he has exhausted them.

One notable result of the demand for enhanced crop production is the attention being bestowed on mechanical auxiliaries for farm work. This spring several potato planting machines have been put upon the market. These are now perfected so that they can handle potato seeds of varying sizes. The bed potato planter is known as the "Richmond" planter. It was patented by Gordon Richmond, farmer, Don, Bridge of Earn, Perthshire. Like his father before him this young farmer has developed inventive powers of no ordinary character, and his planter has been evolved stage by stage under his own eye, until this season it has fairly captured the market. Anything that increases the ratio at which farm labor can be performed is sure of a ready sale in these days.

We are having much protesting on account of the suspension of horse racing by the edict of the Government. Some surprising statements are being made by those whose interests are bound up with racing. They are urging that the suspension of racing even for one year will ruin the breed of English Thoroughbreds. On the face of it this argument is overdrawn. It is inconceivable that any such disaster should follow a mere suspension of racing. Even granting that such short races as are now popular are fitted to develop the stamina and grit of the Thoroughbred, it is inconceivable that the whole fabric would collapse because of suspension. It is estimated that race horses and horses kept for breeding race horses consume from 900 to 1,000 tons of the choicest oats per month. It is in order to cut down this quantity for horses, and increase thereby the food supply for human beings that the suspension of racing has been resorted to. Oats will be saved, and at the moment every bushel must be hained and there must be no waste. The race-horse agitation is one of the most unworthy features of the social life of England at the present time. Scotland is very calm about the business. What concerns it most of all is the crass stupidity of Government officials in connection with the handling of hay and straw.

SCOTLAND YET.

**Escana Shorthorns Sell For \$861.87.**

Forty Shorthorns selling for \$34,475, or an average of \$861.87, is an epitome of the dispersion sale held by Mitchell Bros., Burlington, Ont., on June 29. This, a record average for a Canadian Shorthorn sale-ring, expresses the esteem in which the Escana herd has been held by Shorthorn breeders in Canada and United States, and furthermore it gives voice to the general approval of Right Sort, which, for the last several years, has been the herd bull in service. His get have been persistent winners at the Canadian National during the last three show years, and many of them are now at the head of some of the best herds in the Dominion and across the border. Right Sort himself, at almost six and one-half years of age, went to Chas. Parsons, of Iowa, at \$3,600, but only after J. J. Merger, an Ontario breeder, had put up a stiff struggle to obtain him. Very seldom is an aged bull, even when proven good, able to draw forth such bids in a public sale. Newton Grand Champion, the young imported bull which was brought over last year at a long price to act as the junior in service, was purchased by Geo. Amos & Sons, Moffat, Ont., for \$1,500. It is well that he remains in Canada, for he gives excellent promise of maturing into a leading sire in this country. Escana Masterpiece and Pride of Escana, two very promising young bulls by Right Sort, sold for \$1,000 and \$975 respectively.

The females included a considerable percentage of cows and heifers with calves at foot and again in calf to the service of either Right Sort or Newton Grand Champion. As a general thing, they were not in high fit; just good working condition. The younger heifers and heifer calves were well brought out. Of the 33 females, 13 sold for \$1,000 or over, the top being \$1,750, which J. H. McKloskey, of Fish Trap, Wash., paid for Lady Laura 41st, an imported cow by Royal Count. She had at foot a nice junior heifer calf by Rosebud King. Novelty, another imported cow, which is the dam of last year's junior champion bull at Toronto, and his full brother, Pride of Escana, in the sale went to South Dakota at \$1,600. Pettit Bros., of Freeman, took Favorite Missie, one of the herd's good producers at \$1,500. These represent a few of the top prices for females; the remainder are given in the appended list. An analysis of the selling shows that United States buyers took 11 head for which they paid \$13,300. J. H. McKloskey, of the State of Washington, purchased 6 head for \$5,675. Ontario breeders bought 29 head for which they paid \$21,175. The firm of Geo. Amos & Sons, Moffat, was one of the best Canadian bidders, taking 6 head at an average of \$1,233. The grand average for the 40 head was \$861.87. The 33 females averaged \$804.54, and the 7 bulls \$1,132.14. Where no state or province is mentioned in the list, Ontario is understood.

Nothing more need be said in regard to the excellence and popularity of the Escana Shorthorn herd. These comments have been conservative indeed, for the sale list tells the story in full. One of the best bulls in Canada has been allowed to go, but his good influences will still live and be exerted through his sons in service here. The prices received constitute a very high compliment to the wisdom and sagacity of Mitchell Bros. as constructive Shorthorn breeders as well as to the skill and perseverance of Jos. McCrudden as herdsman and manager.

**Cows and Heifers.**

Lady Laura 41st (imp.), J. H. McKloskey, Fish Trap, Wash.	\$1,750
Novelty (imp.), Jackson & White, Hurley, South Dakota	1,600
Favorite Missie, Pettit Bros., Freeman	1,500
Sybil Girl (imp.), H. J. Miller, Keene	600
Long Lane Daisy, Howard Vaughn, Marion, Ia.	575
Lady Jilt, Theo. Martin, Bellevue, Ia.	525
Orange Princess 2nd, Robt. Miller, Stouffville	1,100
Greengill Fancy, J. H. McKloskey	475
Maude 55th (imp.), Geo. Amos & Sons, Moffat	1,125
Escana Beauty 4th, J. Watt & Son, Elora	650
Escana Broadhooks, Jas. Fallis, Brampton	700
Broadhooks 11th (imp.), Geo. Amos & Sons, Moffat	1,125
Escana Missie 3rd, F. R. Edwards, Tiffin, Ohio	1,325
Red Missie, Pettit Bros.	875
Spicy Girl 3rd (imp.), J. H. McKloskey	1,000
Newton Rose (imp.), J. H. McKloskey	1,000
Newton Rose 2nd (imp.), J. H. McKloskey	700
Lady Laura 29th (imp.), H. J. Miller	550
Warble Mysie (imp.), Geo. Amos & Sons	1,400
Cluny Eliza 7th (imp.), Geo. Amos & Sons	1,225
Stamfords Lady, S. T. Coulson, Milton	675
Killwinning Lady 2nd, Percy DeKay, Elmira	325
Glenholme Lady, J. A. Watt, Elora	600
Escana Beauty 3rd, J. A. Watt	1,150
Escana Bessie, J. H. McKloskey	750
Sybil 15th (imp.), Geo. Amos & Sons	1,025
Escana Isabella 2nd, E. Fleck, Georgetown	250
Escana Isabella, M. E. Harris, Mohawk	350
Sunnyhill Gem, Percy DeKay	450
Pearl Stockings, Thos. Harrop, Milton	325
Isabella Girl, Thos. Harrop	400
Red Isabella, Thos. Harrop	275
Isabella Belle, H. J. Miller	175

**Bulls.**

Right Sort (imp.), Chas. Parsons, Carol, Iowa	3,600
Newton Grand Champion (imp.), Geo. Amos & Sons	1,500
Pride of Escana, A. G. Farrow, Oakville	975
Killwinning Mist, Chas. Monroe, St. Thomas	325
Killwinning Royal 2nd, M. E. Harris	225
Escana Masterpiece, Robt. Miller	1,000
Greengill Star, E. de Gex, Kerwood	300



**The Watt-Gardhouse Shorthorn Sale Made a Big Average.**

Salem Stock Farm, Elora, Ont., has been the place of many epoch-making events in the history of Shorthorn cattle, but the annual sale staged Thursday, June 28, by J. A. Watt and J. M. Gardhouse was the greatest history-making milestone of them all. Nearly one thousand enthusiastic admirers and breeders of the Red, White and Roan gathered at the farm for the dispersion of some of the best cattle ever offered in a sale-ring anywhere in this or any other country. Our cousins from the United States were out in force, but Ontario breeders made them go the limit on many of the good things, and while the greater part of the cattle will go across the border, Ontario breeders were the runners-up on a number of the best offered. The top price of the sale, \$2,600, was obtained for the grand white bull Marquis of Lancaster, sired by the great Gainford Marquis and nearing two years of age. He went to J. E. Crosbie, of Tulsa, Oklahoma, who bought a number of the choice lots. Top price for females, \$2,025, was paid for Britannia the show heifer with a great record in both Canada and the United States. Mr. Crosbie took her with his other good ones. Gerrie Bros., of Elora, Ont., got a prize in the bull calf, Gainford Matchless by Gainford Marquis at \$1,625. They also took a heifer calf by the same sire at \$1,025. Fred Currie, of Markdale, Ont., took Matchless Belle 4th at \$1,325. She is a nice red, two-year-old by Sir Victor. M. E. Harris, Mohawk; C. M. Blyth, Guelph; James DeKay, Elmira; Jas. C. Elliott, Glencoe; Alex. Watt, Elora, Ont.; J. J. Elliott, Guelph; W. A. Dryden, Brooklin; Malcolm McCormack, Amaranth; Gordon Auld, Guelph; Rob't. Miller, Stouffville, and Thos. Kerr, Thamesford, were among the Ontario buyers as the list following shows. Geo. Amos & Sons, of Moffat, Jas. Douglas, Caledonia; Rob't. Miller; W. A. Dryden; Alex. Watt and Gordon Auld were among the runners-up of some of the good things. Thirty-nine head went to the United States, and twenty-four remained in Canada. The average price for those purchased to go to the States was \$837, or a total of \$32,675, and those which remain in Canada brought \$15,475 or an average of over \$644 each, so our breeders held up well with the best of the men from the greatest stock-breeding States in the Union. The heaviest purchasers from the other side were J. E. Crosbie, of Tulsa, Oklahoma; C. H. Prescott, of Tawas City, Mich.; W. C. Fleury, of Omaha, Neb.; Rob't. Failon, Neponset, Ill.; C. J. McMaster, Altoona, Ill.; and J. H. McKloskey, Fish Trap, Wash. The sale of 63 head, as here tabulated, including a few calves, sold separate from their dams, brought a grand total of \$48,150—an average of \$764. Six bulls averaged \$1,120 each and included one calf. Following is a complete list of animals sold.

**Females.**

Kilblean Beauty 2nd, J. E. Crosbie, Tulsa, Okla.	\$1,075
Louisa Choice, J. C. Elliott, Glencoe, Ont.	450
Sittyton Victoria, Mrs. Howard Vaughn, Marion, Ia.	575
Heifer calf, J. E. Crosbie	325
Royal Lady, Mrs. Howard Vaughn	475
Benachie's Missie, J. J. Elliott, Guelph, Ont.	450
Missie Dymont, C. M. Blyth, Guelph, Ont.	925
Escana Beauty 2nd, J. E. Crosbie	1,050
Escana Claret, James Brown, Dundee, Ill.	1,025
Zoe, G. H. Prescott, Tawas City, Mich.	925
Oakley Park Zoe, G. H. Prescott	500
Jubilee Jilt, Malcolm McCormick, Amaranth, Ont.	700
Lomond's Lavender, W. C. Fleury, Omaha, Neb.	675
Spruce Hill Mistletoe 2nd, Theo. Martin, Belleview, Iowa	1,100
Spruce Hill Mistletoe 3rd, Alex. Watt, Elora, Ont.	600
Britannia, J. E. Crosbie	2,025
Matchless 39, Rob't. Failon, Neponset, Ill.	925
Matchless 48, T. W. O'Connor, Monticello, Ind.	600
Village Lavender, G. H. Prescott	1,400
Village Princess, C. J. McMaster, Altoona, Ill.	525
Emmeline 23, J. E. Crosbie	1,300
Nora of Pine Grove, C. J. McMaster	975
Blossom 8th, Thos. Kerr, Thamesford, Ont.	525
Nora Claret, W. C. Fleury	325
Princess Royal 27, Anoka Farms, Waukesha, Wis.	875
Columbia 7th, James DeKay, Elmira, Ont.	650
Heifer calf, Wm. A. Dryden, Brooklin, Ont.	500
Spruce Hill Fame 2nd, G. H. Prescott	525
Butterfly Belle, J. H. McKloskey, Fish Trap, Wash.	1,125
English Lady, James DeKay	825
Heifer calf, Gerrie Bros., Elora, Ont.	1,025
Edith Cavell, Jas. C. Elliott, Glencoe, Ont.	575
Vanity 21st, M. E. Harris, Mohawk, Ont.	525
Rothnick Belle 2nd, J. H. McKloskey	675
Gloster's Sunbeam, G. H. Prescott	775
Patriot's Gwynne 2nd, M. E. Harris	650
Gem Queen, G. H. Prescott	600
Minnie Sailor 4th, Jas. DeKay	475
Princess Royal 38th, Rob't. Miller, Stouffville, Ont.	500
Oakley Park Zoe 2nd, Gordon Auld, Guelph, Ont.	475
Bessy May, A. R. Croxton, Angola, Ind.	500
Rosa Stamford, W. C. Fleury	625
Merry Lass 10th, J. J. Elliott	500
Missie May, Dr. McFadden, Fergus, Ont.	400
Lady Mistletoe 2nd, Rob't. Miller, Stouffville	525
The Firs Queen, G. H. Prescott	475
Hero's Lass 3rd, W. C. Fleury	450
Clementina 4th, Jas. C. Elliott	475
Mina Lass 13th, G. H. Prescott	625
Violet Belle, J. E. Crosbie	650
Narcissus 7th, G. H. Prescott	675

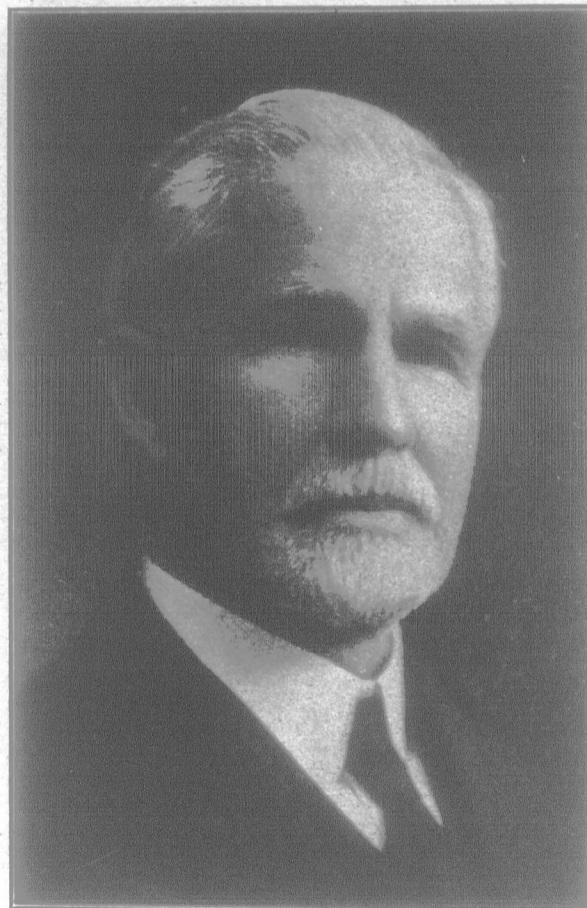
Sunflower, J. H. McKloskey	\$ 775
Stamford B., L. W. Davidson, Stanwood, Ia.	400
Merry Mildred 3rd, J. E. Crosbie	1,025
Mildred Fashion 3rd, J. E. Crosbie	600
Oak Bluff Melba 4th, Rob't. Failon	1,175
Matchless Belle 4th, Fred. Currie, Markdale, Ont.	1,325

**Bulls.**

Marquis of Lancaster, J. E. Crosbie	2,600
The Count of Selma, C. J. McMaster	1,125
Royal Fyvie (imp.), R. J. Doyle, Owen Sound	400
Gainford Matchless, Gerrie Bros.	1,625
Mina Lad, G. Harding, Guelph	375
Signal Chief (calf), W. C. Fleury	600

**The Late J. C. Snell.**

There passed away at Victoria Hospital, London, Ont., Wednesday, June 27th, John C. Snell, a man who has played no unimportant part in the development of Canadian agriculture. The late Mr. Snell was well known to readers of "The Farmer's Advocate" and to live-stock men throughout Canada and the United States. He was for many years a successful farmer and stock breeder in the township of Chinguacousy, Peel County, Ont., and was afterwards, from Jan. 1897 to Dec. 1915 on the editorial staff of "The Farmer's Advocate." Born on Nov. 28th, 1840, the son of John Snell, who had come out from Devonshire, England in 1835, and settled in Upper Canada in 1837, and early took up the live stock business, the late Mr. Snell got an early interest in good live stock, and at the age of twelve years attended the first Provincial Fair, and from that date to 1912 he never missed attending a Provincial Fair in Toronto or the Canadian National Exhibition.



The Late J. C. Snell.

His father became one of the leaders of the live stock business as early as 1854, and later the three sons, John, Joseph and Richard took up the work. For a number of years the firm of John Snell and Sons was well known America over, particularly to the Shorthorn world. Shortly after the Shorthorn herd was founded, a flock of Leicester sheep was purchased, and later, Cotswolds were added. In the early sixties the firm founded a herd of Galloway cattle, but in 1867 they were dispersed at auction as the demand for the breed became limited. John Snell died in 1872, and the business was carried on by the three sons until the early eighties, when the late J. C. Snell started in for himself. The Snells bred and imported some of the best stock Canada has ever seen.

Jersey cattle were then in good demand. The Shorthorn herd was dispersed and replaced by Jerseys. Cotswold sheep and Berkshire swine were made specialties. During the years that the late Mr. Snell was connected with the live stock business, his winnings at the larger exhibitions were always chronicled at the top or near the top of the list. His services as a judge of cattle, sheep and swine, were in frequent demand, and he officiated at the World's Fair in Chicago 1893, as well as acting at some of the leading Dominion and Provincial Exhibitions in Canada. Mr. Snell was three times elected for four-year terms, a member of the Provincial Council of Agriculture and Arts, and was President of the Council in 1887. He was also President for one term each of the Dominion Shorthorn Breeders Association, the Dominion Sheep Breeders' Association, and the Dominion Swine Breeders' Association.

Before joining the staff of "The Farmer's Advocate" in 1897, the late Mr. Snell had written occasional articles for the columns of this paper, particularly on live-stock subjects, based on personal experience. His writings were appreciated by the management and readers of the paper, and after considering the change for some time, he, at the age of fifty-six years left practical agriculture to take up the strenuous work of helping thousands of farmers, through his writings in this paper, to do better work and breed better stock on their own farms.

Mr. Snell was a familiar figure in the live-stock arenas, and his reports of our larger exhibitions were closely followed by stockmen. Failing health made it necessary for him to discontinue his work at the exhibitions in 1912, and to retire from active work on the paper late in 1915.

Always kindly and genial and above all a gentleman, the late J. C. Snell was beloved by all who knew him. He was always an ardent admirer of choice pure-bred stock and a clean farm. The cause of agriculture has lost a strong exponent and the live-stock business has been deprived of one of its best.

He is survived by his wife, Jane Ferguson, whom he married in 1867, three sons, John F. of Macdonald College, Que., Charles K. of Vancouver, B. C.; Gordon B. of Montreal, and four daughters, Miss Mary of Montreal; Mrs. Wm. Garrod, Winnipeg, Man.; Mrs. Mabel Scream and Mrs. Wm. Kingstone, London, Ont.

**Price of Eggs Remains Firm.**

According to the egg and poultry markets' report for the week ending June 26, issued by the Live Stock Branch Dominion Department of Agriculture, the prevailing prices for eggs of extra quality in Western Ontario was from 30 to 35 cents. For the same quality eggs, Toronto retailers paid from 35 to 37 cents, while the price to consumers of that city was from 40 to 43 cents. In Eastern Ontario, the price was 25 to 31 cents; Quebec, 27 to 30 cents; Manitoba, 26 to 28 cents; Prince Edward Island, 28 to 30 cents; Saskatchewan, 25 to 28 cents; Alberta, 25 to 27 cents. The situation is summed up as follows by the Poultry Division of the Live Stock Branch:

"Reports from various producing sections indicate a falling off in receipts, and country dealers report a little better enquiry from consuming centres. Prices at country points during the past week have not been altogether encouraging for producers, and on June 25 quotations ran a little lower. The previous week a number of Eastern Ontario Egg Circles paid their members as high as 32 cents. One shipper sold as high as 35 cents, but the bulk of the eggs went into the larger markets around 30 cents. Some of the larger firms are quoting only 29 cents for straight gathered stock for the week commencing June 25. Consumption continues only fair. With the sharp decline in the retail prices at some points there has been some improvement. Retail prices, however, have generally been slow in coming down. In Ottawa eggs may now be obtained in a retail way from 35 to 37 cents, while they dropped as low as 33 cents on the market. In other points, Montreal and Toronto, retail prices still range around 38 or 40 cents; farmers asking and in some instances obtaining as high as 45 cents on the Toronto market on June 25. On the Vancouver market the retail for best grades still holds at 50 cents. Indications point to a firmer undertone in the larger Eastern markets. While no export business for immediate shipment is yet reported, and while dealers generally are not very optimistic over hot weather business, this is due no doubt to the firmer tone of the British market apparent during the last few days.

Considerable speculation has occurred at different points as to the causes for the sharp decline in prices to producers early in the month. Recent advice would tend to indicate that one of the most potent factors was the sudden tightening of the money market, more particularly in the States. It is stated that dealers and others who earlier in the season had been able to handle a car in storage on an advance of about \$400, suddenly found themselves faced with the necessity of putting up two or three times this amount. Chicago and New York report a little firmer market. Chicago current receipts are quoted at 28 to 29½ cents, and storage packed 30½ to 32½ cents. Storages at New York and Jersey City are said to be practically full, and some dealers have had to send their surplus to nearby cities for storage. Chicago, it is reported, has considerable storage space available yet although it is fast filling up. The money market in the States is a little easier and less difficulty is now experienced in effecting loans on eggs.

A decidedly weaker tone developed in the poultry market during the past week. The cause of this is the large amount of frozen stocks still held in the coolers and the unsatisfactory demand. Holders are becoming nervous and prices are being cut to effect sales. If this situation does not clear up it will have a detrimental effect on the poultry market this season."

There was a reported shortage in the United States of 145,449 cars the first of May this year. Last year on June 1 there was a surplus of 50,000 cars. This does not look favorable for freight shipments this fall. The only remedy is to use the cars to the best advantage, fill them to capacity, unload promptly, and order early.



Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending June 28.

Receipts and Market Tops.

Dominion Department of Agriculture, Live Stock Branch, Markets Intelligence Division

Table with columns for Receipts, CATTLE (Top Price Good Steers), CALVES (Top Price Good Calves), and SHEEP (Top Price Good Lambs). Rows list locations like Toronto, Montreal, Winnipeg, and Calgary with weekly ending data for 1916 and 1917.

Market Comments.

Toronto (Union Stock Yards.)

Twenty-seven hundred butcher cattle were received at the Union Stock Yards over the week end and in addition there were eight or ten loads consigned direct to the abattoirs. Notwithstanding this liberal supply, trading was active on Monday at the prices prevailing at the close of the previous week's market, and 25 to 50 cents higher than the prices ruling two weeks ago.

Table with columns for CLASSIFICATION, No., Avg. Price, Price Range, and Top Price. Rows include STEERS, HEIFERS, COWS, BULLS, CANNERS & CUTTERS, OXEN, CALVES, STOCKERS, FEEDERS, HOGS, SHEEP, and LAMBS for both Toronto and Montreal.

The total receipts at the Union Stock Yards from January 1st to June 21st inclusive, were 106,958 cattle, 26,085 calves, 13,950 sheep and 237,278 hogs; compared with 113,355 cattle, 23,814 calves, 17,439 sheep and 215,906 hogs, received during the corresponding period of 1916.

Montreal.

There was a good demand for cattle of all grades throughout the week and prices advanced 50 cents per hundred with a firm tone evident at the close. The quality of most of the stock was poor, and though a pair of choice heavy steers sold at \$12.50 and one load at \$11.80, few sales were made above \$11.00.

Sheep and lambs were slightly easier and the demand is limited. Very few lambs are being marketed. The demand for hogs was good all week with a liberal supply received.

with prospects of higher prices for the beginning of next week.

PT. ST. CHARLES.—Of the disposition of live stock from the Pt. St. Charles Stock Yards for the week ending June 21st, Canadian packing houses and local butchers purchased 922 calves, 30 canners and cutters, 42 butcher bulls, 339 butcher cattle, 935 hogs, 105 sheep and 25 lambs. Shipments to United States' points totalled 508 calves.

The total receipts at the Pt. St. Charles Yards from January 1st to June 21st inclusive, were 16,823 cattle, 35,098 calves, 6,025 sheep, and 32,578 hogs; compared with 19,104 cattle, 25,447 calves, 5,019 sheep, and 46,262 hogs, received during the corresponding period of 1916.

EAST END.—Of the disposition of live stock from the East End Stock Yards for the week ending June 21st, Canadian packing houses and local butchers, purchased 994 calves, 197 butcher cattle, 456 hogs, and 188 sheep. Canadian shipments (other than for stocker purposes) were made up of 56 butcher cattle, and 58 hogs. No shipments were made to United States' points during the week.

The total receipts at the East End Yards from January 1st to June 21st inclusive were 16,313 cattle, 43,357 calves, 6,263 sheep, and 20,870 hogs; compared with 14,885 cattle, 26,74 calves, 8,100 sheep, and 27,126 hogs, received

during the corresponding period of 1916.

Winnipeg.

The only classes of stock that did not suffer recessions in price was close-up springers and fresh milk cows, both of which were in good demand at steady prices. Traders are not disposed to purchase butcher cattle, in view of a break in the markets to the south. On Monday and Tuesday there were light runs at steady prices, but the latter part of the week brought heavy receipts and consequent reduction in price of 10 to 15 cents per hundred.

In the neighborhood of two hundred sheep were received during the week but



Every farmer who desires to do business with

**The Molsons Bank**

is always assured of a courteous reception by local managers. And their object is to assist the farmer, in a legitimate way, to make his land and stock more productive.

very few were sold. Those that were purchased realized steady prices.

The market for select hogs opened strong on Friday at \$15.00 per hundred, an advance of 15 cents over the close of the previous weekly period. On Monday however, trading was slow and the price for selects was reduced to \$14.90, but made strong recoveries during the remainder of the week, and closed on Thursday at \$15.25 per hundred. Other grades were steady.

Of the disposition of live stock from the St. Boniface Stock Yards for the week ending June 21st, Canadian packing houses purchased 30 calves, 661 butcher cattle, and 4,537 hogs. Local butchers bought 72 calves, 333 butcher cattle, 186 hogs, and 14 sheep. Shipments back to country points were made up of 34 stocker calves, 483 stockers, and 95 feeders. Shipments off the market to eastern points included 539 hogs, and 8 butcher cattle. Shipments to United States' points were made up of 461 butcher cattle, 181 stockers, and 104 feeders.

The total receipts at St. Boniface Yards from January 1st to June 21st inclusive, were 48,589 cattle, 2,805 calves, 732 sheep, and 136,746 hogs; compared with 26,167 cattle, 3,670 calves, 1,246 sheep, and 173,005 hogs, received during the corresponding period of 1916.

**Buffalo.**

Cattle.—Prices on shipping steers here last week were advanced a full quarter over the previous week and Canadian weighty steers reached the highest price within the history of the trade in America—\$13.30, this price being paid for two loads of prime, stable fed steers averaging over 1,500 lbs. There were altogether around fifteen to twenty cars of Canadians offered here the past week, approximately ten cars of which were on the shipping steer order. Best native shipping cattle sold up to \$13.75, eight loads bringing the price. Grass Canadians sold around \$12.00 to \$12.25. In the butchering line prices were strong on drybreds, and about steady on the grass and common grades. Best yearlings which were not strictly prime, sold at \$12.00 to \$12.75, with best handy steers running from \$12.65 to \$12.75. Very little in the steer line, for killing purposes sold below \$9.50. Fat cow and heifer stuff ran mostly to the grass- and common grades. Stocker and feeder trade quiet, by reason of the high prices asked. Grass bulls sold a shade lower, while milk cows and springers brought steady prices. Offerings for the week totaled 1,175 head, as against 5,825 for the previous week and 3,800 head for the corresponding week last year. Quotations.

Shipping Steers.—Choice to prime natives, \$13.25 to \$13.75; fair to good, \$12.00 to \$12.75; plain, \$11.25 to \$11.75; very coarse and common, \$10.75 to \$11.00; best heavy Canadians, \$12.75 to \$13.30; fair to good, \$11.50 to \$12.00; common and plain, \$10.25 to \$10.75.

Butchering Steers.—Choice heavy, \$11.50 to \$12.00; fair to good, \$10.50 to \$11.25; best handy, \$11.00 to \$12.00; fair to good, \$9.75 to \$10.50; light and common, \$9.00 to \$9.50; yearlings, prime, \$12.00 to \$13.00; fair to good, \$11.00 to \$11.75.

Cows and Heifers.—Best heavy heifers, \$10.00 to \$11.00; best butchering heifers, \$9.00 to \$10.00; fair butchering heifers, \$8.00 to \$8.75; light and common, \$7.25 to \$7.75; very fancy fat cows, \$10.00 to

\$10.50; best heavy fat cows, \$9.00 to \$9.50; good butchering cows, \$8.00 to \$8.50; medium to fair, \$6.75 to \$7.50; cutters, \$6.25 to \$6.50; canners, \$5.50 to \$6.00.

Bulls.—Best heavy, \$9.50 to \$10.00; good butchering, \$8.50 to \$9.25.

Stockers and Feeders.—Best feeders, \$8.50 to \$9.00; common to fair, \$7.75 to \$8.25; best stockers, \$8.00 to \$8.75; common to good, \$6.00 to \$7.75.

Milchers and Springers.—Good to best, in small lots, \$90.00 to \$115.00; in car loads, \$75.00 to \$85.00.

Hogs.—Prices were on the decline last week, increased receipts at all marketing points being responsible for the break. At Buffalo last week opening with \$16.00, top and bulk sold at \$15.85. Market the next three days was a little easier and Thursday, which was the low day, no sales were made above \$15.85, and others ranged on down to \$15.65. Friday the market reacted, prices, which were up ten to fifteen cents, showing the same range as the opening day of the week. Pigs and lights sold at \$14.50 and \$14.75; roughs, \$13.75 to \$14.00, and stags \$12.50 down. For the entire week receipts were 21,100 head, as against 20,523 head for the week before, and 28,000 head for the same week a year ago.

Sheep and Lambs.—Prices were hit hard the latter part of last week. Monday's market held up pretty well, springers selling up to \$19.25, yearling lambs made \$16.50, wether sheep sold up to \$11.50 and ewes from \$10.75 down. Before the week was out, however, buyers got top springers down to \$17.50, yearlings dropped to \$15.00, wether sheep, the latter part of the week, could not be ranged above \$11.00 and Friday's range on the ewes was from \$10.00 down. Receipts last week were 3,700 head, as against 1,877 head for the week previous, and 3,600 head for the same week a year ago.

Calves.—Last week receipts were 3,450 head, as compared with 3,257 head for the week previous, and 3,100 head for the same week a year ago. Monday top veals sold generally at \$15.50, Thursday bulk sold at \$15.25, Wednesday some reached \$15.75, Thursday's top was \$16.00, and Friday the bulk moved at \$15.75. Desirable cull grades sold within \$1.00 to \$1.50 per cwt., of the top veals, and weighty fat calves that were rough were not worth as much as the good handy culls.

**Toronto Produce.**

Receipts of live stock at the Union Stock Yards, Monday, July 2, were 175 cars, 3,410 cattle, 310 calves, 1,099 hogs, 310 sheep and lambs. Market closed at noon. Trade slow. Large number of cattle unsold. Butcher cattle good; cows and bulls 15 to 25 cents lower. Common and medium cows and stockers and feeders 50 cents lower. Sheep and lambs steady. Calves 25 cents lower. Hogs steady.

**Breadstuffs.**

Wheat, Ontario, No. 2, winter, per car lot, \$2.50 to \$2.55; No. 3, winter, per car lot, \$2.48 to \$2.53, (according to freights outside). Manitoba track, bay ports, No. 1 northern, \$2.58 1/2; No. 2 northern, \$2.55 1/2, nominal.

Oats, Ontario, No. 2 white, not quoted. Manitoba oats, No. 2 C. W. 78c.

Barley.—Malting barley, nominal. Peas, according to freights outside, No. 2, nominal.

Corn.—American (track, Toronto), No. 3 yellow, \$1.81 1/2, nominal.

Rye.—No. 2, \$2.05, nominal.

Flour.—Manitoba first patents, in jute bags, \$13.40; second patents in bags, \$12.90; strong bakers', in jute bags, \$12.50. Ontario, winter, according to sample, in bags, \$11 to \$11.10.

**Hay and Millfeed.**

Hay, Track, Toronto, extra No. 2, per ton, \$12.50 to \$13.50; mixed, \$9 to \$11. Straw.—Car lots, per ton, \$9, track, Toronto.

Bran, Per ton, \$4.

Shorts, Per ton, \$8; middlings, per ton, \$12.

Good feed flour, per bag, \$2.80 to \$2.90.

**Hides and Skins.**

Country hides, cured, 20c. to 24c.; calf skins, per lb., 30c. to 35c.; kip skins, per lb., 25c. to 30c.; sheep skins, city, \$2.50 to \$4.50; sheep skins, country, \$2 to \$1; lamb skins, spring, per lb., 60c. to 90c.; horse hair, per lb., 35c. to

37c.; horse hides, No. 1, \$7.50 to \$8.50; No. 2, \$6.50 to \$7.50. Wool, unwashed, 51c. to 53c.; wool, washed, 63c. to 68c. per lb. Tallow, No. 1 cake, 15c. to 17c. per lb.; tallow, solids, 13c. to 16c. per lb.

**Country Produce.**

Butter.—Butter was again a little easier in price on the wholesales during the past week, selling as follows: Creamery, fresh made pound square, 38c. to 39c. per lb.; creamery solids, 37c. to 38c. per lb.; dairy, 32c. to 33c. per lb.; separator dairy, 32c. to 33c. per lb.

Eggs.—New-laid eggs also declined in price, selling at 35c. to 36c. per dozen, wholesale.

Cheese.—The cheese market kept about stationary. Old cheese selling at 30c. per lb.; new at 23c. to 24c. per lb.; and new twins at 21c. per lb.

Poultry.—Spring chickens came in a little more freely and declined slightly in price, selling at 25c. per lb.; spring ducks, 25c. per lb.; roosters, 14c. per lb.; fowl under 5 lbs., 18c. per lb.; fowl 5 lbs. and over, 20c. per lb.; turkeys, 18c. per lb. (Live-weight prices).

**Wholesale Fruits and Vegetables.**

Bananas continue to bring high prices selling at \$3.25 to \$4.25 per bunch.

California cantaloupes declined materially in price, selling at \$6.50 per case.

The first Canadian gooseberries for this season came on the market Tuesday last and were of good quality. There have also been small shipments daily since then. They are selling at 75c. to \$1.25 per 11-qt. basket.

Canadian cherries also arrived selling at 45 per 3-qt. basket.

Lemons.—The lemon market is very firm—new Verdilis having advanced to \$6 per case, and Californias selling at \$5.50 per case.

Oranges also advanced; late Valencias selling at \$4.25 to \$4.75 per case; Mediterranean Sweets at \$4 to \$4.50 per case, and the few Navels offered at \$3.75 to \$4 per case.

Pineapples were in demand and remained practically stationary in price at \$3.75 to \$4 per case.

Strawberries.—Canadian Strawberries continued to come in in small quantities, and there were some of extra choice quality; they sold at 20c. to 25c. per box.

Tomatoes continued to have a good demand and did not vary much in price; home-grown hot-house selling at 22c. to 25c. per lb. for No. 1's and 20c. per lb. for No. 2—while the imported outside grown sold at \$2 to \$2.40 per 4-basket carrier.

Watermelons have come in very freely, selling at 40c. to 55c. each, according to quality.

Asparagus.—The demand has decreased and the price was slightly easier at \$1 to \$1.75 per 11-qt. basket.

Beets came in in large quantities; the price declining to 35c. to 45c. per dozen bunches.

Cabbage.—Canadian new cabbage is gradually increasing in shipments, selling at \$1 to \$4.25 per crate.

Carrots have been scarce the few imported selling at \$2.50 per hamper.

Canadian Cauliflower of really good quality has started to come in selling at \$1 to \$1.50 per 11-qt. basket.

Cucumbers have kept up in price. Leamington hot-house selling at \$2 per 11-qt. basket for No. 1's, and \$1.25 to \$1.50 for No. 2's. The imported outside grown bringing \$3.50 per hamper.

Canadian mushrooms of splendid quality came in last week, selling at 75c. per lb.

Potatoes. New potatoes have been arriving very freely during the past week, the price rapidly declining; the latest shipments selling at \$10 per bbl. old ones also were easier—New Brunswick Delawares selling at \$1.50 per bag, and Westerns at \$1 per bag.

**Montreal Produce.**

Horses.—Demand for military purposes is good, but outside of this there is nothing worth speaking of transpiring in the horse market. For a long time it was stated that the automobile would never take the place of the horse, and while this may be true in a limited sense, it is also the case that the traffic in the cities is more and more by way of automobile and less and less by way of the four-footed animal. This is as well, at the present juncture, when governments are able to outbid private buyers

of horses. Prices are steady as follows: Heavy draft, weighing 1,500 to 1,700 lbs., \$200 to \$250 each; light draft, 1,400 to 1,500 lbs., \$150 to \$200 each; small horses, \$100 to \$125 each; culls, \$50 to \$75, and choice saddle and carriage animals, \$200 to \$225 each.

Dressed Hogs.—Although the market for live hogs showed a tendency towards strengthening last week, the market for dressed was little affected. Demand from packers was good and everything offering was readily absorbed, at 23c. per lb. for abattoir, fresh-killed stock. The warm weather was favorable for the market for cured meats and prices were steady at 30c. per lb. for light hams, 29c. per lb. for medium weight hams, weighing from 12 to 15 lbs., and 28c. per lb. for heavies. Bacon was steady, at 35c. per lb. for breakfast bacon, 37c. for Windsor selects, and 38c. for Windsor boneless. Lard was in good demand, and prices ranged from 27 1/2c. to 28c. per lb. for pure, and from 20 1/2c. to 21c. for compound.

Potatoes.—Imported American potatoes were in demand, being new and of good quality, while Canadian potatoes were still old stock and of none too good quality. Americans were \$11 per barrel and up to \$13. Canadians were steady at \$4.25 per bag of 80 lbs. With potatoes at these prices, it was not surprising that consumption was unusually light. People are learning to do without them.

Maple Syrup and Honey.—Demand for maple syrup was light and prices were steady. In 13-lb. gallon tins, extra choice brought as high as \$1.70, while choice was around 10c. less, and from this the price ranged down to about \$1.30. Maple sugar was 15c. per lb. Honey was steady, at 16c. per lb. for white clover comb; 13c. for brown clover comb; 13c. to 14c. for white extracted, and 12c. for brown extracted. Buckwheat honey was 10c. to 11c.

Eggs.—The warm weather had its effect on quality and the stock was not nearly so good as that received earlier in the year. Selected stock was quoted at 37c. to 38c. per dozen, which was practically the low point of the season. It is understood that export demand is not so good as it was previously and this accounts for some easiness in price. No. 1 candled 34c. to 35c., and No. 2 candled 31c. to 32c.

Butter.—The make of butter was large, but the warm weather affected the quality somewhat and as a consequence, current prices were lower than those prevailing recently. Finest creamery was quoted at 35c. to 35 1/2c., while good to fine was about 1c. under this range. Dairies were from 28c. to 32c., covering all qualities.

Cheese.—Country boards in Ontario were cleared at around 21 1/2c. This means that the Montreal price was in the vicinity of 22c. The business is now under control of the Government.

Grain. Oats were on the easy side, with No. 2 Canadian Western quoted in car lots at 79 1/2c.; No. 3 and extra No. 1 feed, were 78 1/2c.; No. 1 feed, 76 1/2c.; and No. 2 feed, 75 1/2c. per bushel, ex-store. Canadian 5-lb. picker beans were \$9.25 to \$9.50 per bushel; Rangoon beans \$8.75 to \$9; Yellow Eyes, \$8 to \$8.25; Jappans, \$7.50 to \$7.75.

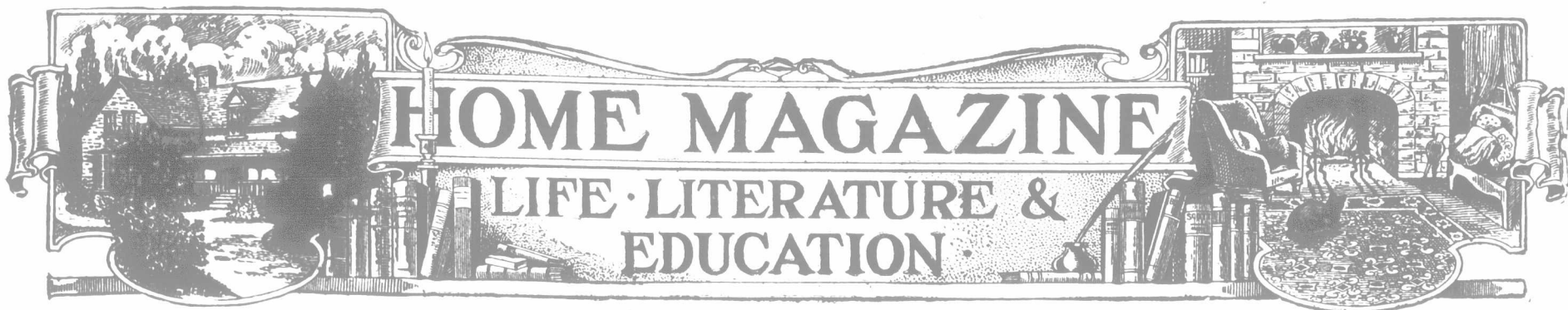
Flour. No change of consequence took place in the flour market last week. Manitoba flours were \$13.50 per barrel, in bags for first patents; \$13 for seconds and \$12.80 for strong bakers'. Ontarios were \$12.50 to \$12.80 per barrel in wood, for 90% patents, and \$6.00 to \$6.15 per bag.

Millfeed.—The market held steady at \$32 per ton for bran in bags; \$38 for shorts; \$40 to \$42 for middlings; \$47 to \$49 for pure grain mouille, and \$44 to \$45 for mixed.

Hay.—The market for baled hay was unchanged, being \$13 to \$13.50 per ton for No. 2 in car lots; \$11 to \$11.50 for No. 3; \$10 to \$10.50 for clover mixed ex-track.

Hides. The principal change was a jump of 20c. each in lamb skins, the price going to 70c. Beef hides were up 1/2c., at 25 1/2c.; 24 1/2c. and 23 1/2c. Calf skins 35c. and 33c. Horse hides \$7 each. Tallow 3c. to 6c. per lb. for rough, and 11c. to 12c. for rendered.





**HOME MAGAZINE**  
LIFE · LITERATURE & EDUCATION

**A Night With the Stars.**

There's a freshening wind and a threatening cloud,  
And my burning camp-fire roars aloud  
I'm alone, quite alone on the wild wide sea,  
With only my tent to cover me,  
And the blood-red wine of the sunset dew  
Drops down before the sun,  
And the twinkling orbs through the firmament  
Come peering, one by one:  
I know that of sleep I shall get not a wink,  
But I only wish to lie and think;  
I shall lie quite still, 'neath the gemmed canopy,  
With only my tent to cover me,  
And the wild halloo of the screeching owl  
Will "Amen" to my prayers,  
And then I shall lie for hours wrapped in thought,  
Oblivious to all cares  
Tho' the wild, jagged clouds in the ruddy west  
Foretell a night of the dirtiest,  
I know and feel sure I shall quite happy be  
With only my tent to cover me,  
For the blood-red wine of the sunset dew  
Drops down before the sun,  
And the twinkling orbs through the firmament  
Come peering, one by one.

ARTHUR THRUSS.

**Among the Books.**

**"Romany Life."**

*Romany Life*, by Frank Cuttriss, Mills & Boon Pub. Co., 49 Rupert St., London W., England.)

At this season of fruit-picking, when the question of "help" is so much to the fore, it may be interesting to read something of a unique people who sometimes when they choose—permit themselves to be enlisted to help out with the strawberry and hop-picking in England. We are accustomed to think of England as a little country so packed with civilized folk that there is no room for a tribal people of different color and speech, and yet it is sufficient to read Borrow's famous Gypsy books, *Lotengro* and *Romany Rye*, or Frank Cuttriss's *Romany Life* to realize that there are still, quiet, almost wild lanes even in England, that give harborage to a people quite as unique and foreign from the "ordinary run" as are the North American Indians in our land to-day.

While, however, the "red men" are indigenous to our country, these brown folk of England are exotics, grafted into the land yet never a part of it, with a story of strange vicissitudes and wanderings behind them which makes a history than which none is more interesting. In *Romany Life*, a book almost hot off the press, published since the beginning of the present war, Mr. Cuttriss has taken pains to trace the links back; one only wishes that he had told more of the details.

The real gypsies, the "Romany" folk, were originally natives of India, which they left hundreds of years ago to acquire, through long years of wandering, a nomadic spirit which makes them in some respects more like the Khirgiz of Russian Asia than the more stable Indian people whom they left, although to this day, in language and many customs they have remained almost unchanged. There is a marked similarity between their words even of to-day, and those of the modern Hindu, while their household utensils, fashioned by themselves, are often exactly similar to those that may be found in Hindu homes. Their dislike to marrying among outsiders, or "gorgios" also, has kept them comparatively free from assimilation,

and among them still may be found true strains who exhibit the coloring and facial characteristics of the Hindus. These strains are the true gypsies, and very proud indeed are they of their long lineage, regarding the "chorodies", or mixed-blood folk, as distinctly inferior.

As an example of words of the Romany tongue, which are practically undiluted Mr. Cuttriss gives a long list, of which a few may serve for example:

English	Romany	Hindu
Eye	Aok	Awk
Yes	Ava	Eva
Bee	Bata	Pata
Aunt	Bebee	Beebe
Kiss	Choom	Chumb
Father	Dad	Dada
Speak	Pukker	Pukar

In 1414 the Romanies began to appear in Germany and France, living chiefly by fortune-telling and Eastern magic. Others went to Persia. About 1480 they first appeared in England. And in all countries, for some inexplicable reason—the sort of hostility that seems so often and so unreasonably to make races of different tongue and color hate each other—they were persecuted, driven from place to place, given no spot for permanent dwelling. In France during the reigns of Louis XIII and Louis XIV, they were frequently massacred by order, and in England the first act of persecution against them was ordered by Henry VIII, a viciously cruel example followed by Mary and Elizabeth.

In England to-day the Romanies find their best resting-places on "common" grounds, wilds and out-of-the-way places;

or to give up a bed at any time to one more needy. Nor does their generosity stop with the Romanies, for a gorgio in real trouble never fails to touch their hearts.

Upon the whole, says Mr. Cuttriss, who has learned their language and lived much among them, they have often been painted black quite without reason, the thieving name which has been fastened upon them having been really earned by tramps and vagrants who have adopted their way of living in some respects, but who have not a drop of real gypsy blood in their bodies.

The true gypsy is much more likely to earn his living in honest ways—making clothes' pegs or toys, brooms, grass door-mats, wicker baskets and furniture, fern baskets and other ornaments, and picking fruit, potato planting, hay-making and hops in season. With most of these things the women help. They also make artificial flowers and lace. At one time—and even yet surreptitiously—they made quite a good deal of money by *dukkerin*, or fortune-telling, but under danger of being subjected to a fine, as the practice is now prohibited by law.

The Romanies as a rule dress according to the fashion of the country in which they live, but the women still cling to an ornate fashion of hair-dressing, with many braids, and invariably they wear beads (preferably red and black, for "luck") and quantities of jewelry, which is often unique in design and of great age, having come down through many generations. Ear-rings, sometimes so long as to touch the shoulders, are in great favor, and neck and head-scarfs

are very comfortable, serving for houses as well as waggons. Usually these vans are painted a brilliant green or yellow, and sometimes they are quite elaborately decorated.

In either case the household furnishings are few and simple, but very resourceful. Bundles of grass, picked up wherever the camping-place may be, serve for beds; an oil-dip, ancient of design, gives all the light necessary; there may be a sheet-iron stove, but more frequently, and especially in summer, the fire is built on the ground out of doors, and the pot is swung over it from a sort of crane. If a hedgehog happens near, woe is his fate, for quickly he finds himself in the pot.

Upon the whole Mr. Cuttriss has found the Romanies a reserved, proud people, yet genial, interesting and likeable, when one has found the key to their sympathies. They are very musical, and often sing songs of a weird wild melody; but above all things do they love dancing, executing gypsy dances with an abandon of native grace.

As an example of a pride likely to be quite misunderstood by gorgios, Mr. Cuttriss tells the following:

"A lady who was aware that I had had intercourse with the gypsies for many years, came to me and explained that she had ordered a dozen baskets to be made by a gypsy named W—H—, and although he knew she urgently needed them for a bazaar he had not supplied even one of them. She considered him very foolish to refuse work which would amount to twelve shillings.

I endeavored to explain the affair without giving offence, but the actual reason why the man refused to do the work was that the lady had ordered this man—who considered himself in some ways at least her superior—to do the work. She had undoubtedly given the order with the very best of intentions, but obviously the gypsy's insight had shown him that she considered him an inferior, and, while giving her credit for some sort of desire to do good, he would give relief to his wounded pride by spitting on the ground in her direction after she had left.

"Some little time later, I required two or three of these baskets for presents, so I looked up this same W—H—and asked if he would be good enough to make a few for me, at the same time telling him he could make them just when he pleased and bring them along as completed, the result being that I received several baskets in one week, and later, I had to tell him to stop or I would have more baskets than friends."

All of which is quite what might be expected from a people whose repute has long been that they never forget either a kindness or an injury.

(To be continued.)

**Travel Notes.**

(FROM HELEN'S DIARY.)

Vevey, Switz., May 5, 17.

Uncle Ned and I went down to Geneva the other day to see the exhibition of the work of the interned Allies—and incidentally, to see the Scotch dancing. I have a secret conviction that Uncle Ned really went to see the men in kilts (he having been quite a foot-flinger in his youth), but, of course, he won't admit it.

Anyway, we went, and we saw the exhibition and we saw the dancing, and I hope I'll never get wedged into such a hot, perspiring crowd of human beings again.

This exposition is being displayed in several of the Swiss cities for the purpose of enlightening the public concerning the work done by the interned soldiers in Switzerland. Also, most of the articles exhibited are for sale, and orders taken for duplicates.

The exhibition is a great eye-opener to



A Good Type of Caravan.

elsewhere they are permitted by law to remain but a few days, and so their carts and vans are frequently to be seen on the move, avoiding the most travelled highways and keeping, for the most part, to the least frequented roads and quiet by-paths. It must be confessed that there is some reason for a law that prevents long staying in one locality, for some of the dark folk—and more especially the "chorodies"—evince thievish propensities, hesitating little about appropriating fowl or garden stuff when it is needed. A true Romany, however, will never take the least article from another Romany, although he may stretch his conscience where a gorgio is concerned; and among themselves they are the kindest and most generous people in the world, willing to share a last crust,

of brilliant colors are invariably worn. In some respects the Romanies are much like the aborigines of this country. They are very observant, and quick at reaching conclusions from natural objects or "signs". When they move their tents, for the information of other gypsies who may follow in their tracks they have sticks, etc., placed in such a way that the gypsy who comes upon them may read clearly as could a gorgio by written word all the news or directions that may be necessary, and the trail, or "pateran", by which the party went is left by signs, quite likely to be unnoticed by the passing gorgio, but never missed by the Romany.

Many of the gypsies live in tents, moving from place to place in carts, but the more well-to-do have vans which



many people who thought the internes did nothing except smoke and loaf and amuse themselves. The variety of objects displayed is something amazing. Everything from a stick-pin to a bedstead; from mere time-killers, such as useless Berlin-wool nightmares and cross-stitch abominations, to artistic bits of tapestry. Entrance to the exhibition was free except on the afternoon and evening when the Scotch soldiers appeared.

Fortunately we "did" the show in the morning, otherwise we would not have seen very much as, in the afternoon, the crush was so great it was almost impossible to get anywhere near the display tables. There was a continuous row of these tables all around the immense sky-lighted hall. The articles were grouped according to the various ateliers to which they belonged:

1. The National Ateliers, controlled by the embassies. These ateliers work mostly for firms in France.
2. The Mutual Aid Ateliers for French artists, under the patronage of the French embassy.
3. The Independent Ateliers, financed by private funds.
4. The Ateliers financed by Swiss capital.
5. English and Belgian Ateliers.
6. The work of private individuals.

We made the circuit of the vast hall and came away with entangled brains—and feet. (I wonder why they never have chairs in these places.)

I will jot down a few of the things I remember seeing, just as they come to my mind: pictures; sculpture in wood; furniture; jewellery; leather work; basket-work; rugs; knitting and crochet-work; embroidery; wood-carving; etching on metal; book-binding; fish-bait; bead-chains; toys; kitchen utensils; garden implements; shoes; glassware; pottery; hand-carved chairs, wardrobes, tables, etc.; ladies' hats; sweaters; socks; dolls, etc.

The exhibition being a sale as well as a display, price-cards were attached to all the articles. Of small objects there seemed to be an inexhaustible supply. The Belgians and French are remarkably clever at utilizing any materials at hand and transforming them into things of beauty. For instance—nails. From mere ordinary nails they have fashioned the most beautiful little articles for desks—such as paper-cutters and letter-openers—exquisite in form and color, artistically lettered, with only the nail-head left to remind one of their humble origin. It is like the story of the ugly caterpillar and the beautiful butterfly.

Uncle Ned was particularly carried away with the wood-carving. (He has a weakness for this kind of art. It was all I could do to keep him from buying some old carved bedsteads in Geneva last year.) This wood-carving is the work of some French soldiers interned in a part of Switzerland where wood-carving is a specialty of the natives. The French soldiers have copied the old Swiss models—chairs, chests for clothes, wardrobes, etc., and have added an artistic French touch which adds much to their beauty.

The English display is not gaudy (except in the matter of fish-bait), the articles displayed being more serviceable than artistic. Their specialty is book-binding—nothing elaborate or gilt-edged, but good, strong bindings for every-day use.

In the afternoon we went to the exposition to see the dancing. Place packed to the doors. No chairs, except in the enclosed place in the centre of the hall where tea was served. Everyone who couldn't get in there pushed up near the stage in order to see better. I was wedged in so tight I couldn't move hand or foot. If a mosquito had alighted on my nose I would have been its helpless victim. There we stood for an hour and a half, propped up by our neighbors. Couldn't have fallen if I had tried.

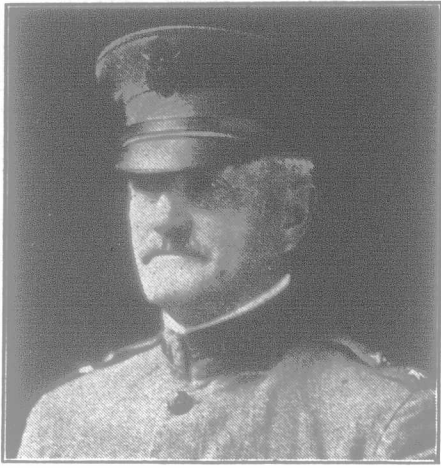
The dancing created quite a *furor*—Scotch dancing and "kilts" being something quite new in Switzerland. But the bagpipes were missing. Instead, a red-headed soldier squeezed out Scotch tunes from an enormous accordion. There were reels, and hornpipes, and sword-dances, all furiously applauded. Uncle Ned was so puffed up with pride and excitement he looked ten years younger, and whistled reels and things at intervals all the next day, although it was Sunday.

A new sign has made its appearance here on the lake-front promenade. It reads:

British School of Motor Mechanism.  
For British prisoners of war interned in Switzerland.

Underneath this is added a very unsocial paragraph to the effect that visitors are not wanted.

So, being warned off the premises, all I know is what I see from the outside. I know that thirty or forty Tommies in khaki go in and come out at regular intervals, and that a gray automobile is forever whirling up to the door depositing Tommies and taking away other Tommies, and that said automobile when *en route* is given to the most extraordinary capers, acting like a thing possessed of the—well, you know what. I have watched it going



Major Gen. John J. Pershing.  
Now in France, commanding the first American Expeditionary Force.

along serenely like an old gray horse, then all of a sudden begin to snort and prance and reel from side to side, and then with a final snort come to a dead stop. After which, all the Tommies would get out and crawl under it, and over it, and examine its interior, and poke their fingers in here and there, and expostulate with it in various dialects, and reason together over its behavior. Then in they would get, and off they would go, leaving a long trail of dust behind them.

The explanation is, I believe, that they are studying automobilism—if there is such a word. The Tommies come to Vevey in groups of thirty or so to take the course at the school here.

If you were a Tommie, and you had been in the war, and been wounded, and captured, and dumped into a German prison, and been ill for months, so ill that you had been sent to Switzerland; and if, after you had regained your health, you were languishing for something to do, and had a chance to go to Vevey and study motor mechanism; and if you did not understand a word of French, and if you were not bashful—how long do you think it would take you to converse fluently with a French-Swiss girl who could not speak a word of English?

Well, I have been told by a person who claims to know, that some of the Tommies have developed such remarkable linguistic qualities that they have accomplished this difficult feat in an astonishing period. That, in fact, *three days* after arriving in Vevey, they have been seen sitting on the benches carrying on absorbing conversations with native belles. In some cases there was a khaki arm along the back of the bench just about where her shoulders came. It is a chilly spring, and one gets a good deal of wind on the lake front. And some days there isn't anything to look at but fog. But the benches are never empty. There are always couples holding hands and looking at the place where the scenery would be if there was any.

But if one of the two on the bench does not understand French and the other does not understand English—what language do they talk?

That is what I have been wondering. For they certainly talk.

There are not many guests in this hotel, but they are the queerest lot we have yet encountered. They are of all nationalities and nearly everyone is suspected of being a spy—by somebody else. Even we have been branded as "dangerous." There is the usual mixture of Russians and Poles and Greeks and "doubtfuls." There is an English lady whose mother was Russian, and an Italian lady whose mother was Irish. There is a Russian lady whose first husband was Russian, and whose present husband is a Bulgarian. She has a Russian son in the Russian army, and a small Bulgarian son with her. Her feelings are said to be mixed.

No wonder. Then there is a dubious Serb with cruel eyes, suspected of being Germanophile, and another Serb who has fought for his country in the war. And there are South Americans, and Central Americans and North Americans, and there is the mild-voiced pleasant-mannered old German gentleman known among us as The Trombone. No one would ever imagine to look at him that he was capable of creating such tonal disturbances, but with that natural trumpet of his, which is situated between his eyes and his mouth, he can produce an endless variety of tones—war-like blasts that startle, and long, low, wailing, dirge-like sounds that almost make one weep. He blows *fortissimo*, he blows *pianissimo* he blows *staccato*, and *legato*; he blows coldly and contemplatively, and peevishly and passionately; he blows *allegretto* in a gay, rhythmic sort of way, and he blows *adagio* in mournful tones suggestive of Hopeless Despair.

And he never seems to know he is playing his trombone, he seems quite unaware of his own performances, and of the sensation he causes in the dining-room, for his performances always occur in the dining-room between courses. He is never sick, he never has a cold. Various theories have been advanced to account for his remarkable trombone exploits. One is that he is lonesome; another, that he wants every person to know he is there. But no one really knows why he



New Sign on Lake Promenade.

does it, and he himself doesn't know he does it. Although he was born in Germany he left that country when he was a year old—that was about 75 years ago—and his sympathies are quite with the Allies.

He is really a very nice old gentleman, a spy, of course (according to some people) like all the rest of us. He was warned against us, and we were warned against him, and the result is we are excellent friends.

## Hope's Quiet Hour

### Why Not?

When ye shall have done all those things which are commanded you, say We are unprofitable servants; we have done that which was our duty to do. —St. Luke 17:10.

To-day's text is our Lord's commentary on the galling inequalities of social position. He remarks, as a matter of course, that when a slave comes in from his work in the fields his master does not thank him, or wait on him at supper; but expects the weary slave to wait on him first. Then he is allowed to take his own meal,—when the day's work is fully done. The Carpenter of Nazareth did not fiercely denounce this custom—as a socialist of these days

might do—but used it as an illustration of our duty to God. Speaking to His disciples—who were neither slaves nor rich slave-holders—He told them that, if they should succeed in their ambition to fulfil their Divine Master's Will perfectly, there could be no room for proud boasting. Though a man should keep the whole law, without failing in thought or word or deed, he could only offer his finished work to God and say humbly: "I have done my duty".

We look back in shame and regret, at our past life. It is stained with many sins, it is broken and full of holes where duties have been neglected. Even our best actions and our most inspiring words may not be as fair and pure as they appear on the surface. God cannot be deceived by outside appearance. He looks at the motive which inspired the word or the deed; and too often He sees very little love (except self-love) in the heart. But we feel that if we could only do something really great and noble we might deserve our Master's approbation, and have a right to claim a future reward. How often we hear people say: "I am afraid I am not good enough to go to heaven"—as if anyone were good enough!

There is a distinction between "wages" and a "gift", and St. Paul is careful to mark that distinction when he says: "The wages of sin is death; but the free gift of God is eternal life in Christ Jesus our Lord."—Rom. 6:23, R. V.

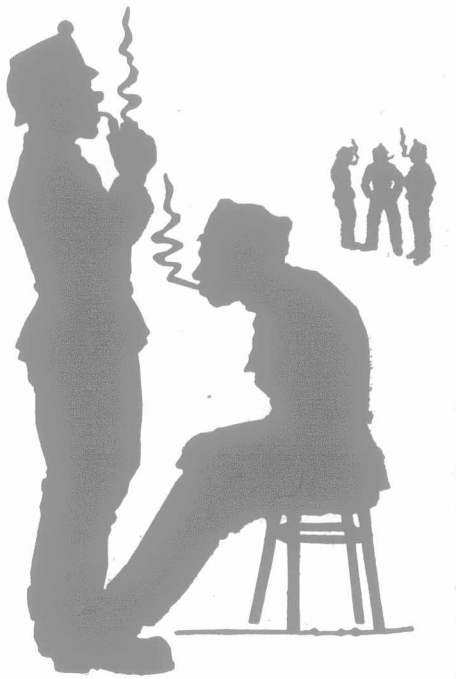
It is not in any man's power to earn eternal life. His business is to do his duty, faithfully and loyally; never imagining that by his good works he can buy that priceless gift which God's love delights to bestow, the gift which is "without price" and cannot be bought.

Now you are probably wondering why I chose as the title of this Quiet Hour that question, "Why Not?"

It is said when Nelson's famous message was sent to the British fleet: "England expects every man to do his duty!" the men showed no sign of being impressed. "Duty!" they grumbled. "We've always done it. Why not?"

I don't know whether that story is true in fact, but it is splendidly true in spirit. Those brave boys at the Front don't need to be told that Canada expects them to do their duty. What did they go to Europe for; if it was not to do their duty?

I think we sometimes get a little irritated when English people grow enthusiastic over the part Canada has played in this war. If Canada had held back, when the Empire's very life was threatened, we should have had good reason to be ashamed of our country. But why should Canada be praised and patted on the back because she simply did that which it was her duty to do? She did her duty, and is prepared to go



A Popular Pastime

Of all the soldiers in Switzerland, no matter what nationality.

on doing it, without expecting the world to admire and praise her. Why not?

When a man has done a deed of splendid courage he does not expect, nor want, the cheers of the crowd. "I have only done my duty—why not? Anybody would have done it! he declares. And he means what he says, if he is a real hero.



There are people who "play to the gallery" to use a slang term—and of course they are very disappointed if the world fails to notice and applaud their acts.

Our business in this world is not to make a great name for ourselves, it is not to win glory and admiration; but our business is to do the work our Master puts into our hands. He will not withhold His pleased "Well done!" from any faithful servant; and those who love Him would think the praises of men a poor substitute for the glad commendation of their Leader.

Duty, rather than the hope of glory, should be our guiding star. Look at those gallant Australians, who stood as calmly as if they were on parade while the troopship Ballarat was sinking rapidly beneath their feet. Death seemed to be very near, yet there was no sign of confusion or of fear. The colonel, on the bridge, called out to the men: "We're all right, boys; keep steady!" Back came the answer: "It's all right, sir; we're all right."

Those 1,400 young men did not want to die; but, if facing death was their duty just then, they would meet it like men and not like cowards. Why not? A special despatch to the Times declared that the story of that day was "one of the most stirring tales of fortitude which has ever been told, even of Australians." The men had been drilled so thoroughly that when a torpedo struck the ship every man was in his place in less than five minutes. They were calm and cheerful—ready for the call of duty—the call to live or to die.

Think of the Canadians who have gone forward to face almost certain death in many of the battles of this awful war. The noblest among them would say, if you tried to praise them: "We only did our duty. Why not?"

It is not the duty of everyone to do some startling deed of valour; but everyone is called to do his duty faithfully. That is the only really successful life—the life of duty—and it is within the reach of each of us. Are we, with patience, running the race set before us? If we are not—why not? It matters very little whether the world admires us or not; but it matters tremendously whether we are doing our Master's work, or neglecting it. Outward failure or success is a temporary matter; but failure in duty is a real disaster. In the battle of life we cannot be defeated unless we give up the fight.

When Gen. Foch was driven back and back—in September, 1914—he seemed to be defeated. But was he? Listen to his report: "My left is shaken; my centre is retreating; my right is broken; I shall attack!"—and he did. Then the enemy was forced to retreat.

Perhaps you are feeling discouraged and almost ready to give up the fight. You have failed again and again, it may be, and have lost all hope of victory. Then think of that French general calmly saying that the army is shaken, retreating, broken, therefore "I shall attack." Where can you gain courage to renew the fight? Look at that same Gen. Foch, as Mary Roberts Rinehart saw him. She writes: "Going up a steep street to where at the top stood a stone church. . . I opened the leather-covered door and went quietly in. There was no service. . . the Commander of the Armies of the North. . . was kneeling there alone. He never knew I had seen him. I left before he did."

If we trust to ourselves we are bound to fail—for our temptations are fierce and cannot be evaded—but the Source of Strength is our Father as well as our Master, our Brother and Friend as well as our King. "He giveth power to the faint; and to them that have no might He increaseth strength. . . they that wait upon the Lord shall renew their strength."

Are you waiting upon the Lord? Why not?—the way is open. The psalmist declares that the man whose strength is in the Lord of hosts shall "go from strength to strength."

"He leans on invisible angels, And Faith is his prop and his rod; The sky is his crystal cathedral, And dawn is his altar to God."

DORA FARNCOMB.

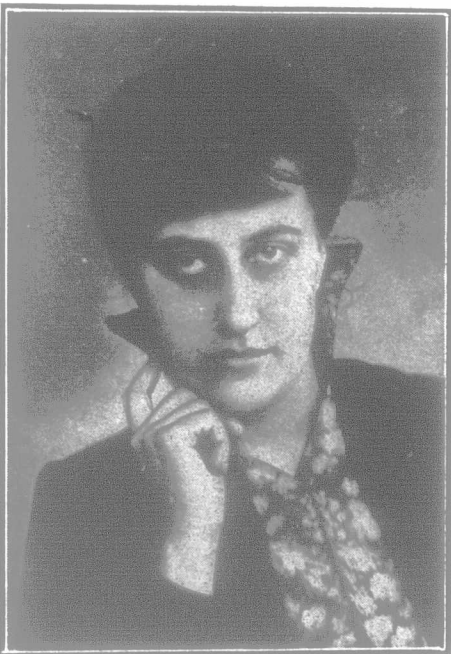
Gifts For The Needy.

Another donation of \$2.00 (from Mrs. H.) arrived this week and soon went out on its mission of good cheer.

I have been checking up my accounts for the half year, and find that during the last six months I have received gifts for the "Quiet Hour purse" amounting to \$89.55. This money has provided 85 gifts for the sick and needy. I don't say that it has reached 85 different cases of need, as some of the "shut-ins" have been more than once cheered and helped by the kindness of our readers.

I have tried to be a faithful steward of your bounty, knowing that I must give account to God Himself. Of course, I have kept a record of all money received, and also a list of the recipients.

HOPE.



The First Woman Attached to The Ministry in France.

Mlle. Jeanne Tardy, the new attaché to the French Under Secretary of Finance. Whenever the Cabinet meets Mlle. Tardy is always present to handle the details of financial work.—Underwood & Underwood.

The Windrow

In Connecticut and other parts of the United States the women are raising Belgian hares to help to add to the meat supply.

Arthur Henderson of the British War Council has estimated that 7,000,000 men have been killed so far in the war.

The United States Congress has appropriated \$750,000,000 to build cargo-ships for carrying supplies to the Allies.

All of the United States airplanes at the front will be marked on the side by the head of an Indian warrior in full war feathers.

Philippe Hebert, C. M. G., R. C. A., the noted Canadian sculptor died recently in Westmount, Montreal, at the age of 68.

Mr. George R. Sims is aghast when he thinks of the way in which the English people have corrupted or contracted old words and phrases. They have (he says) turned the stately "O, Dio mio!" into "Oh, dear me!" "God be with you" into "Good-bye," the surname of Sevenoaks into Snooks, Buffetiers into Beefeaters, "lavenderess" into "laundress," Damascus into damson, Geneva into gin Couvre Feu into Curfew, Windel's Shore into Windsor.—Australasian.

The Beaver Circle

Hay Days.

There are such jolly games to play Vacation mornings in the hay; We're pirates first in hayfield caves, A-hiding underneath the waves.

More often we pretend to be Out swimming in a stormy sea, And where the hay is raked up high That is a billow rolling by.

We raise our heads to let it pass, Almost forgetting that 'tis grass, How very, very funny, though, That ocean spray can tickle so!

Junior Beavers' Letter Box.

Dear Puck and Beavers.—This is my first letter to your charming Circle. I live on a very large farm. For pets I have four kittens and a little dog. The dog sometimes picks a fight, but the kittens always end it. My teacher's name is Miss Vivian. My letter is getting kind of long. Hoping to be a Beaver if Puck's w-p. b. is not hungry. I hope my letter will be in print.

FRANK RAWLEY.

Mitchell, R. R. No. 3.

Dear Puck and Beavers.—This is my first letter to your Circle. I live on a farm and go to school every day. My teacher's name is Miss Coveny. I have just passed into the fourth class. For pets I have an angora goat called Nora; she has two little pure white kids which we think are very pretty. Pa says Nora is a genuine rogue, she can crawl through fences, and to-day she got on the wheat. I have two rabbits called Mollie and Peter. My age is 12 years.

NICHOLAS POLLARD.

Dear Puck and Beavers.—This is my second letter to the Circle. My father has started to take the Advocate again, he couldn't do without it. For pets I have a cat and a yearling calf. I bought a setting of eggs last fall, and now I am going to sell some of them. I have a pet hen, it comes up to me and I take and feed it. We had a school fair at Unionville last fall. I like reading but not always. I will close for this time, hoping my letter will be in print.

JANET FRENCH.

R. R. No. 2, Gormley, Ont.

(Age 12.)



Little Miss Jacobson.

This little girl with her parents was captured and held for 8 days in a German submarine which sank her father's vessel, a Norwegian ship "Thor II." Her name is little Miss Jacobson, and she is six years old. So far as known she is the first girl who ever lived on board a fighting submarine while it was on a war cruise. Underwood & Underwood.

Dear Puck and Beavers.—This is my first letter to your Circle. My brother takes the Advocate, and I always read the letters. I have read a few books, some are "Jack the Giant Killer," "Nelson's Graded Stories," and others. I live on a farm of one hundred and twenty-five acres. I have two brothers, their names are Sandie and Clarence. For pets I have two calves, their names are Jim and Black Beauty, and a dog named Wallace. I will close with a riddle.

Why is a Chinaman the greatest curiosity in the world? Ans.—Because

his head and tail are on the same end. FINLAY STEWART. Campbelton P. O., Ont. (Age 8, Second Class.)

Dear Puck and Beavers.—This is my first letter to your charming Circle. My father has taken "The Farmer's Advocate" this year. I have a half a mile to go to school, I go to school S. S. No. 5 North Easthope. My teacher's name is Miss Grace Master. I like her fine. I have three brothers. We have one hundred and fifty acres of land. We are thinking of cementing our stable this summer. We are milking six cows. As my letter is getting long I will close with a few riddles.

What time is it when the clock strikes thirteen? Ans.—Time to get it fixed. When is a rock not a rock? Ans.—When it is a shamrock.

VIOLA E. SCHMIDT.

R. R. 3, New Hamburg, Ont.

Dear Puck and Beavers.—This is my second letter to your Circle, and I hope to see it in print. I have a brother in France doing his bit. I go to school every day, and have a mile and quarter to go. For pets I have a calf called Betsy and a cat called Topsy, a sheep named Dimple, and a dog called Bounce. I would like some girl my own age (10) to write to me. I guess I will close as my letter is getting long. Your friend.

ELSIE BARTON.

Widdifield Sta., Ont.

Dear Puck and Beavers.—This is my first letter to your charming Circle. For pets I have a Collie dog. He is not cross. He is all black with a white spot on his neck. I also have some kittens. We used to have a Collie dog, and he was shot a year ago last fall. So we got another one. When we hold a piece of bread out and tell him to speak he will bark. I am ten years of age. I am in the junior second class at school. We have head and foot in our class. I am generally head, but I am not to-day. There are five scholars in my class at school. I have three sisters and two brothers. We have a mile and a half to go to school. I go to school every day I can. Our teacher's name is Mr. Lucas. Well, as my letter is getting long I will close with some riddles. Wishing the Beavers every success.

What three words did Adam use when he introduced himself to Eve which read backwards and forwards the same? Ans.—Madam I'm Adam.

Who was the fastest runner in the world? Ans.—Adam, because he was first in the human race.

What did Adam first set in the garden of Eden? Ans.—His foot.

When is a wall like a fish? Ans.—When it is scaled.

What is the best day for making pancakes? Ans.—Fri-day.

There is something odd about the way a horse eats. What is it? Ans.—He eats best when he hasn't a bit in his mouth.

Watford, Ont. MAGGIE MACLEAN.

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 for questions to appear.]

Hot-Weather Notes.

During hot weather omit from the diet all fatty foods, as far as possible. Fat meat, suet puddings, oatmeal, buckwheat and cornmeal are all heating; so also is ice-cream, so it is a mistake to take it to cool off on a hot day. It cools for a few moments, but, on account of the fat in the cream, heats later on. Water-ice and sherbet are much better cooling agents, and if well made are quite as palatable. . . Drink a great deal of cold water, or cooling fruit-drinks in hot weather, and if ice is used do not put it in the drink as it may not be pure. Cool the liquid previous to using by putting the pitcher containing it in a pan and packing the chopped ice about it. . . Do not take cold baths in hot weather; they contract the skin and make one warmer afterwards. Take warm baths, but do not stay in the water too long or the effect may be weakening. The temperature should be equal to that of



the body. A bath such as this taken every night before going to bed will be found very refreshing and beneficial to the health. If tonic effects are needed, scrub the body well with coarse salt. . . . Lastly, if farm folk could take two or three hours' sleep during the hottest part of the day, making up the time lost in longer mornings and evenings, the result, both to health and work would be better.

#### A Change for Breakfast.

Cold boiled rice, with or without currants or raisins, and served with cream and sugar, makes a delightful change from the cereals on warm summer mornings.

#### Economical Hints.

Don't waste a scrap of anything. Use up every spoonful of left-over food somehow. Bones if put in cold water then boiled slowly make delicious soup. Every atom of old bread may be made into pudding, bread-sauce or pancakes; left-over porridge may be added to muffins or pancakes, or boiled over again in porridge; from skim-milk may be made cottage cheese, which is at once nourishing and delicious. So the long lists go. And don't forget that a fireless cooker is a great saving on fuel.

#### Fruit.

Fruit that is to be cooked should be just ripe, or slightly under-ripe, especially that used for jelly or jam, as the jellying properties vanish as the fruit grows very ripe. People who suffer from eating raw fruit should leave it altogether alone or take it in very small quantities. For most people, however, it is very beneficial, as it contains mineral substances useful to the body.

#### Eggs.

Eggs that are to be kept any length of time should never be washed, as that dissolves a protective, gelatinous coating that covers the outside of the egg. It is stated that thousands of dozens of eggs spoil every year in cold storage because those who sold them took pains to wash them first.

### Therapeutic Value of Fruits and Vegetables.

BY MARY E. STICKNEY.

"Look to your health; and if you have it, praise God and value it next to a good conscience: for health is the second blessing that mortals are capable of—a blessing that money cannot buy."—Isaac Walton.

In the wonderful plan of Nature, fruits and vegetables perform many beneficent offices for humankind, stimulating appetite by pleasing both eye and palate, nourishing the body and at the same time cleansing it from clogging accumulations, providing vitamins, now acknowledged to be indispensable in maintaining health, and, of not less importance, offering iron and other mineral salts in a form to be most readily assimilated.

Mineral matters form from five to six per cent. of the body by weight, and while belonging chiefly to bones and teeth are present in the other tissues, and in solution in the various fluids. And so the proper proportion of mineral salts in the diet is of paramount importance.

The healthfulness of fruits and vegetables has been so demonstrated that many of them are believed to have true medicinal properties; and while by uncompromising disciples of materia medica these claims may not always be recognized, and while none of us, in case of serious disease, would care to trust entirely to a fruit or vegetable treatment, it is still interesting to run through the list and consider what virtues they are credited with.

Lemons are cooling to the blood, antiseptic and cleansing. The juice of half a lemon in a glass of cold water, without sugar, taken half an hour before breakfast, can hardly be improved upon as a mild laxative and general tonic. To break up a cold, a pint of hot lemonade drunk just before retiring is one of the best of the home remedies. Lemon juice is one of nature's beautifiers, too, bleaching and softening the skin. Mixed with buttermilk it will, in many cases, banish freckles. Lemon juice will allay the irritation caused by bites and stings of insects, while a dash of it in water makes an excellent mouth wash, pre-

venting the formation of tartar on the teeth and sweetening the breath.

Oranges act on the bowels and are rich in caloric powder. While made up mostly of sugar and water, they contain salts of high nutritive value, while the pulp is a most easily digested cellulose. A glass of orange juice can be taken with benefit by the most delicate stomach, and is especially recommended for biliousness.

The grapefruit, or pomelo, is commonly credited with a medicinal value somewhat similar to quinine, but this may be largely due to the slight bitterness in flavor. Where the fruit grows, however, and where, surely, they ought to know, you will find not a few to tell you that for spring fever, or "that tired feeling," you can take nothing better than a decoction of the pomelo. They run the fruit skin, seeds and pulp through a food grinder, covering it then with boiling water. Leaving it until it has grown cold, it is strained and the liquid taken in tumblerful doses three times a day. Considering the bitterness of it, and the heroic proportions of such dosage, there are those who might declare the cure to be worse than the disease, but many there are to give testimony to its efficacy.

Grapes, except in cases of hyperacidity, are generally beneficial, toning up the system, and cleansing in effect. The value of grapes medicinally would seem to have strong endorsement in the number of so-called Grape Cures to be found in California and other places where the fruit abounds. These sanitoriums, usually temporary camps established in the neighborhood of the vineyard, put their patients on an exclusive diet of grapes, and many cures are reported from the treatment.

The old couplet has it:

"An apple a day  
Keeps the doctor away."

and apples, holding in solution iron, sodium, and other valuable constituents, rank among the most healthful of fruits. They are effective in correcting chronic constipation, and are credited with being an ideal nerve food.

Peaches are rich in iron, and it is said that anemic people would do well to eat of them freely.

The pineapple, because of its natural ferment, is considered especially good for the digestion. It may be noted that in the booklets put out by manufacturers of gelatine, patrons are commonly warned to scald fresh pineapple before using it with their products, as otherwise the acid ferment of the fruit will digest the gelatine so that it will not harden.

Cherries of the cultivated kind, like

all acid fruits, stimulate the gastric juices and are laxative in effect, but beyond that are not credited with any curative powers. The wild cherry, however, in country districts where it abounds, is held in high esteem for its tonic properties, old-fashioned housewives making it into a cordial, known as "cherry bounce", held to be wonderfully effective in cases of general debility.

Plums have a laxative effect when fresh from the tree, but from the therapeutic viewpoint are really at their best when they have attained the prune degree. And the canny boarding-house keeper who buys prunes for their cheapness is really offering her guests one of the best things they could eat for general health. It is a food rich in caloric value, gently cleansing to the system, while it is said to be particularly good for the nerves. Eaten dry, without any cooking, prunes, like dates, are a pleasant remedy for chronic constipation.

Figs have a high nutritive value, while their seeds so encourage peristaltic action that the fruit, both fresh and dried, is commonly regarded as one of nature's best laxatives.

Where cranberries grow they are held to be good medicine for malaria and also for erysipelas. To get their best tonic value they should be eaten raw, either as a salad, or the berries should be crushed and the juice extracted.

Blackberries, made into a cordial, have long been accepted as one of the most effective remedies for allaying inflammation of the bowels and curing diarrhoea.

Perhaps the most valuable of all fruits, both as to food and therapeutic value, is the olive. The ripe, pickled olive is not only an agreeable relish, but a real repair food; its oil is much more readily assimilated than in the extracted form. No other fat, either animal or vegetable, is so easily digested as pure olive oil, for which reason it is commonly prescribed for run-down and anemic people. At the same time it is one of the most effective of the mild laxatives. Taken in tablespoonful doses before meals, it aids digestion and builds up the system. In cases where the taste is objectionable, a little orange or lemon juice taken with it renders it wholly palatable.

Among the colored people of the South there is a prevalent belief that watermelons are a cure for yellow fever and also for epilepsy. Whether or no a person suffering from either of those dread ailments could pin faith to such mild medicine, it must be said that both watermelons and canteloupes, when perfectly ripened, are most healthful, cooling the blood and cleansing the system.

Practitioners of vegetarian schools of healing have great faith in tomatoes

as medicine for biliousness and all forms of liver trouble, this because of the large percentage of vegetable calomel the fruit is credited with. In their diet lists it is commonly advised that the tomatoes be eaten raw, to get their best therapeutic effects.

Potatoes contain all of the inorganic elements of the body except fluorine, while their potassium salts are good for nerve and muscle. Doctors advise rheumatic patients to make a point of eating the jackets of their baked potatoes, to miss none of the potassium salts, which, being alkaline, serve in a measure to counteract uric acid conditions. To eat generously of potatoes is also said to have a beneficial effect upon the growth of the hair; and, though why this should be so may not appear altogether clear, the beautiful hair so common among Irish girls may, perhaps, be taken as confirmation of the theory.

Beets are recommended for making new blood and also as a nerve tonic, while the ancient Greeks held them to be an ideal food for brain workers.

Cauliflower contains the highest percentage of phosphorus of any of the vegetables, and so might be considered especially good for growing children and literary people.

Rhubarb, or pie-plant, when properly cooked, is a good laxative, while its agreeable acid serves as a pleasant stimulant to the jaded appetite in spring time.

Lettuce is considered a sure remedy for nervousness and insomnia; while celery, either raw or cooked, is held to be even better for both those ailments.

Asparagus is believed to be good for the kidneys, while Charles Lamb even extolled it for possessing soothing properties, declaring that it "inspired gentle thoughts."

Cucumbers are rich in phosphorus and potassium salts and, to let them figure largely in the diet is said to have a beautifying effect upon the complexion. But carrots rank even higher with the beauty specialists. No fruit or vegetable is held to be so potent as the carrot for clearing a muddy complexion, particularly when eaten raw.

The watercress, as a salad green, deserves to be more popular than it is. Containing a considerable percentage of sulphur, it tends to purify the blood; the sulphur in this vegetable form is much more readily assimilated by the human system than any decoction made up of the mineral.

Dandelion greens, carrying a high percentage of iron, may serve as a spring-time tonic of far more real value than most of the expensive preparations sold in bottles, while the tender young leaves, served as a salad, are even more healthful.



These are the first lot of a of 200 aeroplanes that are being built in the plant of the Canadian Aero. Co. International Film Service.

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For one "all run down", no vegetable may be more highly recommended than spinach. Not only does it stand at the head in respect to percentage of iron, but it has a most beneficial effect upon both bowels and kidneys. In proverbs spinach is referred to as "the broom of the stomach", and certainly nothing that grows is held to be more effective in sweeping the system of clogging accumulations that make for auto-intoxication and its long train of ills.

The onion, too often thrown into the discard of vulgar viands by the ultra fine, holds a high place in therapeutic value, acting as a stimulant upon the digestive juices, exerting a laxative effect upon the bowels, and serving in a general way to cleanse and purify the whole system. In olden times, when the good housewife doctored the everyday ills of her household as a matter of course, she always turned to the onion barrel as a first aid in most of the family ills.

It must be admitted that many of these claims are hardly to be classed as proven truths: but it cannot be questioned that a well-chosen diet, and especially one with plenty of the newly recognized vitamins, is the doctor's best ally, both in the prevention and cure of disease. It is now believed that pellagra, the scourge of Italy, is a result of eating polenta made from musty meal; the dread beri-beri is caused by a diet of rice which has been robbed of its vitamins through the process of polishing; and scurvy is a common result of living upon salted meats without the saving matters which might be contributed by fruits and vegetables. We all know that to eat of certain things affects us in ways which other viands do not; some foods, we say, are good for us, others we learn to leave alone; and ever and always health is with us in the measure of what we may, or may not, put into our stomachs. And while it may be that fruits and vegetables, for the most part, work to heal disease in the way Mrs. Muldoon advised for getting out of trouble—to "put a stop to it before it happens"—their mission is preventive more than curative, yet that does not in the least detract from their health-contributing function in the diet, nor need it altogether destroy the faith to which many of us hold, that in not a few cases they have real curative value. They should hold a prominent place in natural, wholesome dietaries, the world over.—American Cookery.

Oh Canada.

Oh Canada! beloved country thou,  
Hope's holy wreath adorning thy young brow;  
Thine arm the sword hath taken  
To guard the faith of Christ,  
Thy fealty unshaken  
With valor keepeth tryst.  
Oh Lord of Hosts! on Thee we call,  
Protect our inland fields, our seaward wall.

Our annals glow with deeds of mighty men  
Who conquered fate undaunted one to ten;  
Alone, true hero-hearted  
They kept our flag outflung  
When all save honor parted  
On glorious fields unsung.  
Oh Lord of Hosts! may we recall  
Their valorous deeds, and like them  
stand or fall.

In this great West where Destiny awaits,  
Two mighty oceans front her seaward gates;

May loyalty and honor  
Hold all her marts within,  
Her skies that shine upon her  
Know all her myriads' kin.  
O Lord of Hosts! from these our coasts  
Drive out all sordid greeds, all foolish boasts.

May love revered of altar and of throne  
Join these our hearts for truth to stand alone;

Our laws from their pure fountains  
Their liberties prolong,  
Till round our lakes and mountains  
Fades out the world's old wrong.  
Oh Lord of Hosts! to Thee we cling  
And shout our battle song, "for Christ  
and the King."

William Wilfrid Campbell.

Brazil has officially announced that she can no longer be considered neutral in the war between Germany and the entente Allies, thus definitely placing herself on the side of the latter, though no announcement to that effect has yet been made.

The Greatest Engine Value Offered — "Z" Engine

The new Z Engine

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Absolutely the one great, convincing engine value.

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The Dollar Chain

Contributions from June 22nd to June 29th: M. McCully, St. Mary's (from S. S. No. 9, Downie, Perth, Ont.), \$4.50, "Mrs. R. S. D.," R. 3, Hagersville, \$5.

For Byron Military Hospital for Tubercular Soldiers: M. McCully, St. Mary's (from S. S. No. 9, Downie, Perth, Ont.), \$4.50; B. Geddes, R. 1, Port Elgin, \$1; R. Prior, R. 2, Southwold Station \$1; "Betty," London, \$1; "M. W.," Bailieboro, \$1; "A Friend," Sheppardton, 75 cents; "A Reader of the Advocate," St. Johns, N. B., 25 cents; "A Friend of the Cause," Southwold Stn., R. 2, \$2.

A contribution of \$1 from Mrs. Thos. H. Wright, Byron, was incorrectly credited to another subscriber, but the amount has been credited.

"A. H. C.," Watford, was credited last week with a contribution of \$1, this should have been \$2, making the total for Byron Hospital to date \$500.35.

Table with 2 columns: Description, Amount. Total to June 29: \$4,748.90

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

Current Events.

Great Britain's daily average expense for the carrying on of the war amounts to upwards of \$33,075,000.

As part of a Red Cross campaign, Miss Stinson, a young girl of nineteen, flew from Buffalo to Washington in two days, the second day's flight, from Albany to Washington, 373 miles, being her longest flight in five years of flying. In the presence of an immense crowd assembled to see her arrival, she was presented with a cheque for \$50,000 for the Red Cross Fund, by the Chairman of the Red Cross Campaign in Washington.

According to report, King Alexander of Greece will ask former Premier Venizelos to form a new cabinet.

T. P. O'Connor, the noted Irish statesman and author, has arrived in New

York, as head of the Irish Mission to the United States.

A new type of boat, claimed to be unsinkable, has been designed by an Italian naval engineer, and adopted by the Italian Ministry of Marine for a cargo boat.

It is understood that Great Britain and the United States will unite in taking measures to stop all food supplies to Germany through neutral countries.

The amount asked for in the recent Y. M. C. A. campaign for military work, \$750,000, has been over subscribed by about \$250,000, the total amount raised being \$1,002,000. This generous response to the appeal will enable the National Council of the Y. M. C. A. to greatly extend their work both at home and abroad in England and France.

News comes through Stockholm that the shortage of leather in Germany is so great that only 10 per cent. of the nation's shoes can be manufactured from this material, and the people will have to use



## PARIS GREEN

The season for potato bugs is here. Are you prepared? We have been fortunate in securing a limited supply of Paris Green. Get your order in now while it lasts. We are still in a position to handle butter and eggs. Get our prices and give us a trial shipment. We pay express charges and furnish crates on application. There are still a few tons of high-grade Cotton Seed Meal offering. Give us a trial order for groceries, buggies, wagons, implements, gasoline engines, oats and mill feeds. Prices given on application.

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20TH CENTURY PIANO—known as "Canada's Biggest Piano Value"  
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**THE SHERLOCK-MANNING PIANO CO.**  
London, Canada. (No street address necessary)

If you want a gilt-edged investment ask for a Mutual Life Endowment.

wooden shoes. The shortage of rubber for military purposes is necessitating the collection of all possible supplies; even the rubber cushions on billiard tables being confiscated.

The second contingent of American troops has arrived in France, having safely passed through the danger zone, and escaped the German submarines. They were guarded on the way by their own convoys, and carried their own supplies and equipment.

### "A Century of Dress."

(A paper given at a meeting of the Campbellsford branch of the Women's Institute by Mrs. Howard A. Clark.)

I was wholly unaware of the fact, for some time, that my name had been put down on your leaflets for an article on this subject, "A Century of Dress." I am not a member of your admirable Society, but I enjoy the meetings very much and will try to assist what little I can.

I suppose some people would be interested in all the different styles of make-ups, colors, etc., of the attire of the past century; but with this I cannot deal as I am not a centenarian and haven't had time to look up anything on the subject. Suffice it to say that the styles have been numerous; ranging from the big kilted, frilled, hooped hip-looped skirts down to the hobble and even the "harem", which was as near the man's garb as the women could get until the war came, and now we find them in regalia such as many have seemingly been longing to don for some time, that is the real "overalls". Of course, in these times it seems necessary, but at any rate it satisfies many. We have also had from the great high collars whose points punched our ears down to the low necked dresses which have often been so low as to cause comment from the men, and not much wonder; sometimes the men are not to blame for what we call vulgar remarks. In hats we've had from the "Merry Widow" down to the little toque, and from the great high feathers and ribbons which no one dare venture near, down to the painted trimmings. The colors have ranged from the brightest crimson down to the dullest greys. In footwear we've had from the heeless shoes and pumps which barely nipped on the toes up to the great long legs and high French heels of the present day. And right here I would like to quote a little from an "Empire Advertisement", which I've seen in several papers. The ad. goes on to tell how for years there has been a scarcity of rubber and the Empire builders have been trying to overcome this difficulty by producing rubber somewhere in the Empire. They have succeeded in so far that this year's crop is estimated at 75% or three-quarters of the world's supply of rubber. This makes rubber cheaper than before the war started, as then it was \$1.25 a pound, and now it is 67 cents. The Empire is asking her people to wear rubbers over the boots and rubber boots when possible and so save the leather which is so greatly needed by our armies, and is so scarce. The exact words from the ad. are "Vast quantities of leather are absolutely necessary for the army and the scarcity is growing. Every pair of shoes we save helps to ease the situation and so serves the Empire to which we owe this welcome cheapness of rubbers." This being the facts it is hard to think there are women, and women who think they are very patriotic, wearing these great long legs almost to the knees and the great high heels which are absolutely unnecessary and the heels very harmful.

Really sensible and good people do not care one rap for the styles as they always dress neat and clean and pay no attention to others, although in these days of such low necks, tight skirts and ankle-breaking footwear it is hard not to pass remarks or at least to think them. Our little rhyme says:

Costly thy habit as thy purse can buy,  
But not expressed in fancy, rich, not gaudy;  
For the apparel oft proclaims the man.

Of course the first line of this means to buy such apparel as we can pay for; not to have rich, flighty clothing and plenty of it which is unpaid for; also such clothing that we will have sufficient money for proper nourishment and

shelter. I have actually known people who would have both starved and frozen in the winter had it not been for the help they received from others, and yet those same people always had the very best and latest style of good clothes. This looks like the height of folly. Why not have clothing in accordance with the other things which we must have; and let our underclothing correspond with the outer clothing. Here is a little which I will quote from the Farmer's Advocate bearing on this—"A friend of mine once told me that when she was nursing in the Toronto General Hospital many accident 'cases' were brought in whose outer clothing was very showy and even expensive, but that did not prove that the underclothing could bear inspection. Often it was found that a woman dressed in silk, with handsome feathers in her hat, had only filthy rags beneath the outer finery. But a true 'King's Daughter'—one who has the beautiful refinement of character which proves her to be a 'real princess'—may be dressed very simply and plainly on the outside; but her inner garments will be fresh, and as dainty as she can afford. Some people are only concerned about their appearance in the sight of men. A refined woman shrinks from the vulgarity of wearing soiled and ragged underclothing, concealed by showy finery." (By the way these people are generally the ones who never sweep under the beds.)

When one is clean and tidy what does it matter whether their clothing be of the poorest cotton cut in the oldest style or of silk and purple cut in the newest style? Let us remember that "fine feathers do not make the bird."

Look at the last line of our rhyme, "For the apparel oft proclaims the man." I believe it always proclaims the man. If we see people dressed slovenly and dirty in silk or print, it matters not which, we all conclude that they are as their clothing. Again if we see them neat and clean we think that they are the same about other things. People had the plea when the great full skirts were the style, if they didn't wear them and thereby hinder the manufacturing of so much goods that so many would be thrown out of employment and therefore 'twas best to wear them and also to have at least one new outfit every season. Perhaps thousands would have been thrown out of work in that branch, but there is other work more healthful and better, needing laborers. Take the farm for example. It is a very hard thing to get help of any kind, and when you do sometimes you would be as well without it. Why is it at all necessary for women to have a new hat, dress and whole outfit every season or oftener? Once again I will quote a little from my old friend "The Farmer's Advocate": "I saw, in an American fashion magazine—rightly called "Vanity Fair"—advertisements of fur coats for ladies, which ranged from eight thousand to seventeen thousand dollars each! (I am writing out the figures, for fear you might think there was a printer's error and that thousands had been put down in mistake for hundreds). Are there women in these days of terrible need, who will squander such sums for their personal adornment? How God must pity them! Perhaps he is pitying us too for our selfish hard-heartedness". Is this keeping up with the styles, or trying to, not a pack of nonsense and really wicked, especially in these strenuous times when every cent is needed by the Empire? Besides this it is doing and has done a great deal of harm in many ways. For example, there are people who cannot afford to dress as some of the supposed wealthier people do, and when they don't the others do not recognize them. They even look at them, when they look their way at all, as though they were beneath them. The poorer person generally feels this, and so is kept away from church or whatever meeting it may be. Surely it is wickedness to be the means of keeping anyone away from church or any other helpful meeting. Again, among the richly dressed themselves there is sinning, as many of them go to church and elsewhere to exhibit their new attire and they sit and think about this and compare clothing instead of listening to the sermon. There are also people who would like to attend to the sermon or whatever, but they see such hideous head gear and dress that they cannot help but look at them and pity them and so lose the main thing.

Let, therefore, all dress neatly and clean but not extravagantly remembering

that, "God looketh not on the outward appearance but on the heart", and also the Bible says, "Owe no man anything," and so let us pay for our first fine outfit before we purchase the second one. Again the Bible says, "It is good not to eat flesh, drink wine, or to do anything whereby my brother stumbleth." When we truly remember these things we may use the extra money for the advancement of good works in this world, remembering that we are only God's stewards. Hoping enough and not too much has been said let us try to remember our little rhyme and all that it stands for:

Costly thy habit as thy purse can buy,  
But not expressed in fancy, rich, not gaudy;  
For the apparel oft proclaims the man.

### The Dream House.

The wedding was in chrysanthemum time, and the yellow bloom seemed augury of golden success. At the very last the bride, cheeks aflame and eyes sparkling, whispered to her mother:

"It won't be long. Dick can do anything he sets himself to. In three years—maybe in two—I'll be writing, 'Our house is begun, and we are nearly ready for you and father to come and live with us. You had better start packing, so you won't be hurried.'"

It was easy to see where Jenny had got her bump of hope. The mother's eyes were as bright as the daughter's, and her thin cheek nearly as pink, while she said, under her breath, "Two years won't seem so long with the house standing at the end of the way."

"They will just fly!" declared Jenny, her fingers caressing the golden blossom she held.

As the wagon turned into the highroad, bearing the bride and bridegroom to the depot on their way to Kansas, Jenny's father privately reflected that at least five or six winters would pass before "mother" would need to think about packing. But mother's eyes were still big with hope when she went indoors to help the neighbor girls wrap up wedding-cake to dream on.

There is no such thing as luck, it is said. A man falls down or wins out by the measure of his fight. But when a half-hundred horses are grazing under like conditions, and it is the poor fellow's horse that puts a foot into a prairie-dog hole and must be shot just about second-plowing time—

Jenny Gray did not try to solve a problem so abstruse. Their first spring in Kansas, when Dick told her about Ladybird's fate, she put her arm round her husband's neck and said:

"We'll get along all right without poor Ladybird because, you see, we've got the mule left, and the cow, and the hogs—and ourselves."

But after Dick had gone to work, his wife's straight little scarlet mouth drooped and she looked out the kitchen window, eastward, through a veil of tears. The old people were back there, waiting, hoping, and now the house could not be begun in the fall.

Jenny did not write home about Ladybird's fate. She could not bear to. In her effort to keep her own discouragement out of the weekly letter, she painted the future a rosier gold than she usually did. It was in this letter that she laid the foundation of the house.

"The cellar must be deep enough to keep the canned fruit from freezing in any weather," she wrote her mother, "and of course, the cellar steps will be easy, to make up for the extra one or two we'll have to climb because of the cellar being so deep."

In the period of sickening despair after the hogs died, Jenny's letters built the kitchen and dining-room. It was the same way when the cow hung herself in a barbed-wire fence. The messages that went back east that spring were positively glowing. By that time the house had got as far as the living-room, and the careful construction of that apartment filled the summer correspondence.

During the hard fifth winter, when they were doing without meat and butter to pay for a new mule, the old one having been killed in a cyclone, Jenny began to construct the second story of the house. "Your room is up-stairs, front," she wrote to her mother, "with two big south windows, and a door into my room. There is a fireplace in your room,—the only one in the house,—so you can sit and



toast your feet before going to bed. Don't forget to bring the little patch-work cushion for your footstool."

Her mother's judgment always agreed with Jenny's own. Early in the fifth spring the older woman wrote, replying to a vital question:

"Yes, leave the glass in the front door, so that we can peek when the door-bells ring, and see when the visitors are dress-ups in time to slip white aprons over our gingham before letting them in. I think you are right, too, about not putting on the front porch at first, and waiting until you are able to make it wide."

In the sixth spring, after Jenny's March letters had finished painting the house white, it stood glimmering softly before her tired eyes in the scented dusk of an April day, when Dick came in and said, suddenly:

"Jenny, if the crop is below the average this year I can't turn another wheel."

For the first time doubt came to the girl. What if they should never be able to send for the old folks? Would the naked truth have been best from the beginning? Would it be best now?

She toiled a whole sleepless night over a letter of revelation, and the next morning copied it over three times. But she could not send it. She visualized too keenly the arrival of the letter at the sagging house back there in the "penny-rile." The carrier would stop for a talk, as usual, mother meanwhile chafing at the delay in reading the precious news she was always expecting, her eyes wide with hope, her mouth trembling. Then father would read the letter aloud—and the ensuing silence in the low room would be broken only by the falling apart of the logs in the fireplace. The coming of night would find the old couple still sitting there in silent despair.

Maybe that year would bring a wonderful golden harvest. They might be able to build the house right away after the corn was sold, and send for the old people next year, after all. So passionate was hope that Jenny believed.

"Dear mother," she wrote after she had destroyed the letter of revelation, "we won't build this year, after all, but when we do build we are going to build right. The front porch really ought to be a foot wider than our estimate, if there's to be room for a four-shelf flower-stand, and then a side porch is almost a necessity for sunning pillows."

That year there was drought of unprecedented length. In September Dick came in and blurted out, desperately, "Well, Jenny, we're done! I'm beaten! That's all!"

Jenny pulled Dick's head down until it rested on her shoulder, and they cried together. Then suddenly she laughed the old laugh, and said:

"Dick, I've just thought how much our worldly possessions were like the Ten Little Niggers in the nursery jingle:

"Ten little niggers sittin' in a line, Lightnin' struck one and then there were nine,

and on to the tragic end, when there was left only

"One little nigger sittin' in the sun, Crab caught him by the toe and then there was none."

Dick lifted his head and shook the curly forelock out of his eyes in his boyish way.

"Girlie," he said, "we'll win yet! A man who couldn't win with a wife like you isn't fit to live. To-morrow I'm going in to town and try for a job with a farm-machine firm. I know I can sell machinery enough to keep us from starving while we are getting on our feet again. The road to success will be longer, that's all. We will arrive some day."

Jenny thought Dick's plan fine. She said so, and saw him off on the ride to Wichita with a smiling mouth. But she did not write home that day. She sent a picture post-card instead. The dream-house was trembling.

Dick came back full of enthusiasm. He had secured a job with the farm-machinery people. The sixty-dollar salary would pay board for the two and taxes on the land. In a year or two maybe he would get a raise; then they could begin to put by a little—in five years or so they would have enough to stock the little ranch and begin all over again.

But when the next letter-writing day came round, Jenny sent another picture postal home. In five years maybe they could save enough to "begin all over again."

That would men ten—more than ten—years before they could hope to commence building; by that time it would be too late. The dream-house was fallen.

Settled in the Wichita boarding-house Jenny Gray forced her hand to pen the letter that might be no longer delayed—the cruel, naked truth. Every word she set down stabbed her.

The response to the letter of revelation, which came duly, stabbed deeper. The effort the old people made to look on the bright side was piteous.

All that fall, when Jenny sat sewing in her room, there came to her through the open window the sound of hammer-blows falling on a house that was building across the street. The new house was of the type the dream-house had been, and sometimes Jenny could not bear the sound of the busy hammers; she would close the window and run the sewing-machine fast to keep from hearing.

In late winter came a bit of sunshine.

"Dear child," wrote her mother, "we have made up our minds to come to see you. The year has been more prosperous than we expected, and we have the money for the tickets and a week's keep at the boarding-house. I can't let my girl stay away out there without seeing her mother any longer. If nothing unforeseen takes place, you may begin to look for us when the trees bud."

Kansas bloomed early. The first day of April the one tree in the yard of the new house across the street showed a tender green in the top branches. The tiny lawn had been turfed, and already it was a green velvet rug. Passers-by invariably noted the neat, complete appearance of the place, but a childish pang came to Jenny every time she saw it. It was so like her dear dream-house. Jenny passionately hoped her mother would not notice the new house during the coming visit—it would hurt so.

But the very day the old people arrived from Kentucky, after luncheon, when Dick had taken her father to see the "store," Jenny, who was sitting with her mother on the boarding-house porch, felt her heart sink. Her mother was looking long and interestedly across the street.

"Child," the older woman said, "that house over there seems sort of familiar. Where have I seen such a house before?"

Jenny could not speak because of the lump in her throat, but her mother went on:

"Why, it's got two big south windows in the upper chamber, and a wide front porch—an extra wide front porch, I'd call it,—considerable side porch—all latticed in—and a glass front door, and it's painted pure white, with green shutters. Why, it's for all the world like the house you were going to put up if things hadn't been so dead against Dick! Now I call that house just as near perfect as good lumber and good sense can make a house. I'd love dearly to walk through it!"

Jenny changed the subject. But the next morning, after breakfast, when Dick and father came out on the front porch of the boarding-house to set out on the down-town walk, mother again expressed her wish to see the inside of the new house across the street. Dick looked at his watch.

"I've got twenty minutes' margin," he said. "I see a workman or two over there; there's no objection to our going through the house right now."

Jenny had no adequate excuse, and followed the others across the car-tracks and through the gate.

The house was all but finished. The two workmen lingered over the last touches. As Jenny walked behind the others through the seven rooms, a strange excitement clutched her. The new house was not like the dream-house. It was the dream-house come true! As one entranced, she lingered in the tiny back hall, looking at the ingeniously concealed entrance to the cellarway which she had planned that loneliest winter out there on the ranch. She heard her father call from the front of the house as from a great distance. Then, blinded by tears for the dear might-have-been, she took her slow way toward the little living-room, where the others were waiting for her.

"Pretty nice house, ain't it, girl?" Jenny's father's voice was strangely hoarse. "Roomy and neat, eh? Think you could get ready to move in next week?"

Jenny's eyes followed the lines of writing on the paper which her father handed her, but she did not in the least

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Herd headed by Gainford Marquis (Imp.), undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915 and 1916. Can supply cattle, both sexes, at all times.

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grasp the meaning of it. Her mother's words were enlightening:

"We wrote that the year had been more prosperous than we expected, but we didn't say how much more. We trusted to luck that you wouldn't read in the papers about the new Western Kentucky and Indiana Railroad that just had to have a slice of the old farm to be able to bridge Green River at an easy place. It was your father's idea to build the house unknown to you, and we were perfectly sure of pleasing you, because we had your plans all complete in the letters you had sent home. We knew to the day when the house'd be finished, so we timed our trip accordingly. Your father built in town because he found out from the head of the farm-machinery firm that Dick has got no business going back to farming, because of his having such unusual talent for selling farm machinery. His salary'll be going up peg by peg after a little."

The men left the two women to cry it out together.

"Mother," said Jenny, after a while, "have you ever forgiven me for hiding bad news from you and letting you go on thinking we'd be able to build soon, until at last I had to write you the heart-breaking facts?"

Mother laughed. Then she said, a little gravely:

"Well, to tell the truth, I knew about the discouragements every time they came to you—I read them in the extra gilding you'd always put in your next letter. But I never let on to you that I knew. I believed things'd change for the better before long, and I was glad you could feel hopeful. A hopeful heart is the best gift a fairy godmother ever lays in a woman-child's cradle. I've been thankful for mine."—T. D. PENDLETON, in "The Youth's Companion."

### The High Cost of Living.

EDITOR "THE FARMER'S ADVOCATE": We all know that the high cost of living is becoming a very serious problem, and we all ought to do our utmost in every way to better the situation.

After reading an article on the above subject in "The Farmer's Advocate" of April 19th, I was impressed by the way it read. It would be a crashing pity if the extravagance of the mothers, wives and daughters of our land were at the bottom of the high cost of living. We know some could be more economical than they are.

Our friend does not mention the habits of extravagance indulged in by some fathers, husbands and sons. I think you will all agree with me on the bread question, when flour is \$7.00 a bag, that it would be impossible to clear four to five cents on every one and one-half pound load of bread by making our own.

If I am not mistaken you will find in the country as many little girls going to school barefoot as there are boys. As to the girls getting a little toilet material, it would not cost one-quarter as much as it does for the gentlemen to go into the barbers every day or so to get trimmed up, saying nothing of the tobacco and cigars they indulge in.

We must remember that "The Farmer's Advocate" is mostly taken by the farmers, and is read by the farmer's wives and daughters also. I can truly say that the mothers and daughters are doing their bit, when they are out both mornings and evenings milking and working in the fields to help produce so that the high cost of living will be lessened in the nearest future possible.

I wonder if we remember the quotation from Burns:





## MAIL CONTRACT.

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa until Noon, on Friday, the 10th day of August, 1917, for the conveyance of His Majesty's mails, on a proposed Contract for four years, six times per week over Thorndale No. 4 Rural Route, from the 1st of October, 1917.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Offices of Thorndale, Belton and St. Mary's, and at the office of the Post Office Inspector, London.

G. C. ANDERSON,  
Superintendent.

Post Office Department, Canada, Mail Service  
Branch, Ottawa, 29th June, 1917.



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

A SNAP-FOR QUICK SALE; TOM AND FOUR hens; imported Bourbon Red Turkeys; White Leghorn hens, \$1.00 each; Fox Terrier and Deer Hound puppies. John Annesser, Tilbury, Ont.

RINGLET BARRED ROCKS—PUREBRED, trap-nested, heavy winter layers, beauty and utility combined; setting \$1.50; 100% fertility guaranteed. Book order now. Particulars, F. Coldham, Barriefield, Kingston, Ont.

## Live Broilers

We are open to handle shipments of live spring chickens, etc., at highest market prices, according to quality. Write us for quotations.

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COLLIE PUPS—A FINE LITTER OF pedigreed Scotch Collie pups. Order early—get first choice. L. D. Willson, Aurora, Ont.

FOR SALE—PURE BRED COLLIE PUPS.  
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FOR SALE—"MAPLE VILLA" FARM, LOT 14, con. 1, Ekfrid, Middlesex Co.: 100 acres choice clay loam, 12 acres good wheat, 18 acres oats, 27 acres hay, 7 acres woods, 1 and a half acres orchard, and the balance under pasture; all wire fencing throughout. Two-story solid brick house all heated by furnace. Bank barn, silo and implement house all in good condition, with unlimited supply of water. Situated 1 mile from the village of Appin, half mile from school, rural phone and mail delivery. Proprietor retiring owing to ill health. For particulars apply to John S. McDonald, R. R. No. 4, Appin, Ont.

FARM FOR SALE, ON TOWN-LINE, between Brock and Mariposa, near Cannington. 155 acres, choice clay loam, never-failing stream, Brick dwelling, 2 story, 22x32—16x44; bank barn, 56x112, as good as new. All modern conveniences. Implement house, 22x100. A rare chance to get a good home and money-making farm on a leading road. H. C. Shipman, Cannington.

FOR SALE—A FEW VERY PROMISING Scotch Collie Pups, 4 months old, females only. Pure-bred. Apply Urias Cressman, R. R. No. 1, New Hamburg, Ont.

SCOTCH COLLIES FOR SALE, PRESENT offering, a number of nice puppies; also one breeding pair, not akin. George L. Bentley, St. Mary's, R. R. No. 6, Ont.

WANTED—SIX DRIVERS FOR MILK routes. Commencing wages, \$35 a month and board. W. Windbank, Walkerside Dairy, Walkerville, Ont.

## BABCOCK &amp; SONS

ESTAB. 1877. Formerly Patent Office Examiner, Master of Patent Laws. Book, full information, free. 99 St. James St., Montreal. Branches at Ottawa and Washington.

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"Ah! wad some power the giftie gie us,  
To see ourselves as ithers see us,  
It wad from mony a blunder free us, and  
foolish notion."

It behooves not only the humble mothers to wake us, but all of us, wake up and read Mr. Good's piece entitled, "The War Mongers."

A FARMER'S DAUGHTER.

## A Dinner in China.

Isabel Anderson, in The Bookman, gives the following interesting account of a dinner in Peking:

The invitations which the women of our party received to dine with Lady Na were written in black Chinese characters on a long piece of red paper. A translation was attached which stated that we were expected to arrive at five o'clock, and that dinner would be at seven. We were warned that it was not a Chinese custom to reply, but that we must appear with the invitations in our hands. As foreign women are seldom admitted to even the humbler homes of the Manchus, and as Lady Na was not only a Manchu but a personage of high rank, it was a rare privilege that was offered us by these curious invitations.

Starting off in carriages, we passed Chinese dignitaries serenely squatting in covered chairs carried by coolies, while outriders were going helter skelter before and behind them on shaggy ponies. We rattled past carts drawn by mules, and jinrikshas bearing painted Manchu ladies, and Chinese women toddling along on their tiny broken feet. Bumpity-bump over the rough street we drove, while our driver snapped his whip and gave long calls which sounded like "Liar! liar!" We went under palios and through thick-walled arches, past grey walls and pink walls, and the glorious yellow-tiled roofs of the Forbidden City.

Finally we drew up before Lady Na's house, which looked like any other on the outside—a long, grey wall with a hooded entrance gate. Inside, also, we found the usual arrangement—a walled compound enclosing many courtyards and one-storied buildings, the latter often connected by bridges or covered passageways. Entering on foot we passed through one of the courtyards and into a second, where stood the stone screen placed in every house to keep out the devil, who, according to Chinese tradition, "can only travel in a straight line."

The devil seems to give them great concern. On the corners of the roofs were little curligigs which are supposed to be useful in tossing the devil up into the air when he slides down the tiles. Along with the little tile animals, the dragon and the phoenix, which represent happiness and prosperity, comes the mysterious hen, ridden by a man. She is supposed to give the devil a peck when he comes too near. The Chinese have built lofty pagodas to propitiate the spirits of the air, but their houses are all low, lest they interfere with these gods. For a long time there was a law forbidding any structure above a certain height, in order to prevent missionaries from erecting churches with towers.

Presently we found ourselves at the entrance to a charming paved court. There were potted green plants twisted into queer shapes, and small fruit trees with bunches of crab-apples and beautiful ripening pomegranates hanging from their branches. Lotus leaves floated on an artificial pond, and bright flowers peeped at us between fantastic-shaped rocks. At this entrance Lady Na and her daughters stood waiting to greet us. They were noble Manchu ladies, and they looked like curious flowers in their long, light blue, straight gowns and short jackets, their faces whitened and rouged beyond belief, their black hair plastered down with oil and sewed together at the back, and surmounted by strange black satin topknots with flying buttresses. There were flowers in this head-dress, too, and pearl ornaments striking out at different angles. We could easily believe what we were told, that such a toilet takes several hours in the making.

The Chinese ladies who soon gathered about us were costumed quite differently from the Manchu women. Madame Tsi, for instance, was in a short embroidered pink jacket with pink trousers, and her hair was oiled and coiled at the back of her neck with many jewels; she wore

bracelets on her arms and precious stones about her neck. As a rule the Chinese and Manchu women do not associate much. These Chinese ladies all had natural feet, were educated in America and spoke English, while the Manchu ladies had little or no education. When they met us they all shook hands, but in greeting each other they slid their hands upon their knees and bowed low several times. We were escorted into a room where amahs, or maids, took our wraps, balancing themselves on their high shoes and trembling so in their excitement at seeing people from a far-off land that their mutton-fat jade earrings shook in their ears.

We were taken to the big seat of honor, made of teak-wood and marble, in the centre of which was a small table. Here we had tea for the first time—I say the first time, because we had been offered it at least five times in the different pavilions as we walked through the compound. Lady Na's daughters, who looked about her own age, were presented to us, and a small baby was also brought forward. Whether they were all her own children or not we were unable to find out, but we saw no other wives, though we were told that Chinamen or Manchus might have as many as they could afford to keep. If a man had several, they all lived in different parts of the same compound, each one keeping house by herself. An unmarried woman takes precedence over the married ones, for they say, "Perhaps some day she may be empress!"

The rooms through which we passed were all more or less alike: tables and chairs of teak-wood, a European oil painting here, a piece of Japanese embroidery there; instead of "God Bless Our Home" there were poems hung upon the walls. On the stone floors, instead of the Golden Tibet Monkey Rug, which, they say, "keeps the whole house warm," were only here and there a few garish European carpets. The house was cold, even in September, but in winter it is partially warmed by fires built under the large beds.

At last dinner was announced. The table was set for sixteen. It was quite European, with flowers and knives and forks. Course after course—wine after wine. Our hostess proposed one toast after another, saying, "I drink the glass dry with you!" This seems an appropriate moment to insert a couple of verses of what is said to be perhaps the oldest drinking song in the world—at any rate a very ancient Chinese lyric, written more than a thousand years before Christ:

The dew is heavy on the grass,  
At last the sun is set.  
Fill up, fill up the cups of jade,  
The night's before us yet

All night the dew will heavy lie  
Upon the grass and clover.  
Too soon, too soon, the dew will dry,  
Too soon the night be over!

It was rather a struggle to keep up with the conversation. One end of the table was made gay by trying to teach a Manchu girl English, while some of us passed around our menu cards for the ladies to write their names on. Some of the Chinese ladies had been given English names, such as Ida or May, while others still kept their Chinese ones—"Fairy of the Moon" and "Beloved of the Forest." Lady Na would or could not write her name. Madame Tsi assured us that she had trouble with her eyes. After dinner, to our amazement, some Chinese music was played on the pianola, while more tea and cigarettes were passed. It was all very interesting and delightful, but when we drove back to the hotel at half past nine we were so tired and it seemed so late that we wondered why the sun did not rise!

This was perhaps the most novel experience the ladies of the party had while in Peking, and it well illustrates the transition period through which the country is passing, when some Chinese still wear the "cup of tears," as they call their tiny embroidered satin shoes, while others, who have studied in America or at mission schools, are leaders in the ranks of progress. One of these latter has gone so far as to establish a daily newspaper in Chinese for her own sex. Now that the Empire has fallen and China has become a republic the palaces and gardens belonging to the great Manchus may perhaps be seen by the traveller. But at the time of our visit they were still hidden from the world, as they had been for centuries.

## Preparedness in the Home.

BY HELEN WARD BANKS.

I'll have to darn this with black silk, for I haven't a strand of brown in the house," explained Mary.

Constance laughed. "You make me think of my first visit to Fennington."

"Tell me about it; it will make the darning go easier."

"I visited my two cousins, in turn, in Fennington—it's just one long village street, about an hour's ride from the city. They are nice men, both married, and living opposite each other. One married a Golucky and the other a Forehanded."

"I remember," nodded Mary.

"Both houses are full of young people and it is hard to say which gave me the warmer welcome. But when the two visits were over, there was no question as to which house was the easier to live in."

"I'll wager it was the Golucky's."

"Wait and see. The first night I was at the Golucky's, I went to bed in the dark because Johnnie had carried the last box of matches down to his camp and had forgotten to bring it back. At breakfast, the next morning, there were but five eggs to seven people, and I had to pretend to believe that two of the family never ate eggs. In the afternoon, some people dropped in to call, and there was a scramble for the tea-tray, which had to be abandoned because the closest search could find nothing in the house more appetizing than dry soda-crackers. When, toward the end of my visit, one of the family went with me to return our calls, she had to scribble her name on my visiting-card, for, as we set out, she found her card-case quite empty."

Mary laughed.

"Then I moved across the street to the Forehanded branch," continued Constance, "and it was like dropping from a whirlpool into a quiet haven. There was a seamstress in the house calling hourly for all the things seamstresses will demand."

"Such as brown sewing-silk?" interplated Mary.

"At each call, a tidy sewing-drawer was opened and out came what was wanted. When it chanced to be the last package of hooks and eyes, or the last spool of brown sewing-silk, on a pad in the sewing-bag was written "One package hooks and eyes, No. 1, white. One spool brown sewing-silk, No. A."

"On Monday morning, Bridget came gloomily up-stairs to complain that her clean clothes were dragging in the dirt for lack of clothespins. Out from some cupboard came two dozen new clothespins, and to the shopping-list was added "Two dozen clothespins."

"It's a wonderful system," approved Mary.

"And such an easy one, once you get hold of it. In every household, there are things that are always necessary—matches, crackers, stamps, visiting-cards, sewing materials, hairpins, and a hundred other things. They don't cost any more at one time than another. The Forehandeds buy them in bulk. Before one supply is gone, another is ordered, so that there is always an unbroken package reserved. You can't tell the difference it makes."

"The difference between a whirlpool and a harbor, I imagine," Mary approved. "Hand me that scrap of paper. I'll head my shopping-list with two spools of brown silk."—McCall's Magazine.

## An Appeal for French Hospitals.

An appeal is being made by the Canadian Red Cross on July 14 for money for hospitals in France. The French hospitals are in need of more equipment and Canada is asked to help as generously as possible. Money, not goods, is desired this time.

An Irishman was suddenly struck by a golf-ball.

"Are you hurt?" asked the player.

"Why didn't you get out of the way?"

"An' why should I get out of the way?" asked Pat. "I didn't know there was any assassins round here."

"But I called 'fore'," said the player, "and when I say 'fore,' that is a sign for you to get out of the way."

"Oh, it is, is it?" said Pat. "Well, then, when I say 'foive,' it is a sign that you are going to get hit on the nose."

"Foive!"



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When You Buy Dairy Feed.

EDITOR "THE FARMER'S ADVOCATE":

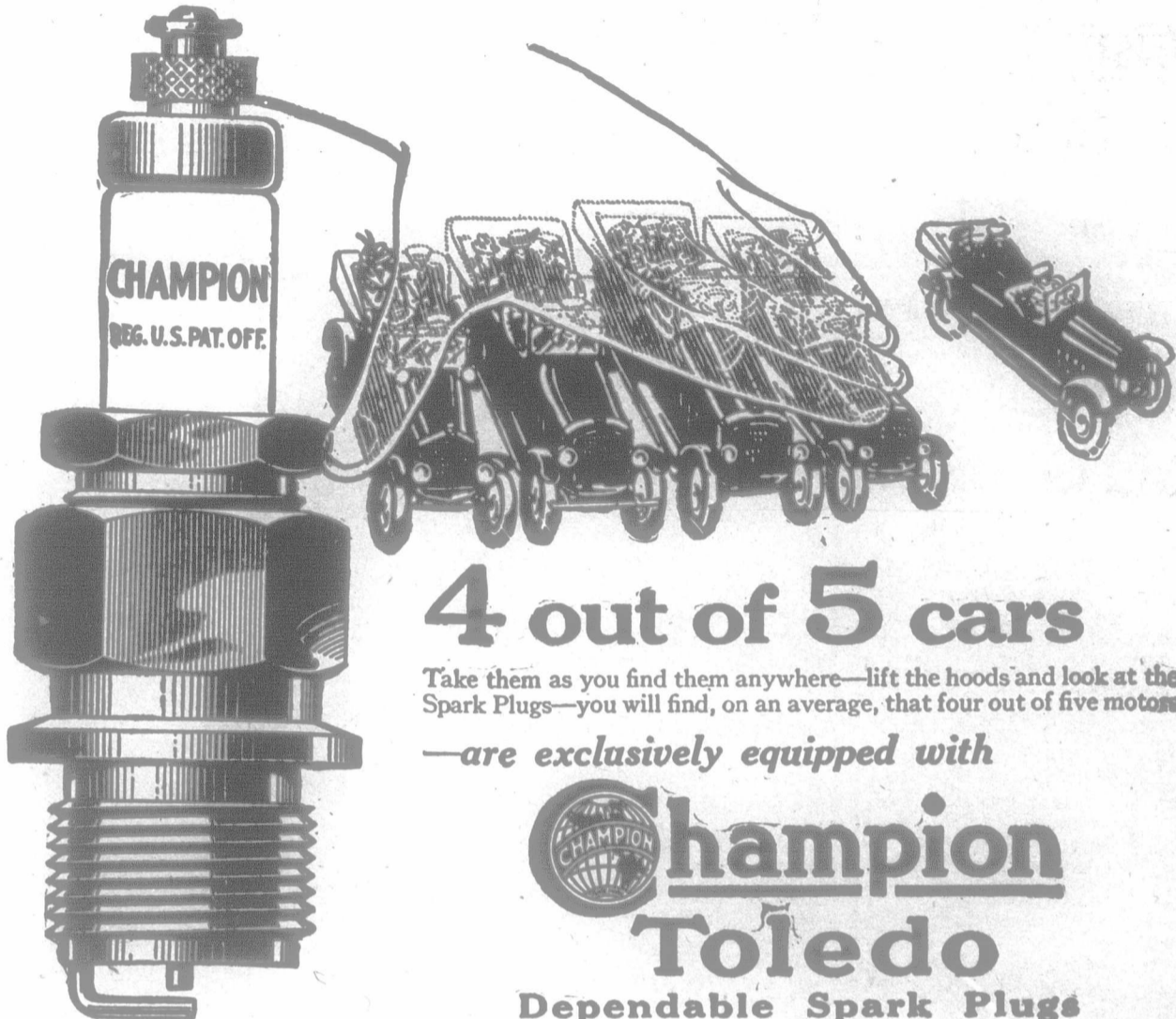
The purchase of various commercial foodstuffs, with which to balance the home-grown grains, in order to promote larger milk yields in our dairy herds is a practice that has become pretty largely established. There can be no objection to this, in fact the procedure is to be most heartily commended if a reasonable amount of intelligence is exercised. Many dairymen have found it very profitable. To others it has proved to be the proverbial millstone that has sunk their hope of net returns beneath a sea of expense accounts. Some buy because to them the large milk yield seems to be the thing. The big milk cheque obscures their vision of the big feed bill. Others, realizing that there will be but little if any profit in the transaction are influenced by what their neighbors are doing. They are acted upon by the law of suggestion, and buy simply because the other fellow does.

Perhaps ninety per cent. of our dairymen purchase their supply from a local dealer. Here is the place where the first objection ought to be registered. Not but that the dealer is a good fellow, he generally is, but he is likely to know as little about our business as we know about his. This being true, he can hardly be considered the best judge of what feeds we should buy. Acting as an outlet for the goods of the manufacturer he will, of course, be anxious to sell the different brands on the market, and naturally repeats the glowing statements of the former. Under these conditions, thousands of tons annually find their way to the farm, and are fed at a loss because they do not fulfil the real requirements. In many cases the cost is out of all proportion to their actual food value.

But suppose the materials carried by the local dealer are of high quality, there is another objection. Feed bought at retail costs too much any way. If we dairymen are to get this matter on a sane and proper basis we must consider ourselves as manufacturers, and the feed we buy as our raw materials. Who ever heard of a manufacturer buying his raw material at retail and selling his finished product at wholesale. If he did, the sheriff would be making his acquaintance in due season. Yet that is about what the dairyman as a manufacturer does. In most cases he is forced to sell his finished product wholesale. Surely it is not only his right, but a duty to reduce the high cost of production wherever possible.

Now, I have said that the local dealer is usually a good fellow. It is his business to sell all kinds of foodstuffs when and where he can. It is our business to know what particular kinds we want and how we can get them the cheapest. It would be unfair to accuse our dealer of making enormous profits from his sales. I doubt if he is in any danger of accumulating a fortune. At the same time, however, I insist that the dairyman should endeavor to buy at wholesale. There are a number of satisfactory ways of doing this. First of all, I would give the local dealer a chance. Let the dairymen in the locality co-operate in securing their supply in carload lots, tell the dealer just what they want, and pay him for the service rendered, no more. The trouble of ordering and delivering feed should not cost more than fifty cents a ton, provided, of course, that the purchasers pay cash. Otherwise the charge must be advanced to one dollar at least. However, if buying is to continue on a co-operative basis it is essential that every man pay cash even if he finds it necessary to borrow the money. It is the real key to the situation. Sometimes a co-operative cheese or creamery company will undertake the buying of feed for their patrons with satisfactory results, while there are also instances of cow-testing associations undertaking the same offices.

There are many benefits to be derived from a dairy community buying its feed direct. By keeping in close touch with market conditions themselves, farmers will soon learn that hundreds of dollars can be saved in buying when the demand is weakest and holding the feed until it is required. Buying at retail is usually done when prices are at top notch, the result of a keen demand. This is not all. The financial advantages gained will be an incentive to give more intelligent consideration to the intricate problem of feeds and feeding. Individuals who are buying their feeds together are likely to have a



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Fords, Overlands, Studebakers and Maxwells are factory equipped with Champions because exhaustive tests have proved that they insure the greatest efficiency in the performance of these motors.

A size and style of Champion has been developed to give long lived, efficient service in every type of motor—that's why Champions are the choice of over one hundred motor car manufacturers.

The asbestos lined copper gasket protecting each shoulder of the porcelain is a patented

feature that insures dependability under emergency conditions.

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Your protection is in the Champion guarantee of "Complete satisfaction to the user—Free Repair—Replacement or Money Back."

Dealers everywhere sell "Champions" for every make of Motor Car, Engine or Tractor. Look for "Champion" on the porcelain.

Champion Spark Plug Co. of Canada, Limited, Windsor, Ontario

Binder Satisfaction

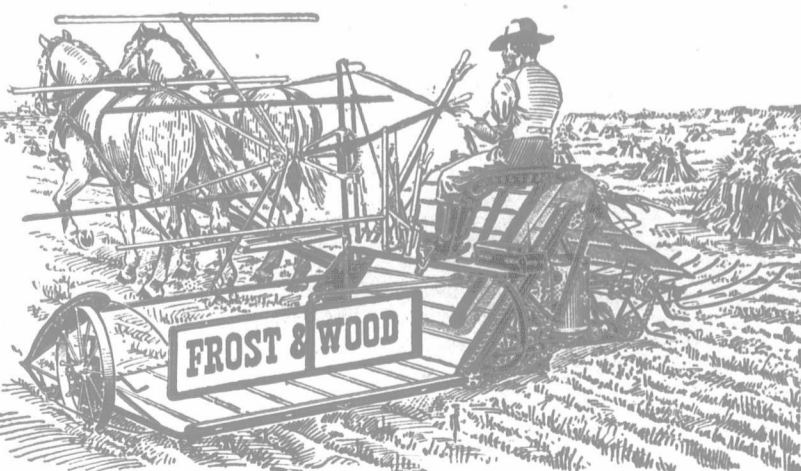
Your Binder should last you many years—it should cut any crop—it should be light in draft and easy to run. It will be all this if it's a Frost & Wood.

Just remember it's only a small part of your crop that represents your net profit. All the rest goes to pay your expenses. You must harvest every straw if you want to make a profit and do more than just make expenses.

Buy a Frost & Wood Binder and you'll be able to handle any kind of a crop—tall, short or lodged

grain. The hardest work won't discourage it.

It's easy on horses. Carefully fitted Roller Bearings in every working part insure light draft. Eccentric sprocket wheel—a Frost & Wood feature—eliminates strain on the binding attachment parts and makes "smooth" cutting.



A Frost & Wood Binder is sure cutting, sure elevating, doesn't choke or thresh the grain, is sure tying and splendidly finished. Levers are all conveniently placed, so inexperienced or "young" help can operate a Frost & Wood successfully.

Built in 5', 6', 7' and 8' sizes.

Write to-day for interesting folder to our nearest Branch or see our nearest agent.

The Frost & Wood Co., Ltd. Montreal SMITH'S FALLS St. John For Sale in Western Ontario and Western Canada by The Cockshutt Plow Co., Ltd. BRANTFORD, ONT.



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—You Help Us—  
and You Help a  
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THE FARMER'S  
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**COUPON**

THE FARMER'S ADVOCATE & HOME MAGAZINE, LONDON, ONTARIO

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Gentlemen:— new subscribers, as below, and enclose.....  
I have secured..... (State whether express, postal order, etc.)  
for \$..... to pay for same. Please give me credit for 6 months on my own  
subscription for each new subscriber secured.

New Subscriber.....  
R. R. No. .... Town.....  
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R. R. No. .... Town.....  
New Subscriber.....  
R. R. No. .... Town.....  
Signed.....  
R. R. No. .... Town..... Province.....

greater interest in what the other fellow is doing. They will want to compare notes, make suggestions or conduct experiments. The interest thus created cannot fail to yield much valuable information that will aid in cutting down costs and make the business of dairying more profitable.  
Elgin Co., Ont. J. H. MCKENNEY.

**Questions and Answers.  
Miscellaneous.**

**Succession Duty.**

A dies, leaves will. The will leaves all to his wife till her death and then divides, leaving money to certain and real estate to others. At A's death valuations value the estate for government purposes. If nothing is distributed till after the wife dies and estate accumulates, can the government at end of wife's death come in again for its share?  
W. J. C.

Ans.—Not as the statute law of Ontario stands at present; but it might be amended by the time the widow dies, and the government thereby enabled to reach further succession duties as suggested.

**Chub.**

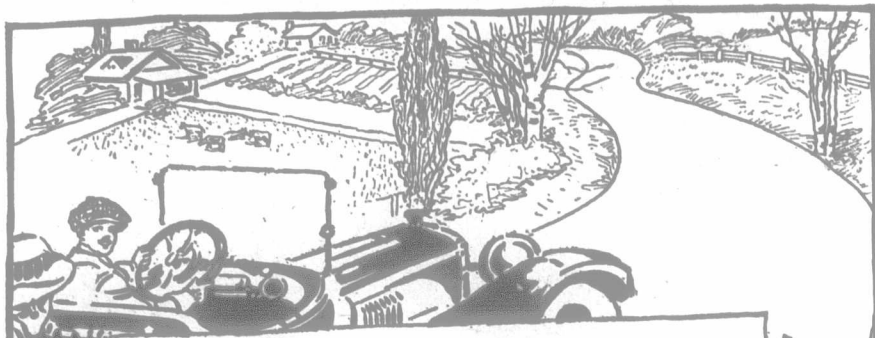
Please describe the color and habits of the common chub. There are no chub in our creek, so have no way of finding out.  
E. J.

Ans.—The chub is a fish belonging to the Cyprinid family, belonging to the same genus, as the roach and dace. It attains a length of 2 feet, and a weight of 5 to 7 lbs. It is described as tasteless and full of bones. This description from the Encyclopaedia Britannica evidently refers to the large chub of deep waters. In America the name is commonly given to smaller fish, such as the river chub. It gets its name from the head which is of inordinate size. The body is oblong, scales large, cheeks silvery, head and back a deep dusky green, the sides silvery but in summer yellow, the belly is white, the pectoral fins pale yellow, and the ventral and anal fins red, the tail is forked and of a brownish hue tinged with blue at the end. The average weight of this fish as known in our fresh water streams does not exceed half a pound, though occasionally it is caught weighing more than two pounds. It inhabits streams with sandy or clay bottoms and is found in deep holes shaded by trees or weeds. Its flesh is coarse and bony and little valued. It spawns in April and is a poor fish for the angler.

**Cement for Wall and Floor.**

How much cement will it take to build a barn basement wall 40 feet by 75 feet by 8 feet high, the wall to be 10 inches thick? I have plenty of stone to fill in the wall. Also how much cement will it take to floor the same basement? Kindly show plan of a suitable stable of such dimensions.  
E. C. A.

Ans.—This wall will require 170 cubic feet of cement and 57 cubic yards of gravel with a mixture of 1 to 9. The doors and windows, the size and number of which are not stated, would reduce the amount to the extent of their cubical dimensions. We cannot estimate how much would be replaced by the stones built into the wall. No stones should come within either surface of the wall. Such a wall should be set on footings about 1½ feet wide extending to solid ground and below the frost line. Every foot in depth of such footings would require 34 cubic feet of cement and 12¾ yards of gravel mixed in the proportion of 1 to 10. If one should be obliged to go 3 feet deep to get below the frost line in a certain district, three times the stated amount would be required. When laying a floor 4 inches thick it is customary to lay about 3½ inches of rough concrete and finish off with a coat of stronger material. The rough floor would take 97 cubic feet of cement and 32½ yards of gravel mixed in proportion of 1 to 9, and the surface coat ½-inch would require 62 cubic feet of cement and 125 cubic feet of sand mixed in the proportion of 1 to 2. One bbl. of cement contains 4 cubic feet. It would be impossible to show illustrations of stables here, but a number of plans were illustrated in the issue of February 8, 1917, from which some suggestions might be gathered.



**The Road of the Future  
should be  
The Road of To-day**

*"A farmer who cannot, sometime in nine open months, waste half a day taking his family to a picnic in his own wasteful automobile, is himself largely wasted. We do not want life so ordered that nobody can throw anything away."*

SATURDAY EVENING POST.

There's a lot of sound sense in this argument.

There's a kind of economy that works nothing but harm.

There is that supposed economy that says: "We cannot afford a new road—let's patch up the old one." Result, more patching next year—and more the next—until you've spent as much on repairing as it costs to build new

**Permanent Highways  
of Concrete**

Meanwhile, the farmer suffers. He cannot get that occasional "half-day for a picnic in his motor-car." And he spends more than he should have to spend on the necessary hauling of his farm produce—the bad road makes him spend in a truly wasteful manner on repairs to his wagons and in loss of time.

It's true economy to start building at once the roads that we must have sooner or later—the durable, dustless, weather-proof concrete roads that alone can make our country truly prosperous and pleasant to live in.

Our road literature sent free to all who enquire for it.

**Canada Cement Company, Limited**  
30 Herald Building, Montreal  
**"CONCRETE FOR PERMANENCE"**

**To Fertilize or Not to Fertilize**

There are two classes of farmers :

- (1) Those who fertilize.
- (2) Those who don't.

Perhaps, we might say, there is a third class and a big class, who have been thinking at long length of starting the use of fertilizers. If you are one of this class, sit down right away and send us your name and address. Our salesman will then call on you and talk the matter over. We sell

**SYDNEY BASIC SLAG**

which is the ideal fertilizer for wheat, and it costs the farmer only \$20 per ton.

**The Cross Fertilizer Co., Limited**  
Sydney, Nova Scotia

**OTTAWA LADIES COLLEGE** PERFECTLY SANITARY  
FITTED WITH EVERY  
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New Fireproof Building  
Academic work up to the first year University. Music, Art and Handicraft, Household Arts, Physical Culture, etc.  
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# WANTED Artillery Horses

Age, 6 to 9 years. Height 15.2 to 16 hands, weight 1,200 to 1,350 lbs., and 1,500 lbs. and stand 16.1 hands.

### COLORS

Any, except Light Gray, White or Light Buckskin. All horses must be sound, of good conformation, free from blemishes, and broken to harness or saddle.

Horses will be inspected as follows:

- July 5—Port Perry. 12 noon.
- July 6—Lindsay. 9.00 a. m.
- July 7—Ottawa. 10.00 a. m.



### MAIL CONTRACT

SEALED tenders, addressed to the Postmaster-General, will be received at Ottawa until noon, on Friday, the 3rd day of August, 1917, for the conveyance of His Majesty's mails, on a proposed contract for four years, six times per week, over London No. 5 Rural Route, from the 1st of October next.

Printed notices containing further information as to conditions of proposed contract may be seen and blank forms of tender may be obtained at the Post Offices of London (main office) and all sub-offices, and at the office of the Post Office Inspector, London.

G. C. ANDERSON,

Post Office Department, Canada. Superintendent. Mail Service Branch, Ottawa, 22nd June, 1917.



### MAIL CONTRACT

SEALED tenders, addressed to the Postmaster-General, will be received at Ottawa until noon, on Friday, the 3rd day of August, 1917, for the conveyance of His Majesty's mails, on a proposed contract for four years, six times per week, over Glencoe No. 4 Rural Route, from the 1st of October, 1917.

Printed notices containing further information as to conditions of proposed contract may be seen and blank forms of tender may be obtained at the Post Offices of Glencoe, Alvinston, Appin and Newbury, and at the office of the Post Office Inspector, London.

G. C. ANDERSON,

Post Office Department, Canada. Superintendent. Mail Service Branch, Ottawa, 22nd June, 1917.

### THRESHERMEN

Read This!

Best 2-inch wire-lined Suction Hose in 15-, 20-, and 25-ft. lengths. Our price, 37c. per ft.

Write for our Illustrated Catalogue "Engineer's Bargains" Also General Supplies for Farmers

Windsor Supply Co. Windsor, Ont.



## McCormick's JERSEY CREAM Sodas

Contain all the elements of a pure wholesome food at an economical price.

Artificial limbs are admitted DUTY FREE. SOLDIERS and others should get the best



### CHURCH BELLS

CHIMES AND PEALS MEMORIAL BELLS A SPECIALTY FULLY WARRANTED

McSHANE BELL FOUNDRY CO., BALTIMORE, Md., U. S. A. Chicago Office: 154 W. Randolph St. Established 1866



### Handling Manure at Macdonald College.

The practice in handling farmyard manure on the stock farm at Macdonald College might be called the "direct method". The manure is taken from the dairy stables twice daily by manure carriers and stored under cover until such time as it can be taken to the field. It does not freeze to any extent in this storage. It reaches the field within two weeks after leaving the stable so that only comparatively small storage is provided, enough to allow drawing when it is most convenient. Manure from the box stalls in the beef cattle and bull stables is removed about every two weeks, depending upon convenience, and stored in a separate pit where it is tramped, watered if necessary, and allowed to rot somewhat for a few weeks so that it will distribute better when drawn to the field. The horse manure is handled in the same way. The liquid manure from the gutters flows to a concrete tank. This is emptied by a sewer pump and used to water the horse manure and box stall manure, where it is absorbed, and at the same time it prevents undue heating in the manure while the rotting process is under way. After attempting to handle this liquid manure in various ways this has been found, under our circumstances, the most economical and very best practice. No liquid is lost and it serves a splendid purpose in keeping and even improving the other manure.

As most of the manure is made during the winter the above practice means that the bulk of it is hauled to the fields in winter as it is made. When it is possible to use spreaders they are used for hauling and the manure is spread on the fields at once. When spreaders cannot be used the sleighs take their place and the manure is spread by hand from them. Only two exceptions are made by this practice,—on steep hillsides and where the snow is so deep that it is difficult to break roads through, as happened for about three weeks during the past winter, the manure is not spread but is placed in large piles, distributed in the field so that the minimum amount of drawing will be necessary in spreading later. In no case is the manure distributed in small piles. This might be justified in late spring, when one wanted to haul as much as possible in a given time while the snow lasted, but otherwise it is wasteful and not economical of labor. Manure forms one of the biggest labor jobs on Macdonald College farm, and farm management requirements allow no practice other than the one above outlined. Moreover, it is considered to entail as little loss of fertilizing constituents as any other system that might be adopted.—Prof. H. Barton in the Agricultural Gazette.

### Pull Your Mustard.

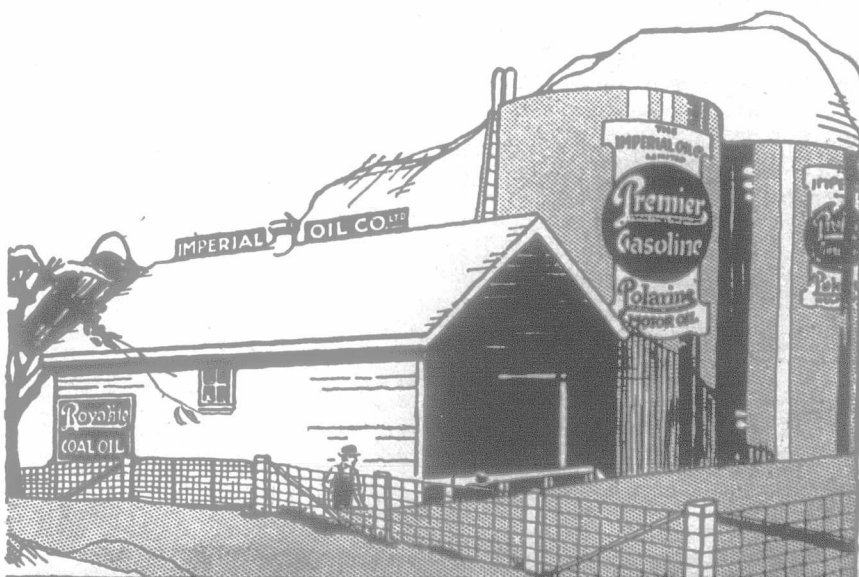
EDITOR "THE FARMER'S ADVOCATE":

You may have in your growing crops but a few stalks of wild mustard. Go and pull them now. It is easy to forget about it till the tell-tale bloom is gone and the damage done. Five minutes now will save five hours next year or five years interrupted rotation of crops later on. If you are to rid yourself of this pest, which easily detracts twenty-five per cent. from land values at the time of desired sale, pull the mustard now.

Mustard seed driven by high winds is carried with the sand to your neighbor's field. Pull it before the seed is ripened. No good farmer welcomes the autumn visit of the threshing outfit from a "mustard farm." Pull the mustard now. Aim to have yellow fields, not in late June and early July, but in late July and early August. Mustard fields are an index to careless or incompetent farming—or both. Pull the weed. If not destroyed earlier, pulling when in bloom is the safest method. Pull it now.

Mustard looks bad, acts bad, is bad, pull it before it is too late, before its occupation of your acres puts you in the class of shiftless, careless failures, of whom your neighbor may say, "He had once a good farm, but he let it go to mustard." Norfolk Co., Ont. I. E. LANGFORD.

"How's your boy Josh getting along with his studies?" "Pleasantly," replied Farmer Corn-tassel. "He don't bother 'em none."



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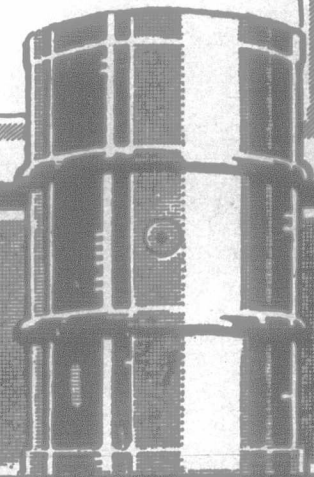
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**Questions and Answers.**

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.

**Veterinary.**

**Lame Horse.**

Horse lamed himself in the field two weeks ago. There is a sore spot both above and below the knee. He stands sound and walks almost sound, but goes very lame when trotting. H. V.

Ans.—The symptoms indicate that he hit the leg both above and below the knee with the shoe of the opposite foot. Give him complete rest and apply poultices of hot linseed meal. Change the poultice three times daily and each time before applying a fresh poultice, rub with a lotion made of 2 oz. laudanum, 1/2 oz. acetate of lead, and 10 oz. alcohol. When the soreness disappears if enlargement remains, rub a little of the following liniment well in once daily, viz.: one made of 4 drams each of iodine and iodide of potassium and 4 oz. each of alcohol and glycerine. V.

**Spinitis.**

On Sunday, June 10, there was an electric storm here. On Sunday the 17th we noticed a two-year-old colt walking in a peculiar manner. He became worse, tumbled violently and fell down, lay out straight and struggled and could not rise. We lifted him three times daily with a sling. His appetite remained. I also applied a blister behind the ears and along the spine. In a few days he began to recover and is now all right. J. G. E.

Ans.—A week elapsed between the storm and the first symptoms of trouble, hence the trouble was not lightning stroke. He suffered from inflammation of the spine. This can be caused by violent muscular contractions owing to slipping, twisting, etc. It often occurs without appreciable cause, due to permanent pressure. When caused by an accident recovery usually takes place. In addition to the treatment you gave the administration of a laxative followed by 1 1/2 drams nux vomica three times daily would have been good treatment. V.

**Fatality in Foals.**

I lost two foals, neither of which could nurse. The mares worked during spring seeding and were in fair condition and on grass for two weeks before foaling. One of the foals would drink milk out of a cup, but could not suck. It lived for 2 1/2 days. The other one would not drink in any way, apparently it could not swallow. F. M.

Ans.—Conditions of this kind are not rare in foals of mares that have spent the winter months in practical or complete idleness, and have not been given regular exercise in some way. If the mares were used this way the fact that they worked during seeding would tend to still further weaken the foals, as the change from idleness to hard work would tend to deplete and weaken the mare hence the foal also. In some cases under apparently the most favorable circumstances, foals that are either unwilling or unable to nurse are produced, and we cannot give any reason for it. The man who keeps his breeding mare in moderate condition on food of first-class quality and of a laxative nature, and sees that she gets regular light work or exercise during the whole period of pregnancy does all that he can to cause the production of a strong, healthy foal, while the man who is careless about the food his pregnant mare consumes and allows her to go without regular work or exercise during several months of pregnancy is not justified in expecting good results. Untoward results occur without appreciable cause, even under the most intelligent usage, and unfortunately we often are unable to tell what causes them. V.

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arrived at our barns late in November. A number of them since have been prominent winners at both Guelph and Ottawa. But we have others (both stallions and mares) that were never out, the majority of the stallions weigh around the ton, and better quality and breeding were never in the stables. Come and see them. We like to show them. SMITH & RICHARDSON, Columbus, Ontario.

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BREEDER OF HIGH-CLASS CLYDESDALES  
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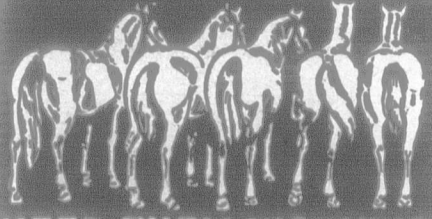
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Heifers and cows with calves, and a few bulls. 1 extra-good shearing ram, and ram lambs, and several real good grade ewes. Yorkshire sows.  
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Rams and ewes. Heifers in calf to Queen's Edward, 1st prize, Indiana State Fair.

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At special prices, six young bulls sired by Victor of Glencairn. All are of serviceable age, and show individuals.

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Cows with calf at foot and bred again. Shearing rams and ram lambs. One Ayrshire bull calf for sale.

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Shorthorns; Shropshires; both sexes. Mail orders satisfactorily filled.

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**Glenfoyle Shorthorns**

Present offering—three bulls from 10 to 12 months. Nice, straight, smooth fellows. Prices easy.

**Stewart M. Graham,** Lindsay, Ontario.

**Questions and Answers.**  
Miscellaneous.

**Fence Posts Heaving.**

I have a clay farm, and I find I can't keep the posts in the ground; they heave out one foot in a season. I would like to know if there is any way of stopping them from heaving.

L. A.

Ans.—Posts put down in the ground from three feet to three and one-half feet should not heave so badly even in clay land. Of course, in springy places they are likely to come up. It is a difficult proposition to keep them down. Some spike a three or four-foot scantling across near the bottom of the post and set the post with scantling attached down about three and one-half feet in the ground.

**Cow Fails to Breed.**

Have a pure-bred cow that has been served three times this spring, but she is not in calf yet. She lost her calf this spring. She is milking fairly well and is in good condition.

G. McC.

Ans.—After losing a calf there is frequently considerable difficulty in getting a cow in calf. You might try the yeast treatment, which is as follows: Mix an ordinary cake of yeast to a paste with a little warm water and allow to stand for 12 hours in a moderately warm place, then stir in one pint of freshly-boiled, luke-warm water and allow to stand for another 8 or 10 hours. The mixture will then be ready for use, and the entire quantity should be injected into the vagina of the animal to be bred. Use the mixture when period of heat is first noticed, and breed when period is about ended.

**Gossip.**

**Ayrshires in Quebec.**

While visiting a few farms in the province of Quebec recently our representative was fortunate in having a few moments with D. M. Watt, of St. Louis Station, breeder and importer of pure-bred Ayrshire cattle. In a very few years Mr. Watt's numerous choice importations from Scotland, combined with the high-quality animals of his home-bred herd have made him one of the best-known figures in Ayrshire circles to-day in Canada, as well as the majority of the Eastern States across the border. At present, the herd numbers around fifty head and is headed by the young sire Killoch Gold Flake, imported by Mr. Watt early in the summer of 1916. His sire, Netherall Scotland Yet, is one of the most talked-of sires in Scotland to-day, while his dam, White Hill Blue Bell 5th, is a daughter of the noted sire Howie's Rising Sun. Better breeding than this young sire has would be hard to find in any country, and as an individual he needs to be seen to be best appreciated. Practically everything in the herd, freshening from now on, is bred to Killoch Gold Flake, while the young bulls advertised for sale now are by such well-known sires as Burnside Ben, a son of Duke Clarence of Barcheskie (imp.), Auchinbrain General White (imp.), Kilford Rent Payer, etc. All are choice, well-grown youngsters. Mostly all are now nearing serviceable age, and are from some of the best cows in the herd. Borland Granny 6th (imp.), one of the most perfect cows that has come out in recent years as well as being a 50-lb. a day two-year-old, is the dam of one of the bulls referred to. Kilford Pansy 3rd (imp.), a fine show heifer is the dam of another; both were imported last summer and freshened to Old Country service. Other choice matrons in the herd are Dewdrop, a 60-lb.-a-day cow by Burnside Ben; Kilford Prilly, one of the most persistent milkers ever imported; Fanny, a grand cow, and others of same type. Write Mr. Watt any time you are interested in Ayrshire cows, Ayrshire bulls, or even the Ayrshire breed in general.

**The "International" Album.**

There is ready for distribution the 1916 Review & Album of the International Live Stock Exhibition, Chicago. This is an excellent book, handsomely illustrated and valuable to all stockmen. It is well bound in cloth. Copies may be obtained from B. H. Heide, Secretary of the Show, Chicago, Ill.



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For the present we have sold all the Cotswolds we wish to spare, but we have a choice offering in young bulls fit for service. They are all of pure Scotch breeding, and are thick, mellow fellows, bred in the purple. **WM. SMITH, Columbus, Ont.** Myrtle, C. P. R., Brooklin, G. T. R., Oshawa, C. N. R.

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We have for sale, at present, a number of young things by our former herd sire, Cian Alpine (the Claret-bred bull, by Proud Monarch). We like them—so will you. If it's young bulls, or a few females you need, we would welcome a visit from you. Write or 'phone. Visitors met by appointment.

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**IMPORTED SHORTHORN BULLS**

We have several newly-imported bulls of serviceable age. Cruickshank, Marr and Duthie breeding, as well as a number of choice, home-bred young steers, got by our noted herd sire, Proud Monarch, by Royal Blood. Get our prices before buying elsewhere.

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Cows and heifers in calf or with calves at foot. Yearling bulls and bull calves. One of the best importations of the year. You will be surprised when you see them.

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Imported and Canadian-bred. More bulls to select from than any herd in Ontario, all of serviceable age; also a large number of females, which are bred right and priced right. All the stock for sale

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### Questions and Answers. Miscellaneous.

#### Reducing Swelling of Ankle.

A young mare has a swollen ankle on the inside. I don't know how long it has been there, but it is quite hard. It does not seem to affect her any except for interfering. What will reduce the lump?

R. A. D.

Ans.—Apply an absorbent liniment with smart friction. Liniment made of 4 drams each of iodine and iodide of potassium and 4 ounces each of alcohol and glycerine. If this fails to reduce the swelling, try a blister of 2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces of vaseline. The hair should be clipped before application is made, and care taken that the mare cannot bite it. It may be necessary to repeat this blister in a couple of weeks. After applying the blister rub with sweet oil to soften the scale.

#### Rocket Cress.

What is the name of the enclosed weed? It has a yellow flower and appeared in a patch in the field. Give a full description of the plant, together with the best means of eradicating it.

M. O.

Ans.—The plant received at this office is believed to be rocket cress, which is similar to the rocket found growing in alfalfa fields a few years ago. It belongs to the mustard family and somewhat resembles common mustard. This weed is not classed as noxious at the present time, but it may become bad enough to cause considerable trouble if it is allowed to seed profusely. It is an annual, therefore, it can be controlled by preventing the plants maturing seed. If the field is gone over and the plants all pulled there should be little trouble from this weed. However, the seeds may remain in the ground some time, and when brought to the surface germinate and grow. This necessitates keeping a close watch on the grain fields. By exercising care this weed should not be difficult to keep under control.

#### Curbing a Well.

1. I intend putting a cement box in a well which is 10 feet long, 4 feet deep and 4 feet wide. How thick should the wall be? In what proportion should the concrete be mixed?
2. How much cement will it take?
3. Will cement spoil the water for drinking purposes?
4. Should there be holes in the walls to let the water in?

M. M.

Ans.—1. A 10-inch wall should be thick enough, and mixing in the proportion of one part gravel to eight of cement ought to be strong enough.  
2. The walls will require about four barrels of cement.  
3. Cement will make the water a little harder but should not injure it for drinking purposes.  
4. If a cement bottom were put in the box or well it would be necessary to have holes in the walls. However, with an earth bottom the water would ooze up through it and reach the same height as it would if permitted to come in through holes in the walls.

#### Tanning Hides.

I have a few woodchuck hides and would like to know if they can be successfully tanned at home to make shoe-lace leather. What is the recipe for tanning? What would it cost to have a hide tanned at the tannery?

H. C. R.

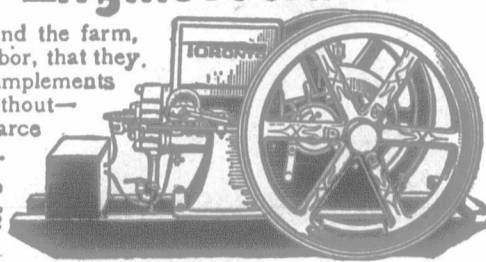
Ans.—It is advisable to send the hides to a tannery as much better work can be done there than can be done at home with only meagre equipment. The cost of tanning a hide varies with the size. If it is decided to do the tanning at home soak well in soft water for two or three days, to make it perfectly soft, then scrape off the flesh and fat. When thoroughly clean, put the skin in a tan composed of equal parts alum and salt, dissolved in hot water; 7 lbs. of alum and salt to 12 lbs. of water. Leave the skin in the brine for a couple of days, then scrape again. Put the hide back in the brine for another day and hang up to dry and then give another scraping. After this apply a coat of oil and roll up in damp sawdust. Scraping and rubbing the skin tends to soften it, consequently it should be well worked again when dry.

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at so many different jobs around the farm, and save so much time and labor, that they have earned a place among the implements a farmer cannot afford to be without—especially in these days of scarce help and high-priced produce.

TORONTO Engines are made in five sizes, to run on gasoline, kerosene or natural gas.

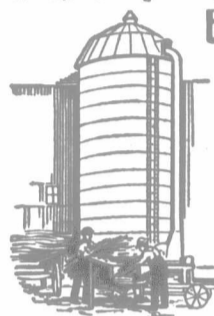
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### The TORONTO Economy Silo

The comparatively low cost of wood staves—the quickness and ease of erection—and the extra capacity afforded by the new HIP-ROOF—make the TORONTO Economy Silo less expensive per ton of silage than any other standard type. Being absolutely air-tight, even to the doors, and having no tendency to draw the frost, it makes better ensilage than silos costing far more. Write for Booklet explaining its advantages.



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### Pumps with Every Wind that Blows

For over thirty years our Windmills have been noted for their wonderful work in light winds. Troughs or water systems don't run dry when supplied by TORONTO Windmills. With this light-wind ability we have combined sturdy strength and self-regulating features that enable Toronto Windmills to stand up to the fiercest gales, and to stop and start themselves when water is needed.

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TORONTO and MONTREAL.

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A real fence, not netting. Strongly made and closely spaced, a complete barrier against animals of any kind. Keeps the small chicks confined. They can't get through. Does all and more than is required of a poultry fence.

The heavy, hard steel top and bottom wires with intermediate laterals will hold a carelessly backed wagon or unruly animal and immediately spring back into shape.

The wires are held together at each intersection by the Peerless Lock.

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and address of nearest agent. We make a complete line of farm and ornamental fencing. We now have agents nearly everywhere, but will appoint others in all unassigned territory. Write for catalogue today.

**THE BANWELL-HOXIE WIRE FENCE CO., Ltd.**  
WINNIPEG, MAN.  
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SOME OF THE BULLS WE HAVE FOR SALE AT ATTRACTIVE PRICES.

1. Born May, 1917, two dams average.....35.62 lbs.
2. Born March, 1917, two dams average.....34.16 lbs.
3. Born March, 1917, two dams average (one at 3 yrs.).....34.23 lbs.
4. Born March, 1917, two dams average (one at jr. 2 yrs.).....33.12 lbs.

These are sons of Avondale Pontiac Echo, our herd sire (under lease) a son of May Echo Sylvia, the world's record cow. Only one other 41-lb. bull in Canada. Send for extended pedigrees and prices on these and others, a few of serviceable age, are from a 111-lb. cow. We guarantee satisfaction. Twenty-five females for sale.

**R. W. E. BURNABY** (Farm at Stop 55, Yonge St. Radial) **JEFFERSON, ONT.**

### PIONEER FARM HOLSTEIN HERD

Of long-distance record makers, the kind that milk heavy and test around 4 per cent. the whole year. Of the six highest butter-fat records of two-year-olds in Canadian R.O.P., one half were bred at Pioneer Farm. Young bulls for sale from dams of the same breeding as these and sired by Canary Hartog, whose three nearest dams average 30 lbs. butter in 7 days and 108 lbs. milk in one day.

**WALBURN RIVERS, R. R. No. 5, INGERSOLL, ONT. Phone 343L., Ingersoll Independent.**

## CLOVERLEA HOLSTEIN-FRIESIANS

Stock for sale, all ages, from choice, high-testing dams—75 head to choose from. Our special offering is a few choice heifers, due to freshen in September or October. Personal inspection is invited.

**GRIESBACH BROS. L.-D. Phone COLLINGWOOD, ONT.**

## Low Banks Farm Holsteins K. M. Dalgleish, Prop., Kenmore, Ont.

Pontiac Korndyke and May Echo Sylvia—strongest combination of milk and butter in the world—Present offering—3 beautiful, young bulls, sired by Sir Echo, from daughters of Pontiac Korndyke, with 2-year-old records of considerably over 20 lbs. each; also 4 sons of Fairview Korndyke, from dams with similar records, going as high as 30.14 lbs. All straight, good individuals at moderate prices.

## EVERGREEN STOCK FARM . . . REGISTERED HOLSTEINS

Just now we are offering a very choice young bull, five months old, whose five nearest dams average over 30 lbs. of butter in seven days and 100 lbs. milk in one day. Also another bull calf whose dam was the top-price cow in the Woodstock Sale. Bell phone.

**A. E. HULET, Norwich, Ont.**

## DUMFRIES FARM HOLSTEINS

175 head to choose from. Special offering; bulls from one month to one year old Grandsons of Prince Aaggie Mechthilde. Visitors always welcome.

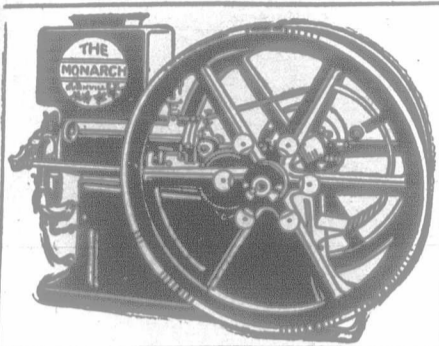
**S. G. & ERLE KITCHEN ST. GEORGE, ONTARIO**

## SILVER STREAM HOLSTEINS—SPECIAL OFFERING

Two bulls fit for service, sired by bulls with 30-lb. backing, and from R. O. P. dams with records up to 500 lbs. butter made as two-year-olds. We also offer three bull calves from three to six months. If you want a bull of like breeding, write quick. Priced reasonable so you can buy.

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*Wearing Quality as well as Appearance*

A few dollars saved on first cost looks very small when compared to valuable time lost because of an unreliable power plant.

**The MONARCH Reliable and Economical**

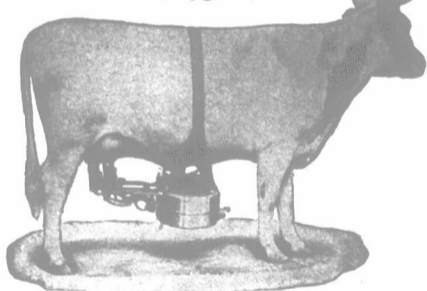
because of having in its construction all the features absolutely necessary to accomplish this result.

It will prove a friend indeed to those whose profits are being consumed because of unreliable power.

Our leaflet explains the many desirable features of the engine. Free for asking.

**CANADIAN ENGINES, Limited**  
Dunville, Ontario

**OMEGA MILKING MACHINES**  
Efficient, Hygienic



The pail and teat-cups are suspended from the cow's back. The teat-cups cannot fall to the floor and suck up manure or straw. The Omega has no rubber tubes. The Omega milks as fast and as clean as is possible by hand. Leading dairymen in Canada, U.S.A. and Europe are using the OMEGA. It's a perfect milker. WRITE TO-DAY for free booklet describing the special features of the Omega. C. Richardson & Co., St. Mary's, Ontario

**Harab-Davies Fertilizers**  
Yield Big Results

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THE ONTARIO FERTILIZERS, LTD  
WEST TORONTO

**Record Holsteins**

We have the only 2 sons in Canada of the 46-lb. bull, Ormsby Jane King, only mature son of the world's most famous cow. One of them for sale. Also a 30-lb. calf, whose dam and 2 great grandams average 38.4lbs. butter in 7 days. 11 bull calves of lesser note and females all ages.

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

Every farm should have an  
**AYRSHIRE**  
**The Cow for Profit**  
WRITE  
Canadian Ayrshire Breeders' Association  
W. F. STEPHEN, SECRETARY-TREASURER  
HUNTINGDON, QUE.

**Glencairn Ayrshires** Herk established 40 years. Producing ability from 8,600 to 11,022lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. Thos. J. McCormick, Rockton, Ont., Copetown Stn., G. T. R.

**Choice Offering in Ayrshires** At Special Prices. Several young bulls of serviceable ages. All from R. O. P. sires and dams. Come and see them.  
Jno. A. Morrison, Mount Elgin, Ontario

**City View Ayrshires**—For July sales: Senator "42110," four years old. Choice bull calves, all R.O.P. dams. Will exchange one. Must have quality and R.O.P. records.  
JAMES BEGG & SON St. Thomas, Ont.

**Questions and Answers.**  
Miscellaneous.

**Scrub Bulls.**

1. Has a man a right to keep two or three scrub bulls, two, three or five years old in his bush pasture along the road?

2. If he does and a neighbor is leading a pure-bred cow along the road taking her to a pure-bred bull, and said scrub bulls, all three of them, break out, and the attendant of pure-bred cow and owner of bulls are unable to prevent them from breeding her, without endangering their lives, what can be done about it?  
J. F. S.

Ans.—1. There is no law to prevent a man from keeping scrub bulls, but if they trespass or do any damage he is liable.

2. The owner of the bulls is liable to the extent of damage done, which would be the difference between the value of a pure-bred and a grade calf.

**Wire Worms.**

How would you treat a field that is badly infested with wire worms? I have six acres sown with oats and seeded, and the balance of about two acres planted to corn. The oats are hardly worth saving, but the clover is apparently all right. I have pulled up several stalks of corn and found two worms on each. The field has been in a hoed crop for several years. Why are the worms so bad?  
E. W.

Ans.—It is unusual for wire worms to be thick after a field has been in hoed crops for several years. They are usually most prevalent the second year after breaking old sod. Evidently conditions have been favorable for breeding of these insects. Possibly the eggs were laid below the depth of cultivation. It is doubtful if anything can be done to offset their ravages this year. We have known of salt being applied at the rate of 200 pounds to the acre with apparently good results. However, the salt has no effect on the wire worms as they will live in a weak brine. The salt may have acted as a stimulant to the crop and forced it ahead. If the field is run down, increasing the fertility will give the crop a chance to get ahead of the worms. Wire worms do not attack buckwheat, flax or peas to any great extent. Clover is not immune, and if the worms are bad it is possible that they will turn on this crop after finishing the oats. There is still time to sow millet or even buckwheat. Rape could also be sown, which would furnish pasture in the fall.

**Scours in Nursing Pigs.**

Please publish a remedy for scours in little pigs. I have a litter ready to wean and they are dying off. Kindly advise what to do.  
D. W. D.

Ans.—In Wisconsin Bulletin 184, Dr. Alexander writes as follows: "When young nursing pigs begin to scour, it is evident that the milk of the sow is disagreeing with them, and immediate attention, therefore, should be directed towards improving her ration. Most often the trouble comes from overfeeding on corn or other rich feed, just after farrowing, and pigs of fat, flabby, pampered, cross, nervous, constipated sows are most apt to suffer. Sudden changes of feed, or feeding sour or decomposing slop, or feed from dirty troughs or sour will barrels, also tend to cause diarrhoea either in nursing pigs or those that have been weaned, and all such causes should be prevented or removed."

"To correct scouring in nursing pigs, give the sow 15 to 20 grains sulphate of iron (copperas) in her slop night and morning, and if necessary slightly increase the dose until effective. Lime water may, with advantage, be freely mixed with the slop as a preventive when there is a tendency to derangement, or after the trouble has been checked, and it is also an excellent corrective for weaned pigs showing a tendency to scour on slop or skim-milk. Where little pigs are scouring severely, each may, with advantage, be given a raw egg and 5 to 10 grains of subnitrate of bismuth twice daily, in addition to changing the feed of the sow and mixing copperas in her slop. In cases which do not promptly respond to treatment, success may follow the administration of a dose of castor oil shaken up in milk. In all cases it is important to set right all errors in diet and sanitation, and to provide the pigs with dry, sunny, well-ventilated quarters. The derangement is always most apt to occur, and sure to prove disastrous, among pigs kept in unsanitary conditions."

**MANOR FARM**

Senior Herd Sire is

**KING SEGIS PONTIAC POSCH**

Sire, King Segis Pontiac Alcartra (the \$50,000 bull)  
Dam, Fairmont Netherlands Posch

7-DAY RECORD, 4 YEARS, 29 DAYS

Butter..... 32.54  
Milk..... 511.50  
% fat..... 5.09

Junior Herd Sire is

**KING KORNDYKE SADIE KEYES**

Sire, Sir Sadie Korndyke Segis

Dam, Lulu Keyes

7-DAY RECORD

Butter..... 36.05  
Milk..... 785.40  
Highest day's milk..... 122.80

What better combination can be had? I have no sons from my junior sire yet; there are just a few left from King, from good A. R. O. dams, and priced right to sell.

**Gordon S. Gooderham**

Manor Farm

Clarkson, Ont.

**SENSATIONAL OFFERING IN 30-LB. BULLS**

We have at present several 30-lb. bred bulls, all nearing serviceable age, that must go out to several of the country's best herds in the near future. They are sired by one of the three sires used in the herd during the past year. Pontiac Korndyke of Het Loo., Avondale Pontiac Echo, or King Segis Alcartra Spofford. Our herd contains more 30-lb. cows than any other herd of equal size in the Dominion. Extended pedigrees mailed on request.

ROYCROFT FARM W. L. Shaw, Prop., NEWMARKET, ONT.

**Sunnybrook Farm Holsteins**

**YEARLINGS**—Male and female for sale, from high-record dams testing from 14 to 30 lbs. butter in 7 days, giving from 7,000 to 12,000 lbs. of milk; sired by Sunnybrook Mercedes Natoye, whose dam has a seven-day record of 29.34 lbs. butter, and Count Faforit Sylvia Segis, highly strained in the blood of the world's only 50-lb. cow.

Joseph Kilgour, Phone, Toronto, Adelaide 3900, Belmont 184, Eglinton, Ont.

**Hospital for Insane--Hamilton, Ont.**

Present offerings are 4 grandsons of Dutchland Colantha Sir Mona, and high-testing, large-producing R. of P. dams of Korndyke and Aaggie DeKol breeding. Born during April and May, 1917. Apply to Superintendent.

**WANTED--Registered Females**

I am on the market for a number of pure-bred Holstein females, with records up to 30 lbs. Would be pleased to hear from you as to what you have to offer. Kindly state in your first letter, pedigree, price and full information, with photo of each animal

W. G. Bailey, R.R. No. 4, Paris, Ont. Oak Park Stock Farm

**SUMMER HILL HOLSTEINS**

The only herd in America that has two stock bulls that the dam of each has milked over 116 lbs. a day, and their average butter records are over 35 lbs. a week. We have 50 heifers and young bulls to offer, by these sires, and out of dams just as well bred. We invite personal inspection.

D. C. FLATT & SON - R. R. 2, Hamilton, Ont. - Phone 7165

**Lyndenwood Holsteins**

Present offering, a bull, 16 months, whose dam won 2nd, Ottawa Dairy Test, 1916. One 11-months bull from a 20-lb. 2-year-old cow. Some fine bull calves from 2 to 5 months; also some choice young cows and heifers with good official records and from R. of M. dams. Write for prices or come and see them.  
W. J. BAILEY, Lyndenwood Farm JARVIS, ONT.

**HOLSTEIN BULLS--HOLSTEIN FEMALES**

King Walker Pride is our present herd sire; he is a son of the great King Walker and the noted show cow Pride Hengerveld Lennox, 30.11 lbs of butter in 7 days. We still have a few sons of his left, and all are from our own high-record dams. Could also spare several two-year-old heifers. Come and see our herd. Collier V. Robbins, Perry Sta., M.C.R., Fenwick Sta., T.H. & B., Wellandport, Ont

**Edgeley Stock Farm**

The home of Canada's greatest producing Jersey, SUNBEAM OF EDGELEY, the Sweepstakes Dairy Cow at the recent Guelph test; is also the champion R. O. P. butter cow for Canada. Would a grandson or great-grandson of this famous cow improve your herd? We have them. Write for particulars.  
JAS. BAGG & SON, Woodbridge, C. P. R.; Concord, G. T. R. EDGELEY, ONT.

**Glenhurst Ayrshires** For 50 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.**



## Ring-Bone

There is no case so old or bad that we will not guarantee

**Fleming's Spavin and Ringbone Paste**  
to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 5-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

**Fleming's Vest Pocket Veterinary Adviser**  
Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable bound, indexed and illustrated. Make a right beginning by sending for this book.

**FLEMING BROS., Chemists**  
75 Church St. Toronto, Ont.

## Yorkshires

From choice stock on both sides. Several young litters. Also some young sows, ready to be bred.

**WELDWOOD FARM**  
Farmer's Advocate, London, Ont.

HEADQUARTERS FOR  
**COTTONSEED MEAL**  
Brands: "American Red Tag," Protein 38 1/2%, Fat 6%. "Surety Brand," Protein 36%, Fat 5.50%. "Creamo Cottonseed Feed Meal, Protein 20 to 25%, Fat 5%.

Mills conveniently located in the south, in every cotton-growing State.  
Prices on application, in car lots or less.  
Fred. Smith, 32 and 34 Front St. W., Toronto

SPECIAL OFFER OF PEDIGREE  
**Tamworth Breeding Stock**  
Young sows in pig, also males and females about to be weaned.  
**HEROLD'S FARMS, Beamsville, Ont.**  
(Niagara District)

**TAMWORTHS**  
Young sows bred for August farrow, and a nice lot of young boars for sale. Write:  
**John W. Todd, R. R. No 1, Corinth, Ont.**

**YORKSHIRES** Sows 170 lbs. and under, not yet bred. Boars 2 and 3 months, 60 to choose from. Bred from prize-winning stock, Eldon Duke still at the head. Tell us your wants.  
**Wm. Manning & Sons, Woodville, Ontario.**

**Cloverdale Berkshires and Shropshires**—In Berkshires 1 can furnish boars or sows, all ages, pairs not akin. All breeding stock imp. or from imp. stock. In Shropshires can furnish rams or ewes, any age from imp. stock. Prices reasonable.  
**C. J. LANG, R. R. No. 3, Burketon, Ontario.**

**MORRISTON Tamworths and Shorthorns**, bred from the prizewinning herds of England. Tamworths, both sexes, 20 young sows, bred to farrow in June and July. Young boars from 2 to 5 months old; Shorthorns of the best milking strain.  
**CHAS. CURRIE, Morriston, Ont.**

**MEADOW BROOK YORKSHIRES**  
From the best strains of the breed. A choice lot of young pigs of either sex and almost any age. Also sows bred and others ready to breed. Prices reasonable.  
**G. W. Miners, Exeter, Ont., R. R. No. 3, Huron Co.**

**Pine Grove Yorkshires** Bred from prize-winning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs not akin, to offer at reasonable prices. Guaranteed satisfaction.  
**Joseph Featherston & Son, Streetsville, Ont.**

**PROSPECT HILL BERKSHIRES**  
Young stock, either sex, for sale, from our imported sows and boars, also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right.  
**John Weir & Son, Paris, Ont., R. R. 1, Sunnyside Chester Whites and Dorsets.** In Chester Whites we have both sexes, any age, bred from our champions of many years. In Dorsets we have ram and ewe lambs by our Toronto and Ottawa champion, and out of Toronto, London, and Guelph winners. **W. E. Wright, & Son, Glanworth, Ont.**

**Polands, Durocs and Berkshires**  
Young stock at all times, both sexes and all ages. Can also supply anything in Dorsets or South-downs. Everything priced to sell.  
**Cecil Stobbs, Leamington, Ont.**

**DUROC JERSEY SWINE**  
My herd won all the champion prizes at London, Toronto and Windsor, 1916. Young stock for sale, pairs not akin. Come and see them, or write. Trains met by appointment.  
**Cuibert Malott, R. R. No. 3, Wheatley, Ont.**

**Avonhurst Yorkshires and Collies**  
A choice litter of pedigreed Collie puppies, sable and white; both sexes. A few good sows pigs, 8 weeks.  
**B. ARMSTRONG & SON, Codrington, Ont.**

## Preparing for Bee-Keeping in 1918.

EDITOR "THE FARMER'S ADVOCATE":

While a maximum production of honey is of pressing importance in this war-food year, yet increasing the bees for next season must not be neglected.

Roughly speaking, the bees that are in the hives at the commencement of the honey-flow gather the crop, while the brood builds up the colony for next year, unless there is to be another important honey-flow. This brood is very valuable for forming nuclei, because these, started early with a laying queen, or ripe queen cell, will build up into strong colonies before winter. Increasing in this way with brood from strong colonies during the honey-flow is the basic principle upon which an apiary can be quickly built up, while at the same time an almost full honey crop is secured.

In newly-formed nuclei containing brood in all stages there is always more or less desertion of bees and consequent death of the young brood, and sometimes chilling and death of the older brood even when the nuclei are skillfully made by an experienced apiarist. Further, queens may not be immediately obtainable, or they may be lost in introduction. Robbing of the newly-formed nuclei has also to be guarded against, but during the height of the honey-flow only carelessness will cause this; towards its end, however, the danger of robbing grows so great that it is difficult to maintain newly-formed nuclei even when strong. Desertion may be checked by stopping the entrance with grass; the bees will make their way out when the grass dries and shrinks in about two days, but care must be taken to avoid overcrowding the confined bees, which would lead to stifling, especially in hot weather. A good way to overcome the loss of young brood is to place the brood over a queen excluder a week before its removal from the parent hive. This may be done in the ordinary course of relieving congestion in the brood chamber as a means to discourage swarming, a frame or two of empty comb or of foundation being placed in the brood chamber when the brood is raised.

All of these risks may be greatly minimized as follows: Have all the queens' wings clipped (this is not essential), and when a colony of a strain that it is desired to propagate swarms, move the parent hive to a new stand, and place the swarm in an empty hive on the old stand, the queen having been picked off the ground and placed in the empty hive. The swarm will return to the new hive at the old stand. The field bees will now join the swarm, and the super should be transferred from the parent hive to the swarm which will produce the crop of honey. The colony, now depleted of bees but rich in brood, is divided a week later into three to six nuclei, each nucleus consisting of two or three frames containing brood and honey carrying two or three queen cells containing queens soon to emerge with the adhering bees.

This method has the great advantage that it not only controls and satisfies the troublesome swarming instinct, but it helps to secure the desired ends by natural means. The honey gatherers are segregated into a strong force, and the brood, being mostly capped, is not likely to get chilled; the bees desert neither it nor the queen cells readily, and all trouble in raising and introducing queens is avoided. The bees in the newly-formed nuclei are in the post-swarming stage, when their instinct is to spread themselves over and incubate as much brood as possible, and especially the queen cells.

The beginner should be warned not to divide the parent colony into too many weak nuclei, but this fault may be rectified in the autumn by uniting. The ideal conditions for building up nuclei are a slow honey-flow throughout August and early September. Fortunately these are supplied in most Canadian localities by golden-roads, asters and buckwheat.

Mismatched queens should be replaced any time up to the first or second week in October, preferably not during the robbing season.—Experimental Farms' Note.



## The Safeguard

THAT adequate protection is about those we love, is a comforting, an inspiring thought. Women, by intuition, sense the need of this protection. Every wife has a horror of having to face some day, the humiliation she has seen become the lot of others upon the death of husband and bread-winner.

Yet it is an easy matter for every man to build about his loved ones a "Safeguard" which, after he has gone, will remain a permanent, tangible evidence of his affection.

That "Safeguard" is an Imperial Monthly Income Policy. Write today for particulars.

**THE IMPERIAL LIFE Assurance Company of Canada**  
HEAD OFFICE - - TORONTO  
Branches and Agents in all important centres

When Building—specify  
**MILTON BRICK**  
Smooth, Hard, Clean-Cut. Write for booklet.  
**MILTON PRESSED BRICK COMPANY**  
Milton, Ontario

A Better Separator for Less Money  
**VIKING**  
Cream Separators of Quality

**Young BRAMPTON JERSEYS Bulls**  
For the next fortnight we are making a special offering on young bulls, bred from the highest producing families ever introduced into Canada. Brampton Jerseys and their descendants hold all Jersey R.O.P. records, save one. Females, all ages, also for sale. **B. H. BULL & SON, Brampton, Ontario.**

**THE WOODVIEW FARM JERSEYS**  
LONDON, ONTARIO  
**John Pringle, Prop.**

**CANADA'S MOST BEAUTIFUL JERSEY HERD**  
The foundation of this herd is made up of very high-class cows, imported from the Island of Jersey, most of them in the Record of Performance, and while we have, at all times, a few mature cows for sale, we make a specialty of in-calf heifers and young bulls. Write us your wants, or better still, come and see the herd. We work our show cows and s newfourwork c ws

**FARNHAM OXFORD DOWNS**  
Flock established from the best flocks in England. Our initial importation was among the first in 1881. Having quit the showing, we now make a specialty of breeding animals. Special attention to flock headers. They will give a good account of themselves in the showing. Offering for the present season:—120 yearling rams; a few two-year-olds; 80 superior yearling ewes. A nice lot of ram and ewe lambs coming on.  
**HENRY ARKELL & SON, R. R. No. 2, (Tel 355r2 Guelph.) GUELPH, ONT., CAN.**

**Duroc Jersey Swine**  
Just home from quarantine; Brookwater Principle Orion, sired by that great sire, The Principle 4, that has proven himself one of the greatest sires in the U. S., which we are using on a number of imported and home-bred sows for spring farrow. A few of the sows and young stock for sale at all times. Pairs furnished not akin.  
**L. A. PARDO & SONS, R. R. No. 1, CHARING CROSS, ONTARIO**

**BERKSHIRES** My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys, the best strain of the breed, both sexes, any age.  
**ADAM THOMSON R. R. No. 1, Stratford, Ontario**  
Shakespeare Station, G.T.R.

**ENGLISH LARGE BLACK PIGS**  
We have for sale at present some young pigs of a breed new to Canada but standardized and very popular in England, from our pure-bred imported **LARGE BLACKS**. Stock excellent for cross-bred English Berkshires. Their English reputation is that they grow large and fast. Also for sale, pure-bred English Berkshires.  
**Lynnore Stock Farm, F. Wallace Cockshutt, Brantford, Ont.**

**ELMHURST LARGE ENGLISH BERKSHIRES**  
From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.  
**H. M. VANDERLIP, R. R. 1, Brantford, Ont.**  
Breeder and Importer.  
Langford Station on Brantford and Hamilton Railway.



**ROOFING**  
MILL ENDS CHEAP

A limited quantity of High-Grade Mill Ends for sale cheap. Samples Free

FACTORY DISTRIBUTORS  
BOX 61 HAMILTON CANADA.

**REMINGTON**  
UMC

Good sport and very useful against vermin. Keep a Remington .22 at hand with a few Remington Metallics.

**Pratts** POULTRY REMEDIES

A Guaranteed Remedy for every Common Ailment. Send 10c. for 100-page "Poultry-man's Handbook," or write for FREE Book, "Poultry Wrinkles." Pratt Feed Co., Canada, Ltd., 68 J. Claremont St., TORONTO.

**Cream Wanted**

We want your cream. We pay highest market price for butter-fat. Supply cans for shipping.

We have opened a Creamery at Prescott, Ont., where we will be able to take care of our Eastern shippers.

Write for particulars, either to Toronto or Prescott.

We guarantee satisfaction in all our dealings with you.

The T. Eaton Co., Ltd.

**LIFT YOUR CORNS OFF WITH FINGERS**

Tells How to Loosen a Tender Corn or Callus So It Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it Frezone, and it now can be had in tiny bottles as here shown for a few cents from any drug store.

You simply apply a few drops of Frezone upon a tender corn or painful callus and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.

No pain, not a bit of soreness, either when applying Frezone or afterwards, and it doesn't even irritate the skin.

Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical. It works like a charm. Your druggist has Frezone. Ask him!

**HOMESEEEKERS' EXCURSIONS**



MAY 8th TO OCTOBER 30th  
Every  
**TUESDAY**  
"ALL RAIL" - also by  
**THURSDAY'S STEAMER**  
"Great Lakes Routes"  
(Season Navigation)

Your Future is in the West

The fertile prairies have put Western Canada on the map. There are still thousands of acres waiting for the man who wants a home and prosperity. Take advantage of Low Rates and travel via

**Canadian Pacific**

Information from Canadian Pacific Ticket Agents, or W. B. Howard, District Passenger Agent, Toronto.

**Gossip.**

**Farnham Oxford Downs.**

Our live-stock advertising columns contain the advertisement of Henry Arkell and Son who for 40 years have used "The Advocate" to place their sheep before the breeders. The flock was established through selections from the best flocks in England, the initial importations being made in 1881. Such a record as this is sure to inspire confidence on the part of buyers. Of late years Messrs. Arkell have quit the show-ring and have made a speciality of breeding animals, paying particular attention to flock headers. Farnham Oxford Downs have made good all over Canada and the United States, and this explains the success of the flock, the beginning of which dates back almost half a century. For information regarding this year's offering see the advertisement and write to Mr. Arkell for full particulars.

**Pettit's Shorthorn Importation Arrives.**

Shorthorn breeders and importers throughout United States and Canada have not in the past two years found it a very easy task to get sufficient cattle in Britain to, in many cases, even replenish their own herds let alone supply an animal or two at odd times to their very oldest customers. Contrary to expectations, early in 1916 when the war began to promise two, three or four more years' duration, prices for all breeding cattle in England seemed directly to start climbing to find a new high level, with the result that we on this side of the Atlantic, not willing to pay the enormous advance in prices, have missed the more regular importation of former years. Great as these difficulties have been however, they have not stood in the way of the annual importations of the firm of J. A. & H. M. Pettit of Freeman, Ont. Early in the season of 1916 their importation of upwards of 60 head was on hand as usual, and now again their stables are once more filled with their 1917 allotments. They were sized up by a representative of this paper as "a uniformly good lot", thirty-six females and two young bulls. The bulls, which are 17 and 18-month calves, respectively, have not shipped well. The former is an Emmeline, by the Duthie bull, Royal Knight, while the latter on the dam's side is a straight bred Lancaster, got by Golden Clipper; both bulls are entitled to a little more fitting. The females, however, have shipped exceptionally well. With the exceptions of one four-year-old Claret cow, and two yearling heifers, all are two-year heifers, and all safely bred before going on the boat. Seventy-five per cent. of the importation are roans with the balance whites and reds, red predominating. One might add that there is not a badly colored heifer in the lot, but it is far more important to say that there is not a bad heifer in the lot. Every heifer is well grown, the majority have both scale and character, and then comes breeding which always has been the Pettit firm's "long suit". Every pedigree attached has a Duthie, Anderson, Marr or Bruce-bred sire right at the top. The Bruce Mayflowers are all direct from Heatherwick and are bred to the great bulls in service, Proud Star, Proud Chief and Golden Primrose. The Lancasters are bred to Collynie Silver Crest, a Roan-Lady Duthie-bred bull; the Roan Ladys to Bapton Prince Henry, a Deane Willis sire; the Missies to Burgie Underwood, and the Clarets to Collynie Ringleader. The latter are Duthie-bred bulls. The Rosebuds, Bessies, Rosewoods, Agustas, Secrets and Brawith Buds are the other families represented and having been selected from some of the best herds in Scotland they are bred to many of the best sires of the day. The offering surely affords breeders a chance of getting a choicely bred heifer carrying an imported calf that should in a short time reduce the first cost to a minimum. Messrs. Pettit report the following recent sales, to Canadian breeders: to Cecil Philys, Janetville, Ont., a Marr Flora cow with a heifer calf at foot, also a Kilblean Beauty heifer; to Patrick Maloney, a 10-months roan imported Broadhooks calf by Prince Clarion; to Frank Brown, Dundas, a roan 10-months Rosewood calf. Archie Pilkey, Wexford, Ont., got a 9-months imported Princess Royal calf, and Samuel Lyons & Son, Dunville, a two-year-old Missie bull.

**WEIGH THIS YOURSELF**

The Average Yearly Revenue from all field crops of each Farmer:

Eastern Canada, \$490  
Western Canada, \$1000

Why not double your earning power by taking up a Free Homestead in Western Canada along the lines of the Canadian Northern Railway? Low Homeseekers' Fares are in effect, once a week, till October 31st, from Eastern points.

For full particulars and any of our descriptive booklets, "The Homeseekers and Settlers Guide," "Peace River Guide," or "British Columbia Settlers Guide," apply to Gen. Pas'gr Dept., Montreal, Que., Toronto, Ont., or Winnipeg Man.

**CANADIAN NORTHERN RAILWAY**

**Our No. 4 All-Steel Self-Dumping Rake**

will give absolute satisfaction under any and all conditions. The wheels are solid, strong, interchangeable. The rake teeth are made of finest steel, oil tempered, elastic. The points of the teeth run parallel with the ground, and are so curved and adjusted that they gather up every bit of hay without digging into the ground or stirring up grit and dust. The self-dumping device operates from either wheel and is adjustable for use in either heavy or light hay, also adjustable for fast or slow driving. Our New Rake is made in 8, 9 and 10 ft. sizes, for either one or two horses. Write for free descriptive folder.

**Peter Hamilton Company, Limited**  
Peterborough, Ontario

**MAIL CONTRACT**

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa, until Noon, on Friday, the third day of August, 1917, for the conveyance of His Majesty's Mails, on a proposed Contract for four years, twelve times per week each way, between Lucan, Clandeboy and Grand Trunk Station, from the 1st of October, next.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Offices of Lucan and Clandeboy, and at the office of the Post Office Inspector, London.

C. C. ANDERSON,  
Superintendent.

Post Office Department, Canada, Mail Service Branch, Ottawa, 22nd June, 1917.

**MAIL CONTRACT**

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa, until Noon, on Friday, the 27th day of July, 1917, for the conveyance of His Majesty's Mails, on a proposed Contract for four years, six times per week over Longwood No. 2 Rural Route, from the 1st of October, next.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Offices of Longwood, Melbourne and Appin, and at the office of the Post Office Inspector, London.

C. C. ANDERSON,  
Superintendent.

Post Office Department, Canada, Mail Service Branch, Ottawa, 16th June, 1917.

**FOR THE MEN WHO HAVE PAID THE PRICE**

WHAT can be done for a man whose life has been given in the great fight? One thing only—and that is to perpetuate his name and commemorate his sacrifice by a worthy memorial in the place where he once lived.

We bring to the work of memorial tablet-making, a reverent care, a consummate skill that ensures the best expression of the remembrances of family, friends, church, society or lodge. Write for particulars of brass and bronze memorial tablets. Our special department will be glad to assist in every possible way.

**The Dennis Wire & Iron Works Co., Ltd.**  
London, Canada



**NORTHERN ONTARIO**

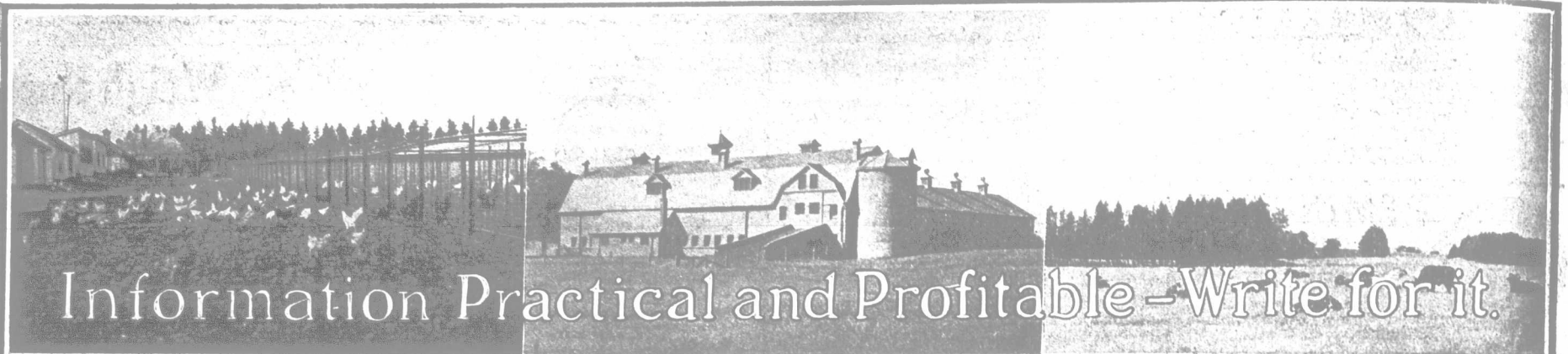
Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others, free—are calling for cultivation.

Thousands of farmers have responded to the call of this fertile country, and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you.

For full information as to terms, regulations and settlers' rates, write to:—

H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.  
Hon. G. H. Ferguson, Minister of Lands, Forests and Mines





**DON'T EXPECT THE ONTARIO AGRICULTURAL COLLEGE**

To run your farm better than you can yourself. The sane, practical, progressive Canadian farmer is already among the most efficient on earth. By means of machinery, skilful management, hard work and common sense he is now producing more foodstuffs per man than any other farmer in the world.

AND YET—no one welcomes sound and practical information more than does the *Ontario Farmer*. Conditions change constantly; bugs, blights and diseases constitute an ever-present menace; the question of soil fertility and fertilizers attains a new significance; scientific feeding and breeding arouse a wider interest; production must go on though the labor situation was never so acute. From a dozen angles problems confront him.

THOUGH HE HAS the intelligence to solve these problems, he lacks the time—he is too busy producing food. Hence his demand for practical and timely information that he can apply profitably in his business. This is where

**The College Fills the Bill**

It will supply him with the latest practical information absolutely free of cost. It has his interests at heart, and is prepared now in still greater measure to co-operate with him. Thousands in the past have secured this timely information which has meant dollars to them. **YOU ARE PARTICULARLY INVITED, IN THIS CRITICAL YEAR, TO TURN THE WORK OF THE COLLEGE INVESTIGATORS INTO DOLLARS ON YOUR OWN FARM.**

**Write for Information Now**

Of course, a personal visit to the College is to be preferred—then you can discuss the matter fully. Each Department and Professor will be glad to see you and to give you all possible information. But failing that, write to any of these whose names are listed hereafter along the lines suggested. Write directly to each Professor concerned and, unless otherwise directed, address him at the *Ontario Agricultural College, Guelph, Ontario*. You will receive an immediate reply.

**Live Stock, Poultry, Bees**

**ABOUT LIVE STOCK.**—For information regarding any problem connected with the breeding, feeding, management and stabling of horses, cattle, sheep and swine, write PROFESSOR G. E. DAY.

**PRACTICAL DAIRY INFORMATION.**—Any questions regarding the production of milk, feeding of cows, dairy stabling and equipment, cheese and butter-making (factory and home) milk by-products, testing milk, marketing milk and its products, the city milk trade and the milk condensery business will be answered by PROFESSOR H. H. DEAN.

**VETERINARY ADVICE.**—For information concerning the symptoms, cause and remedy of any disease affecting live stock, and the best treatment for a sick or injured animal on the farm, write PROFESSOR J. H. REED, V.S., 179 WOLWICH ST., GUELPH.

**MAKE YOUR POULTRY PAY.**—For the latest information concerning the hatching, rearing and fattening of chickens, egg production, house construction, feeds and feeding of poultry, general poultry hygiene and all matters relating to poultry, write PROFESSOR W. R. GRAHAM.

**MONEY FROM HONEY.**—Any question relating to the apian—spring, summer, fall and winter management, honey production, swarm control, re-queening, foul brood control and other diseases, extraction of honey, marketing, apian equipment and supplies or any other—will be answered by MORLEY FETTIT, PROVINCIAL APIARIST.

**Field Crops, Fruit, Farm Accounts**

THE FIELD HUSBANDRY DEPARTMENT conducts thousands of practical experiments in the fields at the College, and carries on great numbers of co-operative experiments with crops on farms in every part of Ontario. It is particularly well qualified to answer any question in regard to field crops relative to varieties, selection of seed, date of seeding, quantity of seed per acre, preparation of the soil, depth of plowing, value of growing grain matters, methods of cultivation, use of fertilizers and farm manure, rotation of crops, change of seed, methods of harvesting and storing—both of crops and of farm manure, legumes, fodder, crops, potatoes and roots. No other information is available more regarding the above than that of this Department. Write DR. C. A. DAVIS.

**ORCHARD AND GARDEN.**—The Horticultural Department gives information along four distinct lines: fruit growing, vegetable culture, flower subjects and landscape gardening. Any question relating to any phase of these subjects—best varieties, location of orchard, planting and caring for your orchards, pruning, grafting, tillage, cover crops, and ploughing of orchard, cultural information for apples, pears, plums, peaches, bush fruits, grapes and strawberries; irrigation for small fruits and vegetables, vegetable seed growing, green-house work, cultural information for all vegetables, flowers for farm home, the perennial border, culture of all varieties of flowers grown in Ontario, growing flowers under glass; ornamental planting of the farm home grounds and rural school grounds, best trees for roadside planting, and select list of ornamental trees, shrubs, hardy vines, etc.—will be promptly answered. An expert in landscape gardening will be sent free of cost to make plans for home or school grounds upon request. For fruit information write PROFESSOR J. W. CROW; for vegetables, A. H. MACLENNAN, B.S.A.; for landscape gardening, A. H. TOMLINSON; for flowers, W. HUNT.

**FARM MANAGEMENT AND FARM ACCOUNTS.**—For information regarding any phase of these subjects write A. LEITCH.

**[Weeds, Fungi, Insects, Bacteria**

**DEPARTMENT OF BOTANY.**—Do weeds lower your profits? Then send a sample of the worst ones to this Department. They will be identified and information regarding their eradication will be sent you. Or are you doubtful as to the purity of the seed you sow? Send in a sample and have it analyzed. The Department will tell you exactly the kinds and proportion of weed seeds in it. Directions will be sent upon request, also for the control by spraying of field mustard, Apple Scab, Peach Leaf, Curl, Brown Rot and all other fungous diseases. Full information regarding the spraying of potatoes to prevent blight and will be given. In fact, any questions relating to weeds, weed seeds, eradication of weeds and the control of fungous diseases affecting any kind of crop will be answered promptly by PROFESSOR J. E. HCWITT.

**KILL THE INSECT PESTS.**—The Department of Entomology will assist you. For complete information regarding insects—cutworms, grasshoppers, wire worms, scale insects, plant lice, codling moths, and the rest—and how to combat them, write DR. C. J. S. BETHUNE. For complete information regarding practical spraying, spraying mixtures and spray outfits; winter injury to fruit trees and its prevention; and protection to trees from mice and rabbits, write LAWSYON CAESAR, B.S.A., PROVINCIAL ENTOMOLOGIST.

**THEN THERE ARE THE BACTERIA.**—For information regarding the symptoms, cause and cure of infectious or contagious animal diseases, as Tuberculosis, Infectious Abortion, Anthrax, poultry diseases, etc.; and of bacterial diseases of plants, as Soft Rot of Vegetables, Black Leg of Potatoes, Fireblight of Pears and Apples, etc., write PROFESSOR D. H. JONES.

Professor Jones also tests samples of milk which are not normal—ropy, slimy, grassy, bad flavored, etc.—tests sample or bad well water, and gives information regarding the causes and remedy in each case. Applications for legume nitro-cultures are made to Professor Jones, preferably just previous to time of sowing.

**Feeds, Fertilizers, Farm Machinery**

DEPARTMENT OF CHEMISTRY is prepared to advise farmers with their soil problems, samples of

soil forwarded to the Department will be analyzed and the enquirer advised as to its needs. Special information regarding fertilizers may be secured now by any Ontario Farmer. Animal feeds sent in for inspection and analysis will be examined for nutrients, and the sender advised of their composition. Well water is examined for impurities free of charge. Flour problems and bread-making have been long studied, and the housewife may secure valuable information by writing for it. The relative values of different human foods will be explained to all correspondents requesting the same. Write PROFESSOR R. HARRCOURT.

THE DEPARTMENT OF PHYSICS specializes along three different lines, as follows:

For information concerning the heating of farm buildings, electrical machinery and equipment, wind-mills, gasoline engines, telephones, lightning rods, lighting of dwellings and stables, write PROFESSOR W. H. DAY.

Latest information regarding sewage disposal, farm water supply, pumps and hydraulic rams, cold storage and ventilation of farm buildings may be secured from R. R. GRAHAM, B.S.A.

If you wish a survey made of your farm for drainage purposes or full information regarding any drainage problem, write J. R. SPRY, B.S.A.

**FARM MECHANICS.**—To secure information regarding the planning and equipping of a farm workshop, care of tools, buildings or making gates, ladders, evens, trap-nests, coops, feed hoppers, fly-traps, belt lacing, knots, hitches splices, etc., write PROFESSOR JOHN EVANS.

**[Co-operation, Recreation, Study**

**THERE IS STRENGTH IN UNION.**—Therefore, secure information regarding the various phases of co-operation—the difficulties and how to overcome them, the methods of organizing and management, where and when to co-operate, how to incorporate a society, and the best way to raise funds—by writing H. H. LEDREW, B.S.A.

**BE YOUNG—LEARN TO PLAY.** Latest information regarding play and recreation for young and old alike—the play equipment of rural schools, public speaking and debating, dramatics, recreation associations, community gatherings, athletics and athletic meets for the country, etc.—may be secured by writing ALEXANDER MACLAREN, B.S.A.

**DO YOU SPEAK IN PUBLIC?** If so you often wish special information regarding the topic, you have been asked to speak or to debate upon.

You can secure it by writing MARY URIE WATSON to send you material from the Macdonald Institute Loan Collection. Over 30,000 clippings and articles are at your disposal, comprehending nearly every conceivable subject used in popular speaking.

**Most Important of All**

**DON'T TRUST TO MEMORY.** It isn't possible to remember all the above names and subjects without more study than you have time to give. So preserve this page—file it in a convenient place, or tack it to the granary or woodshed door. Then use it as a calendar for yearly advice. Just when you want information the most you will know exactly whom to write for it. It will save time and may mean many dollars to you.

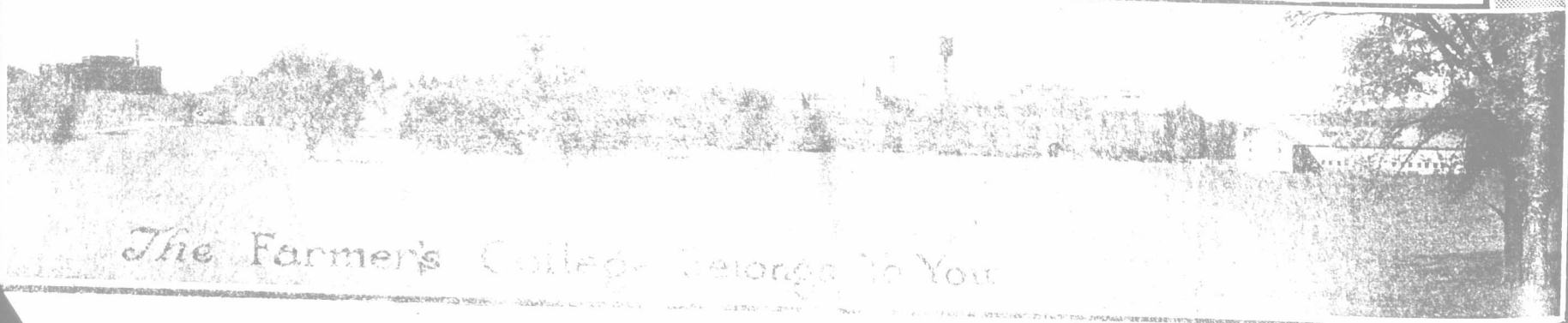
When writing please mention this advertisement, and give as complete information regarding your problem as possible. It will ensure a prompt and satisfactory reply. For fuller details write the Office of the Commissioner of Agriculture, Parliament Bldgs., Toronto.

**The Ontario Department of Agriculture**

Parliament Buildings, Toronto

Sir Wm. H. Hearst  
Minister of Agriculture

G. C. Creechman  
Commissioner of Agriculture



*The Farmer's College - Seizes To You*