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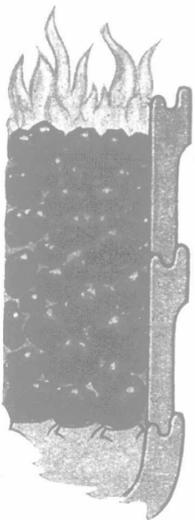


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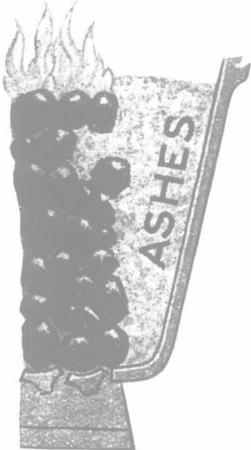
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LONDON, ONTARIO, JULY 27, 1916

No. 1244

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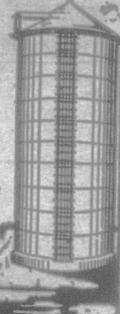
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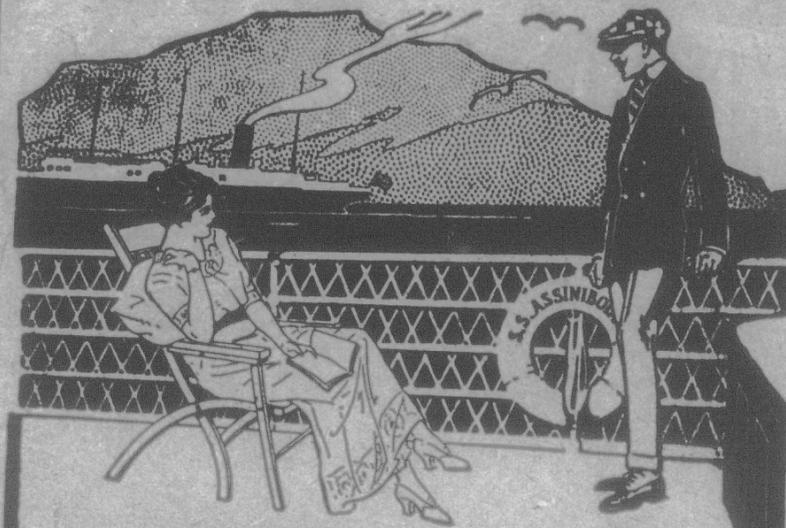


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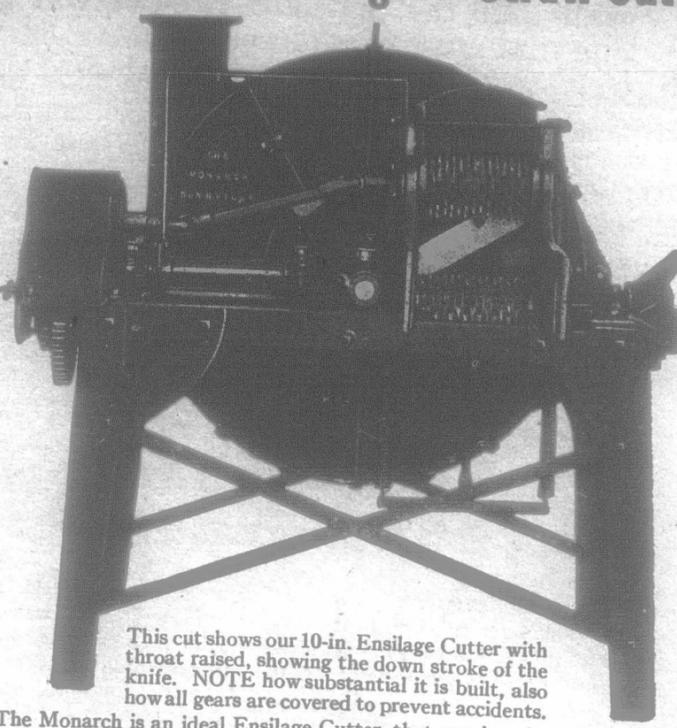
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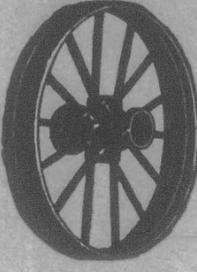
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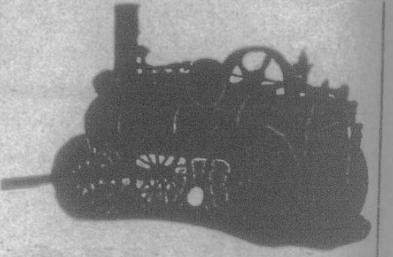
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LI.

LONDON, ONTARIO, JULY 27, 1916.

1244

EDITORIAL.

- Machinery is more plentiful than men.
- Know where economy is required, then practice it.
- Get in your supply of binder twine. It may be scarce.
- One weed gone to seed may mean one hundred next year.
- The herd will never improve through the use of poor sires.
- Fence corners grow grass and weeds—most weeds. All should be cut.
- A farm without a well-arranged water supply is behind the times.
- The cultivator, kept going, is the only salvation of the corn and root crops.
- It is time to commence supplementing pastures. It doesn't pay to let the milk flow drop off.
- The man who grows the best crops generally produces the best live stock in his community.
- Beware of the man who offers something for nothing. Few people live on fresh air and water.
- When is a summer-fallow not a summer-fallow? When it is only half worked. It is then a nuisance.
- How quickly our complaints change! It was too wet and cold a few weeks ago, now it is too dry and hot.
- It may be a little early to talk about after-harvest cultivation, but it is not too soon to be thinking about it.
- There is plenty of room in Canadian politics for more honest, upright politicians, who have the interests of the country at heart.
- The farmer who makes a partner of his son usually makes a farmer of him as well. That is, of course, if the boy has any bent toward agriculture.
- The Kaiser will have to do a great deal of kissing of admirals of his battle fleet before he can open the sea routes to the German commercial fleet.
- The man who is taking good care of his orchard and fruit crop this year may be a big gainer. The crop, on the whole, is not as promising as it was, and prices may be high.
- Have a regular hour for meals, and arrange to have them on that hour. The women folks deserve every consideration in this particular, and the health of the entire family will improve through regularity.
- We don't like the term "Dairy Shorthorn." "Dual-purpose" is much better, and in breeding this type of cattle the breeder should be careful not to lose sight of beef in a senseless stampede for excessive milk production.

There are Two Requirements of the Dual-purpose Cow.

In a lengthy article in last week's issue a writer, who has visited several of the leading dual-purpose Shorthorn herds in the United States, outlined the work being done there, and expressed considerable faith in the future of the dual-purpose animal of this particular breed. We have many times pointed out the dangers existing in the breeding of dual-purpose cattle. We believe that it is not impossible to breed a very high type of cattle which will produce a fair amount of milk, and still possess the conformation necessary for them to be included as very good specimens of beef animals. Many who have started out to breed dual-purpose Shorthorns are destined to make a failure in so far as adhering to the double purpose is concerned, unless they pay more attention to beef and a little less attention to milk. The whole tendency on the part of some breeders seems to be toward milk, and they go into the game seeing nothing ahead but heavy production. We like to see a big, strong cow, with plenty of depth and thickness, straight in her lines and smooth, and then we look for a large udder with well-placed teats, and long and tortuous milk veins. The man who has his eye on milk alone seems to see nothing above the flank of the animal. Udder, milk veins and milk wells are about all he examines, and the cow he selects is usually a slim-necked, narrow-chested, peaked-backed, all-round mean individual. There is no reason for breeding a red and white Holstein. If the cattle bred and named dual-purpose Shorthorns are to be real dual-purpose animals, first attention must be paid to meat, and with it get as much milk as possible without seriously injuring the beef tendencies of the breed.

In laying the foundation for a dual-purpose herd the buyer or breeder should be well satisfied with cows that give from 6,000 to 8,000 lbs. in each lactation period, provided these cows show good beef type and Shorthorn character. Pushing for high records is bound to be carried too far and will result in dairy Shorthorns, a class of animals which should not be eligible to be called dual-purpose. We do not like the name "dairy Shorthorn," because, under existing conditions, there is no excuse for such animal. We have our distinct dairy breeds which fill the bill for milk and cream as well as one could expect, and we have our distinct beef breeds which produce the acme of excellence for the block. The place for the dual-purpose animal, and it has a very large place in Canada's agriculture, is on the average farm, where the man is so situated that he can make more by a combination of a fair supply of milk and good beef calves than by straight beef or straight dairy operations. In order to breed and maintain a herd of the kind of cattle that will produce good steers it is necessary that attention be paid to meat, and that milk production be not over-estimated or over-worked. We are afraid that a great many of the breeders who are enthusiastic over the dual-purpose cow are headed straight for a red and white dairy cow, which is a mistake.

Avoid the term "dairy" in speaking of any type of Shorthorn cattle, and stick closely to the requirements of a good all-round cow, namely, meat as well as milk. This will necessitate some attention to the size and general beef qualities of the cows used in the herd. Select nothing but the big, roomy females which give evidence of being able to produce a good calf as well as a fair-sized pail of milk. Forget about the 15,000 and 20,000-lb. records, and lay more stress on the 1,500 or 1,800-lb. mature steer, or the 1,000-lb. baby beef at twelve to fourteen months of age. Dual-purpose means serving two purposes, not simply giving milk.

War Makers and Peace Makers.

In a hundred years to come historians and journalists will be focussing the causes and consequences of the Great War soon to enter upon its third year. They will finally assign, as observers of the day will do for themselves, the responsibilities and achievements of sovereigns, statesmen and warriors in its beginning, its course and its ending. Prejudice or hireling testimony may for a time obscure issues and becloud judgments, but the day is coming when even the people of the Central Powers, seeing the abyss into which they have been dragged, will cry out as did the old Roman: "Where are my legions?" and demand: "What have you done for our homes? To emerge clean-handed from such an ordeal and to be able to lead effectually in the peace congress when it comes, for the healing of the wounds of the nations, will be more arduous and more glorious than being conquerors. To this place of pre-eminence is Great Britain designated in a volume from the pen of Princess Catherine Radziwill, (Kolb-Dawin) a Russian of remarkable gifts and opportunities, who discloses with merciless candor what has transpired behind the scenes, and analyzes the characters and conduct of the rulers and diplomats of Europe in relation to the day of settlement. Her opportunities for observation were gained at the Courts of England during the reigns of Victoria, Edward VII, and George V; in Germany during the time of Wm. I, Frederick II, and the present Kaiser, and in Russia during the rule of Alexander III and Nicholas II.

In forecasting that Britain would lead in the final negotiations, she pays British statesmen the tribute of saying that they possess most fully the wisdom, political knowledge and fine sense of proportion necessary to give the balanced consideration which comes of long-sighted vision to the arduous and complicated questions which will arise. "Britain took up the sword for the sake of principle and out of respect for her own signature. Her chivalry in maintaining the right of Belgium has assigned her the foremost place in Europe, and most certainly has given her the moral as well as material right to lead in future negotiations. She gave to a sceptic and selfish world a noble example of disinterestedness, which will be written on the pages of her national existence in letters of gold, and will remain engraved in her memory with tears of blood. England deserves well of humanity."

The growing suspicion and condemnation of secret diplomacy in international affairs is heightened by the records given by Princess Radziwill, and should be superseded by an era of daylight. Taking up in turn the part played by leaders in Russia, France, Austria, Bulgaria and Serbia, Belgium and Greece, Italy, Turkey, Germany and England, she concludes that the efforts of the Emperor of Russia and his royal cousin of England will be powerfully exerted to bring enduring rest to a war-weary world.

Along with amazing material achievements a strange moral obtuseness, want of faith in others and density of understanding, seem to have blinded German diplomacy. Through her ambassadors she looked with contempt upon France as utterly incapable of rising to great action or heroism. Prior to the final outbreak the French preserved their temper though purposely goaded by Baron Von Schoen, to reprisals from which happily they abstained. Like England she rejected or was undeceived by vague and insulting promises to remain quiet while Russia and Serbia were being crushed. England was regarded too hopelessly selfish and supine to risk the bones of her soldiers on the battlefield, and Prince Von Buelow thought Italy could be held in the Triple Alliance by bribes of territorial advantages to be wrung from Austria, used as a cat's paw to issue

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the ultimatum to Serbia, which, however, at the urging of Earl Grey conceded practically everything to avert war. Russia was believed to be on the brink of another revolution, which German intrigue sought to foment, as well as sow discord with France. Without faith in anything save perhaps Turkey and her own military powers and preparedness, Germany, in secret, foreordained the catastrophe. This writer combats the current view that Turkey should be wiped off the map and the Straits neutralized, for the reason that in the readjustment more jealousy and trouble would be created than allayed. Though over 80 years old Emperor Francis Joseph is not described as the senile incapable commonly supposed. If possible Austria is revealed worse than Turkey. Having annexed Bosnia and Herzegovina a few years ago, Francis Joseph and his tools secretly stirred up trouble in the Balkans in order to snatch more chestnuts from the conflagration. The assassination of his nephew, Francis Ferdinand, foisted on the Bulgarian throne, was the pretext for war on Serbia, although the old scoundrel denied the nephew a decent burial because he disapproved of his wife. Prince Buelow, the secret agent of the Kaiser, kept Italy from declaring war on Germany though she did declare against Austria, and if in the final crash Austria be dismembered she would deserve richly the fate to which the Kaiser would abandon her.

Princess Radziwill acquits King Constantine of Greece of pro-Germanism, because his country was in no position to effectually intervene on behalf of the Allies. The German Chancellor, Dr. Von Bethmann-Hollweg, is portrayed as clever and brutal but he lacks the brains of Bismarck, who never would have allowed Germany to go to war with Russia. To the wisdom, sincerity and capacity of Sir Edward Grey throughout the whole period, an unequalled tribute is borne and aided by the Rt. Hon. H. H. Asquith, Hon Lloyd George, Sir Maurice de Bunsen and Sir Edward Goschen would naturally at the Congress represent Britain, which holds the key of the situation and can be the ultimate savior of the civilization of the world from an arrogant and cannon-proud aggressor. Perhaps the most caustic allusion in this illuminating

record appears in the concluding chapter: "About one, the German Emperor, I have said nothing for many reasons. I have known him in youth; I have watched him in his manhood; and have come to the conclusion that dead illusions are like little dead children—they should be left undisturbed in their graves. His name will remain engraved in the annals of the world, but how it is not well to try to think. Nearly all of us weep over the loss of a dear one who but for him would not have perished. I have, therefore, abstained from expressing any judgment about his person, though I have said freely what I thought about his ministers and advisers."

The Rural Fall Fair.

The rural fall fair has filled a distinct place in the agriculture of Eastern Canada for many years. It has done much good work, and there is still room for the accomplishment of considerable that would eventually work for the benefit of agriculture in the particular community in which the fair is held. This really means every community, for no county in Ontario, at least, is without one or more fall exhibitions. Last week we hinted that in connection with the fairs, or with the agricultural societies, some improvement might be made in the method of conducting plowing matches by taking the match to the man's own farm rather than taking the man away from his farm to the contest. There are other improvements which might well be considered.

The rural fall fair has developed largely into a holiday and a social time for the people round about. This is all right, and every farmer who works well throughout the summer is deserving of his day or two at the fair, where he meets his friends from other localities and neighbors engaged in the same business to discuss matters pertaining to their occupation, and to have a pleasant time together. There are those who hold that the fall fair is worth while from the standpoint of sociability, leaving out altogether the quality and educational value of the exhibits made. There are others who believe that unless the fair is of some value in an educational way to the exhibitors and to those who attend, it is not worth while. One thing is certain, there is no reason why the county fall fair should not be educational as well as a promoter of sociability and a good place to visit. Too often the directors scurry around at the last moment and get some of the men in the district to enter and bring out stock. This is not always well fitted, and stock raw from the fields does not make as attractive an exhibit as stock well finished and prepared for the fair. Sometimes a big breeder is encouraged to take his herd to the show in order to fill the stalls, and he walks away with all the money, there being little or no competition. It is competition that brings out the good and bad points of the stock. An animal generally looks well at home, but when placed alongside a better one the defects of the former stand out prominently. This is where the public should get most out of the fall fairs. A campaign should be put on for better fitting, a larger local entry, keener competition, and an all-round better exhibition. We would advise the directors of these fairs to encourage the young men in their counties to exhibit. Twenty young men bring out one or two well-fitted animals, each one of far more use to the fair than one big exhibitor trotting out twenty or forty animals. If necessary get some of the young men on the directorate. They will bring in some new ideas, and some of the vim and aggressiveness generally lacking in the older men who have seen the fair go on the same year after year for a quarter century.

The same thing applies to exhibits of grain, roots, vegetables, fruits and other farm crops, as to the stock. Quality should be insisted upon, and a regular campaign made to get out these exhibitors, and to get them to fit their stock. In fact, we would be in favor of cutting out prizes altogether to stock or any exhibits which were not properly prepared for the show-ring.

We have often wondered whether or not agricultural societies could not run better farming competitions, based not only on the appearance of the farm, but upon profits made as shown by the financial

statement of the owner or tenant. This would serve the double purpose of insuring a more systematic and all-round better method of farming, and also would promote the keeping of accounts on the farm which, in the end, would show the farmer wherein his profits and losses resulted. If necessary the farms could be divided into three or four classes, as for instance, dairy farms with pigs, beef-cattle farms, and mixed farms, or in any more suitable way that the societies might agree upon. Anything of this nature, if it is to achieve its greatest success, should emanate from the agricultural societies or the Boards of the different county fairs. We feel certain, that if suitable prizes were offered and the right conditions imposed that a marked improvement in the farming of the districts trying the scheme would soon be noticed, for one good farm in a neighborhood has an effect upon all the surrounding land, which cannot be estimated in dollars and cents. In this, as with the plowing, we advocate taking a part of the fair to the man's farm, where it is really of most benefit.

Graded Prize List.

At least one exhibition in the West (Calgary) has tried out graded prize lists, and we believe quite successfully. It is claimed that breeders who have exhibited at this fair have not complained to any great extent about the new system. By this system all breeds are placed on exactly the same basis. They receive the same amount of money, provided their entries are equal. Naturally, the breeds which are most popular and which make the largest entries get their correct share of the total prize money, and the prizes increase in number as well as in value as the entries increase in a class, leaving not so wide a difference between the several prizes as under the system followed by most of the fairs. The graded list divides the money according to the number of entries in the class, which looks to be quite fair, because the more animals out the keener the competition, and with this keen competition the winner should get more money. It also insures more money to the animals placed lower down in the list where there are big classes, which should encourage amateur exhibitors. Only three entries are allowed to compete in any class from one exhibitor. An exhibitor can thus make a splendid exhibit, but is not permitted to walk away with all the money and make the system unworkable. Where the amount offered for stock at various ages does not graduate to the same extent as under the old system, this feature is provided for by paying 20 per cent. less for classes under one year, and 50 per cent. more than the list for aged stallions and aged bulls. Some other classes are also balanced by adding 50 per cent. to the list, doubling it, or, as in the case of four-horse teams where the entries are sure to be light, paying three times the list. The total money is first divided among the departments on a percentage basis, then pro rata to prize winners. This permits the departments to share in the prize money according to their total entries. If entries fall off in any department to a large extent part of the unearned money goes to the department which makes a better showing.

Special prizes and championships are simply added to the prizes won in the regular classes.

We are reproducing a table showing a tabulated list of prizes for horses, as it runs according to the number of entries.

Tabulated List of Prizes.

Total value.	No. of entries to qualify.	1	2	3	4	5	6	7	8	9	10	11
\$ 15	1 or 2	\$10	\$ 5									
25	3 or 4	12	8	5	R							
40	5 or 6	15	12	8	5	R						
60	7 or 8	20	15	12	8	5	R					
80	9 or 10	22	18	15	12	8	5	R				
102	11 or 12	24	20	18	15	12	8	5	R			
127	13 or 14	26	23	20	18	15	12	8	5	R		
154	15 or 15	28	25	23	20	18	15	12	8	5	R	
180	17 or over	30	26	24	22	20	18	15	12	8	5	R

We feel sure stockmen in the East will be interested in this system. It has several good features and we invite discussion on the subject at this time. It should be a grand system to encourage amateur exhibitors, and increase the competition and value of the show.

Nature's Diary.

A. B. KLUGH, M. A.

A rather striking moth, which is sometimes not uncommon in the vicinity of vines of the Virginia Creeper, is the Eight-spotted Forester. The adult of this species is black with two very pale yellow spots on each of the fore wings and two white spots on each of the hind wings, and measures about an inch and a quarter across the spread wings. One of its most interesting features is the possession of little bright red tufts of feathery scales on the upper part of the two front pairs of legs, which give these legs the appearance of being clothed in red knee-breeches. In this species the male and female differ from one another in the fact that in the male the inner white patches on the hind wings are much larger than in the female. The larva of this insect feeds on the leaves of the Virginia Creeper, and occasionally becomes abundant enough to do a considerable amount of damage to this ornamental vine.

In some parts of Ontario the Elm Leaf Aphid, (*Callipterus ulmifolii*), is extremely abundant this year. The presence of this plant-louse is usually revealed by the leaves of the Elms, and objects under these trees, becoming spotted and dampened by the sugary excretion, which this insect, in common with other plant-lice, exudes. This fluid, which glistens in the sunlight, is known as "honey-dew" and is a favorite drink of many species of ants.

This Aphid in the adult condition is yellowish-green winged, and about one-tenth of an inch in length, while the young are the same color but smaller and wingless. As the young grow they moult several times, and their cast whitish skins cling to the leaves for a considerable time.

Like all the plant-lice these insects suck the sap of the leaves, and when trees are badly infested many of the leaves are seen to be dead and brown.

The best means of combating this insect is to spray with kerosene emulsion, made by dissolving one-half pound of hard soap in a gallon of boiling water, and while it is still hot adding two gallons of coal-oil and stirring until the mixture is thoroughly emulsified. For use this mixture should be diluted in the proportion of nine parts of water to one of emulsion. It is most important that the spray be directed on the lower surface of the leaves, as it is here that the insects are found. This remedy may be applied to a few isolated ornamental Elms, but the cost of spraying large numbers of such big trees prohibits its general use, and we are consequently obliged to rely upon its natural enemies, such as the Lady Beetles, to keep it in check.

A very beautiful plant which is now in full bloom is the Blue-bell, or Hair-bell. The flowers of this species are bright blue, bell-shaped, half to three-quarters of an inch in length, and droop from hair-like stalks. The earliest leaves produced at the base of the plant are nearly round, and wither early, the leaves which are present on the stem at flowering time being long, narrow, and pointed.

The Blue-bell hangs its head, not from modesty as the poets would have us believe, but to protect its pollen from rain and from crawling insects. These insects would brush off the pollen which had collected on their bodies on the grass as they crawled through it, so that none of it would reach another flower to bring about cross fertilization. The Blue-bell advertises for winged insects by its bright color, and succeeds admirably in attracting bees, since blue is their favorite color. These visitors cannot very well walk on the vertical petals, and must clasp the pistil if they would secure the nectar secreted at its base. In doing so they dust themselves, and the immature pistil with pollen from the surrounding anthers. This does not result in the fertilization of this flower as the stigma is not yet ready for pollination. By the time all the pollen has been removed and the anthers have withered, the pistil has grown longer, until it looks like the clapper in a bell, and the stigma at its end has separated into three sticky lobes. When an insect, dusted with pollen from a younger flower, enters the bell, some of the pollen adheres to the sticky surface of the stigma and the flower is thus cross-fertilized.

We are quite used to seeing one animal devour another, a large fish swallow smaller ones and birds consume insects, in fact all around us we find one form of life existing at the expense of some other form. But the wide-spread application of this fact is brought home to us when we witness a tragedy such as I observed the other day. While examining some Protozoa, those minute, single-celled animals which are the lowest forms of animal life, under a high power of the microscope, I saw a Stentor, a trumpet-shaped Protozoan about one-hundredth of an inch long. This form has an opening known as the mouth, at the upper end and round it a row of cilia, (fine hairs), which by their motion create a current of water towards the mouth. In the current was an Amoeba, the simplest of all Protozoa, about one-thousandth of an inch in diameter. When the cilia beat rapidly the Amoeba was drawn towards the mouth of the Stentor, when their action was lessened it moved slowly away. Finally the Amoeba was drawn into the mouth of the Stentor and through the transparent substance of that animal could be seen in its "gullet." The Stentor had a meal; there was one Amoeba less in the world.

THE HORSE.

Under no conditions throw cold water over a heated horse, unless it be put on the legs and feet only.

Don't forget that the horse is your friend and without horses even we in Canada would starve.

Remember that on a hot day the horse appreciates a short rest in the shade of a tree as much as does the driver.

Plenty of salt in the pasture field and an abundance of fresh water are necessary to the best development of the colt.

When taking your refreshing drink in the middle of the forenoon or afternoon think of the horse. A pail of cool water will add much to his comfort.

Relieve the weight from the horses' necks by the use of tongue-trucks on all implements and machinery where these are suitable and can be easily attached.

When tying your horse to be left for several hours select a cool, breezy spot. Do not, because it is handier, hitch him up to the south side of a building in the blazing sun and out of the breeze.

Keep the stable well ventilated. Horse stables are very often about the hottest part of the building in the summer. A current of air passing through the stable but not directly over the heated horse, will soon lower the temperature and allow the animal to cool down.

This is not the best season to breed the mare. It would probably be advisable to arrange for a fall colt, if she has been missed up until this late date. However, circumstances must always be taken into consideration and some would rather have a late June colt than an early fall colt. At any rate if you have a good mare do not hesitate to breed her to the best horse in your locality.

Shipping Draft Geldings Co-operatively.

The following article is composed of extracts from a speech delivered by G. E. Wentworth, superintendent of the Horse Department of the Union Stock Yard and Transit Company, Chicago, Ill., and was recently published in the Breeder's Gazette. It gives such a good idea of the horse market situation in the United States that we feel sure our readers will appreciate it.

The co-operative marketing of horses impresses me with its wonderful possibilities. It is actually needed, positively demanded and not longer to be evaded. It must come.

The co-operative method of disposing of all classes of goods is undoubtedly one of the best which has ever been discovered. The many advantages to the farmer of disposing of his draft geldings through co-operative shipping appears at first blush so clear that no argument should be required to convince him. On second thought, however, the sad fate of numerous co-operative associations presents itself

vividly. Hundreds of co-operative life insurance companies have fallen by the wayside for lack of proper support from the supposed beneficiaries. Co-operative buying has failed time and time again owing to the incompetency or the dishonesty of chosen agents. The co-operative selling of cotton in certain southern districts was abandoned because super-heated imaginations led to expensive management. These are the rocks upon which co-operative enterprises split: lack of support, debt, expensive management, incompetency or dishonesty. In Scotland and Ireland farmers have succeeded because of their great thrift and honesty, and in the United States farmers have successfully marketed co-operatively their cattle, sheep and hogs, obtaining the best prices and dividing the whole profit.

In the early days of our horse market we received loads consigned jointly by many owners. Few horse buyers or middlemen operated in the country. Market commission men invested no money and were called upon to pay no drafts. Horses were billed by their country owners direct to commission men. The commission men sold the horses at auction for the high dollar and returned satisfactory proceeds to the farmers. Horses were plentiful. Prices were low, trade was active, sales were rapid and returns quick. There was a place for every horse. No horse that came to market was without its particular job. Export trade was good. Domestic trade was good. Drafters, bussers, expressers and street car horses could scarcely be obtained fast enough to satisfy the demand. Even before horses were unloaded from the cars knots were tied in their tails through the slats of the stock car to signify that such and such an exporter was entitled to first bid on the horse so marked. Each buyer for export had his own peculiar knot. Horses needed no selling, but themselves according to their classes. That time is coming again. Horses of class will sell themselves.

In those days the business got so good that horse commission men became eager to secure more and more horses for themselves. The desire to get all of the horses, to put all competitors out of business, arose in the mind of some hungry commission man. From this desire to get it all was born the custom of furnishing buyers with money to pay for horses in the country. The horse buyer was injected into the game. This effort to corner the horse market, to secure for one firm all of the horses in the world, was met by all other commission men and by all other markets. The farmer disappeared from all horse centers and to-day practically all the commission man's money is invested in all the horses shipped to market. Every dollar expended by a market horse buyer in railroad fare, hotel bills, in high living, or laid up as profit out of a horse which sells itself, is lost to the farming interest.

Not that the market horse buyer is totally useless. There are many horses which could never be marketed profitably except through the offices of such a man. It takes an operator to place horses whose job is not plainly obvious by reason of their bad appearance, their ungainly proportions or their serious defects. A horse dealer has his uses. He knows exactly where he can sell this or that horse which he buys, if it can be used at all in the world's work. There are alley peddlers who pay \$60 for a plug and other alley peddlers who pay \$250 for a real horse. It would be difficult for your manager of a co-operative shipment to discover which peddler uses the magnificent draft horse for peddling his



Shepherds with Their Horses and Dogs on a New Zealand Ranch.

wares to city housewives and needs one now. Users of horses are frequently finicky about their looks and there will be in co-operative loads of grade draft geldings horses which can only be got rid of by a real operator through his peculiar knowledge of the trade.

There is a vast advantage in handling draft geldings through a large central market. The consumers of this class of horse reside principally in the great cities of the east. The buyers are city men, accustomed to city facilities and city bright lights. They use the extra-fare trains in order to cut down the time which they are obliged to spend in railroad travel. If they had their way they would have all the big horses lined up in one big barn for quick handling and to save themselves a few rods of needed exercise.

On the Chicago market horse dealers do business with one another like brokers upon the stock exchange. Without the scratch of a pen thousands of sales are made; few disputes arise, and no lawsuits. Horsemen never go to law; that is, seasoned ones never do. When a legal luminary announces that his client is a horseman a ripple of amusement circulates through the court room. Even the spectators know the answer before a single juror is sworn. I know a market horseman of responsibility who will not sell, nor even recommend, a horse to an upright business friend. He knows that if the horse turns out badly from any cause he will lose his friend and his money. Yet that same market man will trust a penniless horseman with several thousand dollars with which to buy horses for him in the west, or with a load of valuable horses to sell for him in the west.

There seems to be no other line of trade in which such skepticism exists as between horse buyer and farmer as to the fairness and honesty of the party of the second part. I never yet talked with a horseman who did not violently asseverate that the farmer got full value for every horse that he (that particular horse buyer) had purchased. Few farmers, on the other hand, are convinced that any horse buyer gives them full country value for their live stock.

In marketing a co-operative shipment of drafters in Chicago the first item of expense is the freight, plus yardage and terminal charges. There may be feed at an unloading station to count, if the shipment takes more than 36 hours. Next is the per diem market feeding charge; then the commission upon each sale. To these charges there must be added those incurred to make the horse extra presentable—such minor items of expense as sacking, braiding and special wiping or cleaning. A shrewd Minnesota horse buyer figures that his horses must advance \$15 each over country cost before he can hope to see a profit.

The demand for the grade draft horse stock comes soon after Jan. 1 in each year and lasts until the end of May. There have been years when there was a special demand for this class of horse in the summer months. It is an easy matter for the market authorities to notify the co-operative farmers when to ship loads which have been collected.

Perhaps the best way to get this co-operative marketing of draft geldings started right would be to hold a special sale. Have the sale well advertised; in fact, make a gala day of the first sale so as to get both ends of the horse movement into close touch with each other. Just prior to making a co-operative shipment there should be a little co-operative feeding and co-operative judgment passed on the availability of the co-operatively shipped horses, and a shrewd selection of a capable co-operative representative to attend to the business.

Not since 1906 has the market for domestic horses been so active as it has been this year. The eastern buyers flock to Chicago demanding big horses. "Where are they?" they ask. "Are there none to be had in the country? It seems as though no one knew what a real draft horse was any more." It is useless to try to appease these would-be buyers by showing them horses under size, say around 1,400 pounds, or those weighing 1,700 or over but with serious defects. And let me say here, when this co-operative marketing of draft geldings is attempted send in none with back hocks, bad wire cuts, splints, sidebones, curbs, or the aged, bad-eyed, windy or crampy kind, and expect a sound horse price. On the present market, real drafters are selling for from \$225 to \$350. These prices mean a genuine horse, full-aged, sound and right.

Farmers must breed horses, and breed and breed. They cannot keep up with the coming demand for grade draft geldings. They will never breed them last enough to keep down the price.

Never was so glorious an opportunity for the improvement of the horse stock of America. Hundreds of thousands of them have left our shores never to return. In single file they stretch from the Mississippi to the tip of Cape Cod and there is no end of the demand in sight. This war's work of destruction is not yet half done. The citizenry of those countries have given their best. They have given their horses, their geldings, their stallions and their mares. The horses shipped from here do not meet their ideals even for war horses. After this conflict they must and will seek the world over for grade draft geldings to work and for grade draft mares to breed. Their buyers will come here to get them. Will we have them? There is time enough to breed them if we delay no longer. The time is short in which to do the work. It is sufficient if

no time is lost. The foreign buyers will demand pure-bred, registered draft mares.

Already orders for agricultural horses have been placed here, delivery being contingent upon the conclusion of the war. The domestic trade is good; the export trade will be.

We must keep our horse breeding ideals ever before us. When our ideals perish our horse breeding industry shall die from the earth. Breed to the best, not to the nearest. Breed for quality, not for quantity. One will have enough bad things thrust upon him.

Great men die and their after usefulness to the world is to point morals to tales to school children. A great horse never dies. Darley's Arabian, Hambletonian, Justin Morgan, Brilliant, Baron's Pride, all of them live in their numerous progeny. I find no eugenists, looking for a strain of blood from Saladin or William the Conqueror, but horse breeders in all countries seek eagerly even the most attenuated strain of the blood of the horses upon which they rode.

LIVE STOCK.

A change of pasture is good for both the pasture and the stock.

If possible, when the pasture begins to brown and get short separate the sheep from the other stock.

If you want to make pork cheaply make use of plenty of clover, alfalfa, rape, or some other form of green feed.

Beef raising has come back to its own and the dairyman is not the only man who can show a profit from his farming operations.

This is an opportune time to keep all the good females for breeding purposes. The outlook for live-stock husbandry never was brighter.

The average amount of milk supplied to calves at this season is by no means enough to quench their thirst. See that they get water besides.

The man, or group of men, not showing enough interest in good stock to purchase and look after a good pure-bred sire will not likely make the best of a sire given to them for nothing.

A little grain and a little summer silage would not come amiss now on most farms. Grain-fed stock usually produces more milk and better gains when the pasture begins to dwindle.

Don't forget to keep the watering trough well filled. An animal will do better with a comparatively short pasture and an abundance of water than with plenty of pasture and a poor supply of this necessity.

Where sufficient feed is assured for winter it might be better to keep the stock up in condition by pasturing the second crop of clover on one field rather than let them down to save the crop for later use.

Keep the calves in at least during the day time. If they must be out, let them have the run of a grass paddock at night. Nothing will retard the growth of the young calves more than fighting flies in the hot sun.

Diarrhoea in Young Pigs.

Diarrhoea is quite a common disease in young pigs, and is the cause of considerable fatality, especially in the spring.

Causes.—The nature of the food is a frequent cause. If the dam be in an unhealthy or feverish condition the first few days after the birth of the litter, her milk becomes unsuitable for food for the young, and diarrhoea is the usual result. Improper feeding of the mother during pregnancy and after farrowing is also a common cause of the disease. Feeding of decomposing, rotten or frozen feed to the dam will result in poisonous material in her milk, which irritates the stomachs of the young and causes the trouble.

When the dam and litter are kept in close, damp quarters, diarrhoea is very liable to develop. The young pigs require light, airy quarters, with room for exercise, and plenty of sunshine. On many farms the sow about to farrow is placed in an overheated, damp, dark building. In such cases we cannot be surprised if the pigs commence to die at a few days of age. Diarrhoea is especially liable to appear if the weather be damp and chilly. Cold, wet spring weather is especially favorable to the development of the disease in newly born pigs. The youngsters get out in the damp grass and become chilled, which reduces their strength and vigor, and renders them susceptible to the actions of any poisonous substances that enter their stomachs in the milk.

On general principles we may say—that the young pig, in order to be healthy must have the milk of its own dam. In cases where the sow dies, or refuses to nurse her young, and an effort is made to raise them on cows' milk, diarrhoea is often noticed in a few days. The same condition is often noticed when the young are nursed by another sow that has farrowed a week or two before the dam of the pigs. The milk appears to commence to change a few days after farrowing and gradually becomes stronger. For this reason the milk of a sow that has farrowed two or three weeks previously is not suitable for newly born pigs, and they seldom thrive well on it. The age at which the disease appears varies from the first day after birth to several weeks. In some cases the disease is noticed so soon that it almost appears to be congenital. In cases where the pigs are of considerable age before the disease appears, the diarrhoea is preceded by a few days of constipation. In some seasons the disease is very common in some sections, which tends to indicate that it is of an infectious nature.

Symptoms.—The most prominent symptom is the evacuation of liquid, or semi-liquid faeces, sometimes noticed shortly after birth. The excrement is almost watery in character, usually of a grayish or grayish-yellow color, and with disagreeable, foul odor. The longer the disease continues the more liquid the discharges become and the more foul the odor. They also irritate and stain the tail and hind quarters.

At the first the appetite is often good, and it may remain so for a day or two, but the desire for food is soon lost, and the patient rapidly loses strength and flesh. The animal becomes weak, stunted in growth, stands with head down, tail drooping and the abdomen tucked up. The hair becomes rough and unhealthy in appearance and the animal often evinces pain by squealing and grunting. If the disease be not checked the patient usually dies in a few days. The results are especially bad where the disease appears during the first few days of life. The younger the animal the less probability there is of recovery.

Treatment.—As in most diseases, prevention is of more importance than medical treatment after its development. The pregnant sow should be kept in clean, healthful quarters and her feed and water should be of good quality. Arrangements should be such that she will be practically compelled to take



Women are Doing all Kinds of Work in England.

This shows the wife of a British soldier shearing sheep in North Hants. International Film Service.

plenty of exercise. In cold weather she should be given a reasonable allowance of raw roots, or other substitute for grass. No sour swill or mash or mouldy grain should be allowed. The quarters, in which she is placed to farrow, should be clean, dry, roomy, and so arranged as to allow the entrance of sunshine.

If the dam appears feverish after farrowing it is well to give her a laxative of 6 to 8 oz. of raw linseed or castor oil and feed lightly for the next 24 hours. When the disease is noticed, unless the pigs are very weak, it is well to give a laxative of about a tablespoonful of raw linseed or castor oil in order to remove poisonous substances from the stomach and intestines. This, of course, temporarily increases the diarrhoea, but if given in the early stages of the disease it does not materially reduce the strength and vigor of the patient, and when it succeeds in causing an evacuation of the cause of the trouble a cure has practically been effected. This, with proper attention to the diet of the dam, is often all that is necessary. When diarrhoea continues for more than 8 or 10 hours after the administration of the laxative, or in cases where the patient is so weak that it would be dangerous to give a laxative, it is necessary to give treatment to check the diarrhoea. For this purpose probably nothing gives quite such good results as about one-half dram of the subnitrate of bismuth and 2 or 3 drops of laudanum in a tablespoonful of new milk, every six or seven hours until diarrhoea ceases.

After the diarrhoea is checked it is good practice to give tonics as 5 drops tincture of gentian and 1 drop tincture of iron in a spoonful of milk three times daily for several days. WHIP.

THE FARM.

Our Scottish Letter.

EDITOR "THE FARMER'S ADVOCATE":

We have passed the longest day, and yet we have had very little summer warmth. "Genial" is not a word that can be applied to much of the weather experienced this summer. The one crop which promises to be heavy is hay, and there is no end of heartburnings as to the method in which the Government will deal with it. There has been a great hullabaloo about the way in which the crop of 1915 has been dealt with. It cannot be said that the Government action has been consistent or masterly, but, on the other hand, it must be acknowledged that its intention has been excellent. As in many other things good intentions in themselves are not sufficient to justify all methods, and the Government methods of dealing with the hay crop of 1915 have left a good deal to be desired. They commandeered the surplus of 1915 crop; what they should have commandeered was the whole crop. It was a short crop to begin with, and there was a very severe early spring snowstorm, which necessitated heavy demands on the fodder supply to keep hill stock alive. Everything conspired to make the balance of the crop, which remained after the Government demands had been met, scarce and dear. But the Government restricted the selling price to the consumer to £6 10s. per ton, and those who had a good deal of hay on hand felt very wild, as the demand was such that in some cases for a few weeks they could have got double that price. However, it was the earlier Government demand which curtailed the later supply, and the authorities, therefore, felt themselves under obligation to protect the consumer from the rapacity of the gentlemen who held the surplus and meant to coin money at all hazards. Naturally they feel bad, and have made much noise. Unfortunately some who have no sympathy with the rapacious aims of these gentlemen have lent their countenance to agitation against the Government scheme, with the result that at the moment the rumor is that Scotland may be left severely alone by the Government. The hay crop in England is so heavy that the War Office may get all it wants without coming to Scotland at all. We are awaiting developments.

These have come. Scotland is to be left out altogether.

A sensation has also been caused by the action of the Government in dealing with the wool clip of 1916. The buying and selling of wool in the open market has been absolutely prohibited, and the War Office has commandeered the whole clip at the price ruling during 1914—that is for the clip of 1914, plus 30 per cent. Flockmasters are making trouble over this. The price for the 1915 clip was a great advance on the price of 1914 clip, and in many districts ewes were purchased, in the autumn of 1915 to bring grey-face lambs this season, on basis of wool prices of 1915. Many farmers who follow this practice are face to face with a serious issue. Their revenues will of necessity be much less than they bargained for, and there is an outcry on the subject, before which the Government may, in part, have to give way.

At the same time there is another side to the story, and it is just possible farmers may cry out too loudly about these things. City and towns people are asking what all the noise is about. They did not interest themselves much, if at all, in the hay racket, but wool is another proposition. The man in the street is interested in wool, and he is beginning to ask whether the farmer is not fairly well off. This is the point. Farmers used to pay Income Tax on one-third of their rent, which was taken in a rough and ready way to represent their profits. The effect of this was that the vast majority of farmers paid no

Income Tax. Under the Finance Acts, passed to meet expenditure, the basis of assessment has been altered, and the farmer has been given an option. He can either pay on his full rent or on his actual profits. In order to discover the latter he must keep books like other traders, and there is no insurmountable difficulty about that. Flockmasters will certainly pay on their rents. If they were to pay on the average of their profits during the three years, 1913-14-15, they would pay very handsome contributions to the national exchequer. It is said, for example, that one flockmaster last year cleared £15,000. He will only pay Income Tax on about £1,500. If he were a manufacturer or merchant making such profits the Government would take 65 per cent. of the excess profits which he has been making since War was declared, and on the remainder he would be taxed at the rate of somewhere about 8s. on the £. It is represented to us in this way. If in 1913 a manufacturer's income was £10,000, and in 1915 it was £20,000, the Government would lay hold on 65 per cent. of the total, which would leave him with something over £8,000 of real profit, and on this he would have to pay Income Tax at the rate named above or thereby. Altogether farmers generally are having the best of it. Some of them have hardships on account of increased cost of production. Wages have risen tremendously, quite 50 to 60 per cent. in many districts. Manures and feeding stuffs are all very dear, and those who engage in feeding cattle and sheep have had to pay ransom prices for their stores. At present such are, of course, doing quite well, but when they come to lay in their stores for next winter they will be up against it. The moral of all this simply is that it is unwise for farmers to make too much noise. They are making war profits as well as other people, but they are exempt from Government demands on excess profits, and they are very leniently dealt with on the score of direct taxation.

The early potato sales on the Ayrshire coast have passed, and farmers there have had a great time. Some have got as high as an average of £50 per acre, and top figures have reached £82 per acre. Such figures as these are unprecedented, even on the Ayrshire coast. As indicating the enhanced value of farm produce consider these figures: The average per acre at Morriston this year was £50 4s. 11d., as against £35 10s. 7d. last year; at Jameston the relative figures are £46 10s. as compared with £33; at Warren, £50 as against £41; at Dowhill, £45 19s. 9d. as compared with £28 2s. 6d.; at Drumbeg, £51 12s. 10d. as against £32 8s. 4d.; at Little Turnberry £53 as against £33 4s. 7d. Like the flockmasters the early-potato growers will pay an Income Tax on the rents of their farms, rather than on their profits. Old potatoes last week were selling for £14 per ton, and a few months ago many tons were sold at 50s. These things are a puzzle to those outside the trade but, no doubt, some explanation can be given.

The Royal Agricultural Society of England has held its seventy-seventh annual show. The site was Wittington Park, Manchester, the property of Lady Egerton, of Tattar, and the event was a great success. It is rather interesting to remember that the County of Lancaster has a population which exceeds that of the whole of Scotland, and the same thing is true of the County of York. We have heard it said that the area of which Manchester may, in a general way, be regarded as the centre commands a population of about 8,000,000. It may be so. The fact that it commands an enormous population is undoubted. Three Royal shows have been held in Manchester, viz., in 1869, 1897, and 1916, and all three have resulted in handsome profits to the Society. The show of 1869 holds the record for profit, and the show of 1897 for attendance; the profit in the former year being £9,153, and in the latter £4,074. It would be idle to speculate on this year's profit, but

judging by the attendance on the first three days it will be handsome. It is a tribute to the stolid, persistent character of the British public that such a show should have been held in the middle of the great War. Taking all things into consideration the exhibition of stock was highly satisfactory.

SCOTLAND YET.

After-harvest Cultivation.

By the time the last cultivation has been given the corn and root fields there is usually one or more fields on the farm from which the season's harvest has been gathered. The aim on many farms is to give such fields, as are not seeded down, some form of tillage during the early fall. This used to be the general practice, but of late years it appears to be going out of vogue. Scarcity of labor is one reason why the amount of early fall cultivation is decreasing. The acreage devoted to corn has increased greatly of recent years, and the harvesting of this important crop commences soon after the grain crop is garnered and encroaches somewhat on the time previously used in stirring the surface soil.

Cultivation at the right time is one of the most effective means of keeping noxious weeds in check and when the surface soil is loosened the evaporation of moisture is reduced to a minimum. By capillary action in the soil, moisture is being continually drawn from the great reservoir to the surface for the use of growing crops. The plants shade the ground and there is very little moisture lost by direct evaporation, but so soon as the crop is harvested there is nothing to check the escape of water from the soil unless a dust mulch is made by some means of cultivation. It may seem absurd to commence in August to save moisture for the following season's crops. However, in the average season it is necessary, as only about one-half the amount of moisture required to grow and mature a crop falls during the growing season. The fall, winter and spring rains must be depended upon to fill the soil with moisture to furnish the crop with a drink when it most requires it. The soil should be looked upon as a great reservoir, that not only contains plant food, but also holds vast quantities of water. Without water the plant food does not become readily available and the plant soon wilts. It is the duty of the tiller of the soil to make conditions right for the filling of this reservoir with water as well as plant food, and late summer or early fall is not too soon to commence. A hard, compact surface soil does not absorb the rains that come as readily as a soil in good tilth. Of course, a soil covered with a luxuriant growth of clover or other growing crop, that completely covers the surface, is in a condition to make the best use of the water that falls. The bare stubble field requires to be gone over with plow, cultivator or disk.

Then, there is the weed problem. Many annual weeds ripen their seeds before the grain is harvested. These seeds fall to the ground, and if the soil is stirred many will germinate and then be destroyed with later cultivation. There are also varieties of weeds that appear to grow up and produce seed after the crop is harvested. Ragweed is a representative of this class. Many of the perennial weeds as twitch grass, sow thistle and bladder campion can be materially checked in their growth if not entirely eradicated by thorough after-harvest cultivation. Usually there are several weeks of dry, hot weather at this season which soon destroys any roots exposed to the surface. More fall cultivation would aid in lessening the numbers of weeds and with many soils would tend to increase the crop yields.

Time to Cultivate.

It is important that the work be done as soon as possible after the crop is removed from the field. On



A Field of Ox-eye Daisy.

This bad perennial if allowed to gain a foothold soon makes a flower garden of the pasture and hay fields.

some farms this phase of the season's work is considered to be so important that the binder is followed with the disc or cultivator. This is not practicable on most farms owing to lack of sufficient horse power and men. However, the work should be done soon after the crop is removed from the field. It is not uncommon, especially in a catchy season, to see the cultivator or plow being used between the rows of stooks. The sooner the work is done the greater the opportunity of conserving soil moisture and of destroying weeds.

Methods of Cultivation Followed.

The gang plow is the implement most generally used. It can be set to cut and turn a shallow furrow. If carefully handled every weed will be cut and turned under, thus exposing the roots to the hot rays of the sun. This is an advantage when it is desirous of destroying weeds with running root stocks. The plowed land should be harrowed a couple of times to form a mulch. Where weeds are bad, a broad-share cultivator can be effectively used. If time will permit, a cultivation every week should be given a weed infested field that has been gang plowed. Careless plowing and failure to cultivate will not tend to eradicate weeds.

Where it is not thought advisable to use the plow, two or three times over the field with a sharp disk will pulverize the soil and put it in a condition so that moisture will be absorbed and retained and weeds will commence growth. The spring or stiff-toothed cultivator has also been used to good advantage on the bare stubble field. If a month or more elapses between breaking the crust and deep fall plowing there will likely be a crop growing which will indicate the number of weed seeds which have started growth only to be destroyed before they have an opportunity of reproducing themselves. Without cultivation many of these seeds would never have germinated until the following spring where, under shelter of the growing crop they would have a better opportunity to complete their life cycle. Fields

not in clover, grass or other crop are benefited by fall cultivation.

Invariably the fields that have been cultivated plow easier in the fall, especially when the weather sets in dry. True, it may be a slight disadvantage in a wet season as it is possible for a field to be too wet to plow, but this is the exception not the rule. Too few plowmen use a "jointer" or "skimmer" on their plow when giving a field its final plowing for the season. By its use all growth is turned under and not only does the furrow have a better appearance, but weeds and grass are completely buried. Without the light few plants survive long. A more general use of this small attachment to the plow would aid in keeping the fields freer from plants, which may be termed soil robbers.

In some sections, after-harvest cultivation consists in plowing deep, and following up with surface cultivation until winter sets in. Sod, as well as stubble fields, are treated this way. As soon as time will permit after the hay or grain is removed the fields to be broken up in the fall are plowed the usual depth, varying from five to seven or eight inches, depending on the nature of subsoil. It is essential that a skimmer be used on the plow. These fields are gone over with the cultivator or disc and harrows several times during the fall. No growth is allowed to get a start and many weeds are destroyed. This method has proved quite effective in dealing with sow thistle. Sod has a better chance to rot than if plowed late and it is usually easier to prepare for spring seeding. The wide-shared cultivator may be used effectively on either deep or shallow plowing. Few weeds escape if the teeth are kept sharp. Many use it late in the fall and the soil is left in shallow ridges, which gives the frost a better opportunity to do its beneficial work than if the surface is left flat. Some method of thoroughly loosening and stirring the soil, to be sown to spring crops, that will destroy weeds and keep a dust mulch will be a step towards heavier yields.

Plan to cultivate as soon as possible after the crops are harvested.

Alfalfa as a Fertilizer.

Besides being an excellent fodder for all classes of live stock, alfalfa also has a value as a soil renovator. The plant being a legume takes nitrogen from the air and stores it in the soil. When purchased in a commercial form this material comes very expensive, but where legumes can be grown the commercial form of nitrogen is not required. When a field of alfalfa is broken up, the decaying roots add humus to the soil. These roots being hollow also tend to permit the air to gain access below the surface. The value of alfalfa as a fertilizer is clearly shown on J. Hughes' farm, Middlesex County. Last year a field, which was part in timothy sod and part in alfalfa, was plowed and the whole field sown to oats this spring. Preparation of the seed-bed and method of seeding was the same over the entire field. Six weeks after seeding, the oats on the part of the field which was broken out of alfalfa sod was six or eight inches higher with broader leaves than those on the timothy sod. There was also a vast difference in the color of the crop. Where the legume had grown and stored nitrogen the oats were a dark green, while on the timothy sod they were light colored and did not look healthy. Nitrogen always tends to produce a healthy, luxuriant growth, and through the growing of legumes is the cheapest way to put this valuable fertilizer in the soil.

EDITOR "THE FARMER'S ADVOCATE":

In the letter on page 1189 on Bean Anthracnose the last sentence should read, that it is a matter for experiment to determine whether an anthracnosed seed can come or ever does come out of an unspotted pod. J. D.

Canada's Young Farmers and Future Leaders.

Profitable Potato Experience.

EDITOR "THE FARMER'S ADVOCATE":

I think my most profitable experience was in potato growing. It had been our custom, as well as that of our neighbors, to plant sets with only one eye in them. We decided to plant a few rows of quarter-potatoes and note the difference, if any, between the yield of these and of the one-eye sets.

Accordingly we planted four alternate rows of each. The rows were two and one-half chains long and thirty inches apart. We marked the rows planted with the big sets to make sure we did not mistake them, but there wasn't any need of doing it, for, from the time the potatoes came up, the rows could easily be picked out because of the much greater growth of top.

When we picked the potatoes in the fall the four rows of one-eye sets yielded 9¼ bushels and the four rows of quarter-potato sets yielded 13¼ bushels. Or in other words the small sets yielded 257½ bushels and the large ones 350 bushels per acre. There were as many small potatoes from the small sets as from the large ones, so the difference would all be salable. With potatoes at a dollar a bushel, as they were this spring, it would mean an increase of \$92.50 per acre.

It is true it takes more potatoes for seed and more work to take them to the field and plant them, but who would object to picking up the extra potatoes in the fall? Even if it does take a little more work to get them harvested what about the \$92.50 per acre? Is that not worth a little extra work?

The slogan for Canada this year is "Increase your production whether you gain by it or not." Would this not be a good way to increase the potato crop and at the same time get good returns for a little extra trouble?

P. E. I.

R. LOUIS CAIRNS.

A Lesson in Feeding Steers.

EDITOR "THE FARMER'S ADVOCATE":

During last winter we fed twenty head of grade Shorthorns and Angus cattle. Their weight, when purchased, October 22nd was 18,010 lbs. or 900 lbs. apiece and they cost \$6.60 per cwt. They were pastured one month on the new meadows, having a free run of the farm. November 20th the feeding period began, ten head being tied in, while ten head ran in and out of a shed at will. Both lots received the same amount of feed and there was no difference in the gains made by either lot. The feed consisted of silage, hay, mangels and chop. They were loaded at Locust Hill station April 8th, the gross weight being 24,100 lbs. or an average of 1,205 lbs. and an average gain of 305 lbs.

No feed was weighed out individually, but as the grain was all chopped by the cwt. a tally on the grain consumed was easily secured. The hay fed was ten loads of second-crop red clover that would weigh about a ton each. Our silo holds about fifty tons of silage. Also, 800 bushels of mangels were fed.

Placing the prevailing market price on the feed consumed its value was:

Ten loads of hay at \$10 per load.....	\$100.00
18,180 lbs. wheat and oat chop at \$27 per ton.....	245.43
800 bus. of mangels at 8 cts. per bushel.....	64.00
50 tons of silage at \$3.50 per ton.....	175.00
One month's pasture for 20 head cattle.....	20.00
Straw free.....	
	\$604.43

No charge is made for attendance during the one-hundred-and-forty days they were being fattened. I shipped them to Buffalo where they brought nine cents per pound. The gross weight was 23,430 lbs. showing a transit shrink of 670 lbs. or 33½ lbs. per head, which reduced the average weight to 1,171 lbs. and the average gain to a little over 270 lbs. The cost of shipping was:

Consular invoice.....	\$ 2.50
Stamps for same.....	1.50
Switching and disinfecting car.....	7.50
Freight.....	35.76
Yardage.....	3.00
Corn.....	3.00
Hay and bedding yard.....	18.05
Insurance.....	.20
Commission.....	12.00
	\$83.51

This was 36 cents per cwt. without considering transit shrinkage which was 33½ lbs. per head, leaving the cattle \$8.40 per cwt., f. o. b., Locust Hill.

It cost \$7.39 per head to market them viz., transit shrink 33½ at \$8.40 equals \$2.81 plus \$4.18 for freight and market fees.

Results were:

20 cattle sold 23,430 lbs. at \$9 per cwt.....	\$2,108.70
Delivery and market fees.....	83.51
	\$2,025.19
20 cattle bought 18,010 lbs. at \$6.60 per cwt.....	1,188.66

Leaving a margin of.....	\$ 836.53
Feed.....	604.43
Profit.....	\$ 232.10

The transaction shows fair, though not large profits. The lesson learned was that cattle cannot be dry fed at a profit without an advance in the price per cwt., when purchased off the pasture in the autumn. This bunch of cattle made satisfactory gains, and, valued at the price received in Buffalo with the gain actually delivered there, viz., 23,430 lbs. - 18,010 lbs. equals 5,340 lbs. or (270 lbs. per head) at 9 cents equals \$480.60.

Then take the gain, when they were weighed full at Locust Hill, and the f. o. b. price, 24,100 lbs. minus 18,010 lbs. equals 6,010 lbs. at \$8.40 per cwt equals \$504.84. This last gain includes little shrinkage, as we are hardly a half mile from the station.

In neither instance does the gain, if valued at live-weight price, equal market price for the feed consumed. The reason was that after having been dry-fed for four or five months, cattle show a better percentage of dressed beef than when off the grass.

The gain on a dry-fed bullock is in reality flesh and costs flesh price to produce. Now take the gain made by this bunch of cattle. It cost \$604.40 to produce

the 5,340 lbs. or practically 11½ cents per pound without allowing anything for attendance or bedding. After considering the rise in price from fall till spring of \$1.80 per cwt., they showed a return of \$336.53 and the gain in weight being (24,100 lbs. minus 18,010 lbs.) equals 6,010 lbs., the price per cwt. received for the gain was \$13.85 or just about the same price as the abattoirs were selling choice dressed carcasses to the purveyors.

In concluding allow me to say that a feeder should have a spread of 2 cents a pound to dry feed a bullock at a profit, or else a cash value will have to be placed on the manure to make a satisfactory balance.

When buying pick smooth, thickly fleshed cattle, study the probable demand, never loose sight of the quality in the cattle, but remember that having bought worth the money is a long way on the road toward satisfaction in the spring.

H. STUART CLARRY.

York Co., Ont.

Experience with Poultry.

EDITOR "THE FARMER'S ADVOCATE":

I started out as a young poultryman by setting one old hen, and from that I am now managing the poultry plant.

I like best to keep count of the eggs I get, the feed the hens eat, and then know how much I am spending, and how much profit I get.

Those who set hens often have trouble with eggs not hatching well. I find a good way is to set a coop outside with a nest or two in it for sitting hens. I kept the coop dark a day or so after I had put the hens in, to make sure they would stay there. The hens did not smear the eggs with filth. They got off to feed, and take a bath in the dirt. I set twenty-seven eggs under two hens, and they brought out eighteen or nineteen chickens.

I shut the brooding hens up as soon as possible after they start to sit. I put them in a coop and give them feed and water, and they soon give up clucking.

I use the Farmer's Advocate to get pointers, and also Government papers. I like looking after poultry and I want to get into some pure-bred stock.

Oxford Co., Ont.

FRANKLIN LESLIE.

Pure-bred Pigs Paid.

EDITOR "THE FARMER'S ADVOCATE":

Having read in your issue of June 22 that you were devoting certain space in your valuable paper to boys and young farmers to help and encourage them, and also that a competition was open for them, I would like to give my last year's account on feeding a litter of ten pigs, hoping it may interest and help others, as I am receiving help from them.

To begin with, I may say I did not have very good success, at least wasn't satisfied with the gains in my pigs until I purchased a registered Tamworth sow and raised pure-bred pigs from her. Her first litter was crossed with Berkshire, but the second was pure. I might add that the neighbor who bought her mate fattened it as soon as first litter was weaned, but since buying other breeds he now wants to pur-

chase a pure-bred Tamworth from me, and says he made a mistake by not giving her a second chance. As is often the case the first litter of seven were not hustlers, but the sow was young and small, and had not been properly fed or cared for. However, they did better than the former litters I had dealt with, which were from mongrels all around. I paid \$14 for the sow, due to farrow, and was to have the next two breedings free. It is her second litter which I wish to give the facts and figures about, as I consider they did well. The pigs were weaned when two months old. A statement of the feed follows:

Feed for sow for 2 months while suckling pigs, and extra feed before farrowing, 20 bus. oat chop at 35 cents.....	\$ 7.00
Feed for pigs from 2 to 3½ months old, 2 cwt. shorts at \$1.40.....	2.80
Six bus. oat chop at 35 cents.....	2.10
From 3½ to 4 months old, 6 bus. oat chop at 35 cents.....	2.10
From 4 to 5 months old, 17½ bus. oat chop at 40 cents.....	7.00
Four bus. barley chop at 60 cents.....	2.40
From 5 to 6 months old, 43 bus. barley chop at 60 cents.....	25.80
From 6 to 6½ months old, 25 bus. barley chop at 60 cents.....	15.00
Paid for chopping grain.....	1.70
Stock Food.....	.25
Weighing pigs when sold.....	.20
Total cost.....	\$66.35

When sold at 6½ months, lacking one day, old the 10 pigs weighed 1,785 lbs., and sold at \$10.35 per cwt., amounting to \$184.70. The total cost was \$66.35, leaving a balance for labor and profit of \$118.35.

I may add that these pigs were always penned in, except for a half day now and again when they were let out for a run. Also, they got no drink of any account except water, as we had no whey or skim-milk, and very little swill for them. For about the first two months they were fed four times daily, as, contrary to the opinion of many, I believe in feeding lighter and oftener, especially when the pigs are first weaned. After that they were fed three times a day. Two of the litter were weighed each week, and gained from a little over one to two pounds per day; one doing better than the other, and both

gaining more as they got older. The price I put on the grain is what I could have sold it for at the time of feeding.

Northumberland Co., Ont. HOWARD A. CLARK.

Benefits Derived from an Acre-profit Competition.

EDITOR "THE FARMER'S ADVOCATE":

Is the average farmer farming on a basis of assets or liability account? One is not in a position to reply unless he had kept an accurate account of feeding and production.

When I entered this competition it was more for the necessity of the product than from a keen competitor's point of view. Our District Representative advised me to compete. He knew the interest it would create in estimating the profit or loss in this competition and in other lines of business.

The plot was clover sod on a sandy loam overlying a clay subsoil. On the first of May the sod had a light application of stable manure, about seven loads. I was very particular in plowing, cutting about six inches deep, so as to lay the furrows at an angle of about sixty degrees. This left the land in fine condition to work down smooth and uniform. The sod was then rolled and left for about two weeks; then had a good cultivating, disking and harrowing, the latter being used frequently to tear the sods. The surface was mulched to a depth of about five inches. Longfellow Flint corn was planted then with four kernels to a hill and covered with a hoe; the hills being three feet apart each way.

Previous to sprouting it had a harrowing to retain the moisture, and to destroy all weeds that appeared. After the corn produced the second pair of leaves it was cultivated twice a week. There is nothing like a two-rowed corn cultivator for saving time, which is a very important item in this competition. I cultivated very deeply to eradicate couch grass, and also it had a thorough hoeing. By this time I found there was only a fair stand of corn, being badly grub-eaten. I replanted the hills, but they never produced corn. After the corn advanced to the stooking stage it was very much too thick for good seed production. I then cut out all stools, leaving only the parent stalks, but occasionally where the hill was thin I left a good healthy stool. These young stools made an excellent soiling crop for the young

hogs. By this time the corn advanced beyond the two-rowed cultivator, but was cultivated for the last time with the one-horse cultivator.

After the corn was glazed it was cut and put in small stooks to avoid heating. It was left in this stage for a month, then was hauled to the barn and husked. When all was finished this was my account:

Assets.		
82 bus. of corn at \$1.25 per bus.....		\$102.50
		\$102.50
Liabilities.		
May 1 Manure.....	\$ 7.50	
" 2 Ploughing.....	2.00	
" 20 Cultivating, etc.....	2.50	
" 25 Planting.....	2.43	
Hoeing.....	1.20	
Stooking.....	1.50	
Cultivating and harvesting.....	12.67	
Rent of land.....	5.00	
Present worth.....	67.70	
		\$102.50

I then took the two weeks' free course in stock and seed judging at Guelph Agricultural College. This is a very instructive course for both old and young farmers. One is given an opportunity to achieve a greater insight into stock judging, and become familiar with many noxious weed seeds. You are not only interested in the work, but filled with enthusiasm to put in practice the principles that the professors have found correct by experimenting. Another very important benefit is that you become acquainted with a large number of farmers from over the Dominion to discuss farm methods.

When I returned home I started pruning a badly-diseased orchard. When spring advanced I plowed the sod. I applied two applications of lime sulphur, one in the dormant stage, the other in the calyx stage. I also took out two experiments with Grimm alfalfa for the production of seed.

I would advise any young farmer to invest his money in a competition of some description, for he will receive a large interest on the amount of capital invested. I consider the course worth many times the profit over and above the cost of production, from the viewpoint of returns in the next two or three years.

HARRY L. PRINGLE.

Lennox and Addington Co., Ont.

Automobiles, Farm Machinery and Farm Motors.

Courtesies of the Road.

If you will pay a visit to any nearby garage and have an intimate interview with the manager, he will undoubtedly state that the dog days of summer bring a great many automobile accidents, and that the majority of these wrecks are directly traceable to lack of common sense and common decency, to say nothing of common courtesy. The rules of the road are so simple that anyone with an atom of intelligence can follow them closely enough to avoid every form of trouble. When meeting a vehicle of any kind, do not hesitate to immediately indicate your desire to turn to the right. It is bad policy to remain in the centre of the road until the last moment, and then quickly swerve in the proper or improper direction. Such action is not only liable to excite the person or persons approaching you, but at the last second you or they may find out that the ruts of the road hold the rear wheels of your car, or that a rough spot causes dangerous skidding. When passing a vehicle going in the same direction, it is necessary to turn to the left, but, as in the previous instance, do not put off this operation indefinitely. As the roads are dusty, we know you will be kind enough to give the vehicle you are passing as many feet as possible in order that those left behind may not be seriously inconvenienced by the dirt and fine particles of gravel that are thrown into the air, and if the roads are muddy, go as slow as you reasonably can in order that the wheels may not throw a spray of muck and water upon those that are being passed. In turning corners, it is imperative that you exercise every caution, as it is in places of this kind that what is known as "corner swiping" generally occurs. Do not feel confident that the driver approaching you has as much nerve and decision of character as you think you possess.

Night driving presents more complications than daylight driving, because the searchlights which were originally intended to provide maximum safety, can be improperly used and result in serious trouble. When you are passing a car, throw off the searchlights and put on the dimmers in order that the outlines of the approaching vehicle may be distinct and definite. Maintaining the searchlights creates a glare that is conflicting and perilous. You must bear in mind that when the searchlights are working through a cloud of dust that no eyes can estimate distance. When the car is not in motion, it is well to run a cloth over the glass on the tail light in order that its red glow may be distinct. Never leave a machine standing on the road at night with the lights out, as the danger will be to your own property as well as to the lives and property of others. Should

you suffer a blow-out or any mechanical trouble, your first precaution must be to roll the car to some safety zone beyond the road allowance in order that other vehicles may have safe passage.

New drivers should practice difficult situations, such as hill climbing and descending, before incurring any risks. Many good cars will take all up grades on high gear, but should you find any trouble in climbing, do not hesitate to pull the emergency brakes. After the difficulty has been located, or if there is no apparent mechanical defect, advance the gas throttle half way down the sector and release the emergency brake, allowing the service brake and clutch to come out at the same time. Your machine may roll back a few feet, but do not feel nervous, as the extra fuel and the fact that you are in low gear will quickly start the auto on its way up the hill. Unless you have practiced a good deal, we would suggest throwing your car into intermediate gear before a real necessity arises, as sometimes the novice has caused trouble and distress by failing to do so until it became too late.

Upon seeing a car in trouble on the road do not rush by with a sneer, as the day will surely come when you will have your share of inconvenience. Enquire as to the nature of the delay, and, if possible, render any assistance available. Sooner or later you will appreciate the return of such a courtesy, and the way to make friends on the road is to be friendly yourself.

Many drivers fear skidding, because they are acquainted more with its effect than its cause. This peculiar motion of the machine comes from a too quick application of the brakes when turning a corner or riding upon a slippery pavement. The rear wheels lose their tractive force, because they are thrown under the influence of a centrifugal action. The only safe, sane way to avoid skidding is to drive slowly whenever you have any idea that the rear tires cannot secure a satisfactory grip upon the material over which they must travel. If skidding does occur, however, release the brakes instantly, and turn the front wheels in the direction the car is going.

AUTO.

Attachments for the Binder.

Cutting the grain crop is somewhat of a trying time for both man and horses, but if the grain is badly lodged or the ground soft the work is made more difficult. The average binder pulls heavy at the best. Besides its own weight, power must be generated to operate the machinery which cuts, elevates and packs the grain into sheaves, then ties and disposes of them. The big wheel which carries the bulk of the weight of the binder is connected with the machinery,

and by being drawn over the ground sets the mechanism of the binder in motion. The heavier the crop the greater the strain on the parts, and just when speed is necessary to elevate the grain rapidly is the time when horses have a tendency to slow down owing to the extra load. The binder is slowly drawn forward, the knife cuts, but owing to lack of speed the elevators choke and time is lost in clearing them. This trouble is not experienced to any great extent with the five-foot-cut binder, and for any ordinary crop the wider binders are speeded to elevate and dispose of the grain. However, three horses are generally expected to handle the six and seven-foot cuts as readily as they did the smaller size, but in a heavy crop on soft ground the load is too heavy.

Gasoline Engine.

A small gasoline engine to drive the machinery greatly lightens the draft on the horses. The engine is attached to the frame of the binder directly behind the big drive-wheel. The horses merely draw the implement over the ground, the engine does the rest of the work. Whether cutting a heavy or light crop the draft is the same. Of course, the condition of the ground influences the draft, but not to the same extent as when the mechanism is driven from the big wheel. The speed of the engine can be regulated so that the knife, elevator and packers will run at the proper speed for doing the work with the greatest efficiency. It matters not how fast or how slow the horses draw the binder over the ground the machinery continues at a uniform speed. On firm ground two horses can do quite easily what previously required three. The engine saves the use of one horse, and the work is done with greater ease. As yet there are very few binders fitted with an engine, but the time is not far distant when this extra attachment will be in general use on the large-sized machines.

Tongue Truck.

Binders are built so that the weight will be fairly evenly balanced on the drive wheel, but even then the weight on the tongue is sufficient to make the tops of the horses' necks sore in many cases. When the front of the machine is tilted downward extra weight is thrown on the tongue, and if horses are used for several days on the binder it requires extra care to avoid trouble. To lighten the downward pressure of the tongue, trucks are used and the horses merely have to carry the weight of the tongue alone, which is less than that of the average farm implement. Besides being easier on the horses it facilitates hitching the team to the binder. One form of truck is attached to a short tongue, and entirely relieves the main tongue of any weight from the binder. It does not

interfere with turning or tilting the machine, but it does lighten the load on the horses, especially when cutting lodged grain. This kind proves very satisfactory, but a new tongue would be necessary in fitting it to an old binder. There is another kind that can be bolted on to any tongue, and is equally as effective as the one previously mentioned in relieving the weight from the horses. It is composed of a single wheel possibly a foot or a trifle more in diameter, and a heavy spring with a single coil attached from the wheel to the plate which fastens it to the tongue. The spring can easily be adjusted to hold the tongue at a certain height. It can be raised or lowered, according to the height of the horses. This kind may be attached below the whippetrees, and being on a swivel does not interfere with turning and is not liable to catch on anything. It is equally as serviceable on the mower as on the binder, and only a few minutes are required to change it from one implement to another. A similar truck is made to attach to the side of the tongue instead of underneath. A vertical coil spring is used in place of the horizontal spring. Both kinds are serviceable. After once using a tongue truck on a binder few would be without it, especially when the horses are considered.

Additional Guards for Lodged Grain.

When the grain is badly lodged the work of handling the binder is greatly increased. Some times it is difficult to get all the heads of grain even when cutting one way of the field. The binder may be lowered to the bottom notch on both wheels and then tilted until the bottom scrapes on the ground, but yet the short guards will not raise the grain. This difficulty has been largely overcome by using six or eight special guards. These may be twelve or fifteen inches long with the centre raised two or three inches. These special guards projecting beyond the regular ones raise the grain so that it may be caught by the reel and drawn on to the table. Only a few are necessary. They resemble the guards used on a pea harvester, and have proved a great help in picking up lodged grain.

Every season difficulty is experienced in fields where the crop is lodged with grain catching on the divider. The use of the double divider lessens the trouble from this source.

Sheaf Carriers.

Binders manufactured of recent years are equipped with sheaf carriers. This has proven to be a great labor-saving device. Four or more sheaves can be carried and dropped in windrows. True, it gives the man operating the machine one more thing to attend to, but it also saves the work of one man when it comes to shocking. The machine carries the sheaves instead of the men having to do it. It saves a good deal of walking, especially when the stooking is not done until after the field is cut. The sheaves lying in a row can soon be stood up. There is nothing complicated about a sheaf carrier, it can be operated by anyone.

There are many labor-saving devices which make the farm work less arduous and more quickly done than it was formerly. Without some of the recent inventions it would be difficult to harvest the crops with the labor available. Machinery is now used to do much of the heavy work that was formerly done by hand. Man is saved hard work at the expense of the horses, but the good horseman also endeavors to lighten the work of his team by use of machinery. The tongue truck and gasoline engine attached to the binder make the work easier on both horses and driver.

THE DAIRY.

The Heifer's Heifer Calf.

EDITOR "THE FARMER'S ADVOCATE":

The present time, when every farmer is doing his utmost to produce the most he can from his land and the live stock kept thereon, is an opportune one for the throwing of a little light on an old controversy, namely, the question of the advisability of raising the heifer's heifer calf. Dairy cattle and their products are at a premium at the present time, and all indications point to a continuance of this situation with a possibility of even better prices in the future. Under these conditions it is, or should be, the aim of every farmer to keep up his production by conserving all the breeding stock possible. Many breeders, however, even though they need the breeding stock, still discard the first calves from their heifers, claiming that they are not as good producers as subsequent calves from the same cows.

With a view to ascertaining, if possible, the correctness of this theory, or at least obtaining some figures throwing some light upon it, a study was made of the herd and milk records of the herds at the Central Experimental Farm. These cover a period of ten or twelve years, and include representatives of the five outstanding breeds of dairy cattle. From among the herds three lots were chosen; lot 1 consisting of cows that were the first calves of heifers, lot 2 consisting of cows that were the second calves dropped by their dams, and lot 3 consisting of cows that were the third calves dropped by their dams. Records of production were available for each of these cows, and these have been tabulated for their first, second and third lactation periods wherever it was possible

to carry it that far. In some instances only the records of the first or first and second lactation periods were available, the animal having then been disposed of. These records have been averaged, and the results are presented in tabular form in the following table:

Lot	1st Lactation Period			2nd Lactation Period			3rd Lactation Period		
	Number of cows included	Days in milk	Pounds of milk produced	Number of cows included	Days in milk	Pounds of milk produced	Number of cows included	Days in milk	Pounds of milk produced
1	9	339	6,745.5	6	297	6,134	4	349	7,563
2	11	335	5,874.0	9	358	6,072	7	343	6,898
3	10	356	6,292.2	8	326	6,033	6	317	6,021

The above data brings out the desired information, but it is more or less misleading, since the average number of days in the lactation period varies considerably, thus giving one lot an advantage over another. To overcome this error it is necessary to take the average production per cow per day. Accordingly a second table, derived from the first, is given, showing the average production per cow per day in each lot for each lactation period, and also the average of the three lactation periods:

Lot	Average Production Per Cow Per Day.			
	1st Lactation Period	2nd Lactation Period	3rd Lactation Period	Average of three Lactation Periods
	Lbs.	Lbs.	Lbs.	Lbs.
1	19.9	20.6	21.6	20.5
2	17.5	16.9	20.1	18.0
3	17.6	18.5	19.0	18.2

The above data, comprising as it does that from seventy lactation periods, should be fairly conclusive and speaks for itself, the first calf from the heifer on this case standing considerably above either of the other lots, showing that from a milk production standpoint, at least, she is the equal of subsequent calves. In your breeding operations then do not let prejudice overrule good judgment, but take every advantage of what good fortune sends your way, and keep up the strength of your herd of breeding females.
C. E. F. GEO. W. MUIR.

HORTICULTURE.

The Home Garden.

A good deal of work is required to keep the vegetable and flower gardens looking their best during the hot, dry days of mid-summer. The cultivated plants wilt and languish for want of a drink, while the weeds continue to thrive, and unless checked soon monopolize the ground. Few farms have a water supply that will furnish water to the garden through a hose. To carry sufficient water in pails is no light task, but from the appearance of the plants many think that this must be done in order to save them. Many fail to realize that cultivation is a means of retaining moisture in the soil and of forcing growth. Carrying water to the garden is seldom necessary if the soil is stirred frequently. Where a dust mulch is obtained the soil is kept moist to within about one inch of the surface. The hoe may prove more serviceable than the watering can in the garden during dry weather.

During haying and harvest it is difficult on many farms to find time to devote to gardening, consequently, weeds gain the upper hand and lessen the winter supply of vegetables. Important as is the grain crop the garden should not be neglected. Vegetables have a money value as well as oats and wheat. The land devoted to gardening, if given half a chance, gives greater returns than the same area planted to any other crop. The garden also has a value from a health standpoint. A small plot of ground, a small quantity of seed, and a few hours' work during the season will produce sufficient vegetables for the average family during the summer, fall and winter months. There should be a well-tended garden on every farm, and an effort made to produce the best quality of a large variety of vegetables.

Attack Plant Lice When They First Appear.

The dry weather appears to be favorable to the development of "plant lice" or "aphids." These minute insects work havoc on the foliage of many garden plants, shrubs and trees unless some means are employed to suppress them. There are several remedies which if applied in time and the work done thoroughly will destroy these plant enemies. A strong tobacco decoction proves very effective and is easily applied. Another substance known as "Black Leaf 40" is frequently used. One teaspoonful to a gallon of water is sufficient to kill the lice. It must be applied in the form of a spray, and care must be taken to cover every part of the plant. Possibly kerosene emulsion is as effective a remedy as any, and it can be easily prepared. Dissolve one pound

of cheap laundry soap in one gallon of soft water and heat to the boiling point. After removing the solution from the heat add two gallons of kerosene, and agitate it briskly with a small force pump or bicycle pump. It should not require more than five

minutes to emulsify the material. Dilute to thirty gallons with soft water, then it is ready to apply. For making smaller quantities the proportion of material used can be reduced accordingly. The emulsion kills by coming in contact with the insects, therefore, it is necessary to apply the spray where the insects are lodged. Small expense and a little time are frequently all that is required to save some garden crop from being destroyed.

In dry seasons red spiders frequently attack the small fruit bushes. They are usually found on the under side of the leaves, and are so small that they are hardly discernible to the casual observer until the foliage of the plant is partially destroyed. Flowers of sulphur, used in the proportion of one pound of the sulphur to four gallons of water and thoroughly sprayed on both the upper and lower sides of the leaves, usually proves effective. The material may be applied dry if some means is available to distribute it over the plant.

Staking Tomato Plants.

After tomato plants are set out they require plenty of cultivation to keep the soil from baking and to conserve moisture. Owing to the rapid, spreading growth of the vines, the season during which cultivation can be done without injury to the plants is short, unless the vines are attached to a stake and trained to grow upward. Some commercial growers plan to stake their entire crop, but instead of using a stake for each plant they put a number of posts in each row, and then stretch several strands of wire, to which the plants are tied as growth proceeds. When several acres of this important crop are grown considerable work is entailed in putting up the wire and in tying the plants. However, many who use this system claim that it pays well. Not only can cultivation be continued longer in the season, but the fruit being exposed to the air and sunshine ripens earlier than where the plants are allowed to spread over the ground. The early market is always the most profitable. Where there is an abundance of foliage it sometimes pays to prune lightly.

The number of plants in the average garden seldom exceeds four or five dozen, and not much time or labor is required to drive stakes and train the plants to them. The plants are held up from the ground, and the fruit produced is usually more perfect in form and color than that grown on the low vines. Tomatoes are also saved from the rotting and grubs, which spoil so many if they come in contact with the ground.

A sturdy kind of wood should be used for stakes, as the weight of a plant laden with fruit is considerable. Plants will reach a height of five feet or more if properly looked after. Soft twine that is not likely to injure the stem is best to use. The first tying should take place when the plant is about a foot and a half high, and each foot of growth necessitates another tying. Care should be taken not to tie the twine so tightly around the stem that it interferes with growth. With the vines off the ground the soil can be stirred close to the plant. In order to avoid root injury shallow cultivation is necessary. A few plants well cared for will yield sufficient tomatoes to can for winter use, besides supplying the table during the fall season.

POULTRY.

Grade the Flock.

Where chicks are hatched by the natural methods the hatching season frequently extends from early May to late June. There may be two months' difference in the age of the birds, and yet they are permitted to feed in one pen. While this system may be an advantage to the older birds the younger chicks are raised under a severe handicap, and seldom make as good gains as they would have had they not to fight against their superiors in age for their living. Grading the chicks according to size may entail extra labor in feeding and increase the expense of yarding, but the effort is amply repaid by the more rapid growth of the younger chicks. When the young fowl are by themselves a little extra attention and feed can be given them. The older birds are better able to look after themselves. Although the early-hatched pullets are depended on to supply winter eggs, it is also possible to feed June-hatched pullets so that they will be sufficiently developed to commence laying before the end of the year. When all sizes are crowded together and fed alike this is hardly possible.

It has frequently been noticed that in some flocks

of soft water removing the ns of kerosene, force pump or more than five

Period	Pounds of milk produced
	7,563
	6,898
	6,021

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the mature hens are allowed to feed with the growing chicks. This may be good for the hens, but it is detrimental to the most rapid development of the young fowl. On every farm there should be a place for the hens to feed, and a separate place for the chicks. Later in the season it is advisable to separate the pullets from the cockerels. The former can then be fed for egg production, and the latter fattened for the market.

Constant Attention Keeps the Mortality Low.

There is always more or less uncertainty in the poultry business, and it is not wise to count the chickens before they are hatched. Even the number of chicks hatched is no criterion of the number of birds there will be to market in the fall. Constant attention is necessary to prevent disease making its inroads into the flock. If the chicks escape this there is still danger of the size of the flock being decreased by robbers which have a particular liking for fowl. This latter trouble can be guarded against, and paying particular attention to the housing and feeding will go a long way in warding off disease. In one farm poultry yard 135 chicks were hatched this spring, and in the first three months only two were lost, and that by accident.

After the chicks were taken from the nest water and grit were placed within reach, but feed was withheld until the birds were about 48 hours old. Stale breadcrumbs was the only feed for the first week, and then small wheat and oatmeal were added to the ration. When milk was available it was allowed to sour and then given as a drink, or else used to moisten the mash which was fed a couple of times a week. When milk could not be secured beef scrap was fed. Like all animals, chicks make best growth when fed a variety of feeds. Oats in some form are a valuable feed for growing chicks, and, of course, wheat cannot very well be entirely replaced with any other kind of grain. Oats and wheat are satisfactory grains for summer feeding. The plan of keeping a dry mash before the growing chicks is gaining in favor, but an occasional feed of wet mash is also found to be beneficial. Shorts, bran and cornmeal have been successfully used, both for the dry and wet mash.

Poultry require cool, clean sleeping quarters, and it is not advisable to house too many together. There is danger of their crowding and becoming overheated. The flock in question is housed in a number of chicken coops. As these coops are not floored they are moved to fresh ground every morning, and to this is attributed at least part of the success in raising the most of the chicks hatched. During the day they have the run of a sheltered yard, and at night a wire screen is placed before the coops to prevent rodents gaining entrance.

The orchard or corn field makes an ideal run for growing chicks, but care must be taken to furnish a variety of the necessary grain feeds, and to supply abundance of clean water.

FARM BULLETIN.

A Good Show at Calgary.

(Continuation of last week's report.)

While the Herefords were inferior to the Shorthorns in number of entries the quality of the individuals shown fully maintained the reputation of this great grazing breed. The entries were confined to two exhibitors, L. O. Clifford from Oshawa, Ontario, and Frank Collicut, Crossfield, Alberta. All classes were keenly contested but the major portion of the honors went to the Ontario herd. Lord Fairfax was awarded first place in the aged bull class and was later made champion. He is a well developed animal, wonderfully smooth and of great scale. The Alberta herd took first place in junior yearlings, but in the senior calf class Carl Fairfax stood first and was later made junior champion and reserve to the aged bull for the open champion. This calf was one of the best seen for some time and gives promise of a great future. In the female classes Miss Armour Fairfax, showing great breed character and smoothness, gained a close decision over Sally of the Alberta herd. Della Fairfax won the first honors in the two-year-old class, and also was made junior champion. In the aged bull and senior yearling classes, L. O. Clifford, stood first with Lord Fairfax and Warwick Prince, but with a junior yearling he only took second place to Willow Spring Perfection of the Collicut herd. In the senior calf class first and second honors went to L. O. Clifford on Carl Fairfax and Wilton Fairfax, while the junior class was won on Royal Fairfax. In aged cows L. O. Clifford won on Miss Armour Fairfax, and the three-year-old class on Miss Princess. Della Fairfax of the same herd stood at the head of the line in the two-year-old heifer class, and Belle Fairfax, held first place as a senior yearling. With senior and junior calves the Alberta herd stood first.

For herd bull and four females and for a class of three calves Clifford won first.

Aberdeen Angus.

The Aberdeen-Angus men attended the Calgary show in full force, and the Doddies, besides constituting the largest beef cattle class on the grounds, took second place to none in point of quality. There were seven herds competing, but animals from the herds

of J. D. McGregor, Manitoba, and Jas. Bowman of Ontario, carried off the lion's share of the honors, although in many classes the Alberta breeders were not far behind, as they exhibited a number of worthy representatives of the breed. All through the bull classes the competition was very keen. Black Abbott Prince, a smooth blocky bull from the Glencarnock herd was given the red ribbon in the aged bull class, winning over Young Leroy and Beauty Irwin from the Elm Park establishment. These latter two bulls, while of considerably less scale than the winner, were remarkably smooth. The winner was later made the grand champion of the breed with Beauty's Leroy the junior champion as reserve, this latter animal is remarkably symmetrical possessing great breed character.

The aged cow class was probably the most uniform and provided the keenest controversy among the females. After considerable hesitation on the part of the judges, Key of Heather 2nd was placed first over Elm Park 11th and Elm Park Rosebud 15th, and later was made grand champion over the Elm Park Pride 15th, which was a sweet calf, showing great smoothness of conformation. The herd class, seven in number, was a grand sight, and the final decision put the herd of Jas. Bowman in first and third place, with J. D. McGregor second. J. D. McGregor won the aged bull class on Black Abbott Prince, while second and third place was held by young Leroy and Beauty's Irwin from Jas. Bowman's herd. The two-year-old bull class was won by Jas. Bowman on Elm Park Wizard, but in the senior yearling class he took second place, on Elm Park Kelso, to J. D. McGregor's, Marshall of Glencarnock. Jas. Bowman again won first in the junior yearling class on Beauty's Leroy. The first and fifth places with senior bull calves went to J. D. McGregor, while the second, third and sixth was occupied by Jas. Bowman on Elm Park Rare Goods, Elm Park Brigadier, Elm Park Count. J. D. McGregor won the junior calf class on Marshall of Glencarnock 2nd.

In a large class of aged cows first and fourth honors went to J. D. McGregor, and second and third to Jas. Bowman on Elm Park Rosebud 11th and Elm Park Rosebud 15th. The Ontario herd also won the red ribbon on three-year-old Elm Park Rosebud 17th, W. R. Stewart of Alberta coming second. With two-year-old heifers, first and second places were held by Jas. Bowman on Elm Park Keepsake 17th and Elm Park Rosebud 20th, with McGregor's Pride of Glencarnock third. Jas. Bowman held the first honors on senior yearling heifers with Emmeline of L. F., but his junior yearlings had to give place to J. D. McGregor, although he was successful in winning the second and fourth prizes with Elm Park Rosebud 23rd and Elm Park Witch 6th. The senior heifer calf, Elm Park Pride 15th, secured the red ribbon for Jas. Bowman, but in the junior class Elm Park Rosebud 26th was forced to take second place to J. D. McGregor's Pride of Glencarnock 3rd. With three, the get of one bull, Bowman was first and McGregor second, the same placing was awarded for two progeny of one cow.

Red Polls.

Messrs. J. H. & W. E. Elliott, showed some typey individuals in the various classes for this breed. Among those worthy of special mention was the aged cow, Jewel 101, and the two-year-old heifer Ora, 4th.

Ayrshires.

Ayrshires were not out in very large numbers, but what were exhibited showed excellent quality and type. In all the classes the reputation of the breed in this respect was fully maintained. The outstanding feature of these classes was the showing made by the Lakeview herds. Although Mr. Ness corralled the major portion of the honors, the herds of Laycock & McDonald and Wm. Anderson worked up to first place on more than one occasion. Morton Mains Planet from the Ness herd had little difficulty in winning the aged bull class and later the senior and open championship. Although hardly in as good fit as he has been shown previously, he is a select individual of good type. The aged cow, Lessnessock Pansy 2nd, also from the Ness herd, winner in the aged cow class, and awarded female championship, still looks remarkably fresh notwithstanding her age. The reserve championship was placed on Lakeview Vera, the winner in the junior calf class. She is a particularly sweet, growthy calf, showing excellent prospects for the future.

Dairy Shorthorns.

Although these classes were not particularly well filled some splendid individuals were brought out. With a bull of any age Kyle Bros. stood first on, Missie's Joy with G. K. Allenby & Sons second on Chief. With the aged cow, Allenby & Sons secured the premier honor with Missie of Blanchard 11th, while Kyle Bros. took second place with Golden Drop 14th.

Jerseys.

The Jersey classes were not strong numerically, though some splendid individuals were shown by Joe Harper of Westlock, Alberta, and E. W. Shenfield, Bowden, Alberta. The Northern Alberta herd made practically a clean sweep, being awarded the major portion of the prize money in every class.

Holsteins.

Holsteins made the greatest showing this year ever seen at an Alberta fair. Both in the female and male classes, young and old, the entries were large and uniform. Jos. Laycock and Geo. Bevington staged very keen controversy in every class. The awards having to be made on very fine points. Es-

pecially so in the aged cow class, and no adverse criticism could have been made had the awards been reversed. The showing of the Holstein herds, twelve in number, was a sight long to be remembered. Korndyke Posch Pontiac and Sylvia Champion, both smooth, typey bulls, were keen competitors in the aged bull class. After some hesitation the former was given the red ribbon and eventually was made grand champion. The junior champion was Frank Favorite De Kol, a bull showing excellent qualities. Fourteen splendid animals stood before the judge in the aged cow class and constituted one of the best and most uniform classes ever seen in the West. Looking down the line from end to end could be seen a number of proven matrons with their fine dairy type and symmetrical, well developed udders. Finally, Molly of Bayham Mercedes 2nd, a cow showing extra fine quality, although not quite as typey as some in the line was placed first with Beauty Dot De Kol, a cow showing more Holstein type, but hardly as much quality as the winner, in the second place. The grand champion female Tensen Burke, the winner in the yearling class is a beautiful heifer showing abundance of dairy quality. The herd prize which was keenly contested was won by J. Laycock.

Swine.

The swine classes were all well filled and with the exception of a couple of breeds the competition was very keen. Particularly was this the case in Berkshires, Tamworths, and Duroc Jerseys. In Yorkshires, S. C. Swift, was the only competitor, but the quality shown would have won in keen competition. W. J. Hoover's well known pen of Hampshires showed great breed type and quality. Berkshires occasioned the keenest competition of all the classes with Wilbert Gilbert of Alberta and S. Dolson & Sons of Ontario, dividing the honors fairly evenly between them. The Ontario pen were of good type and very smooth and deep. The competition in Tamworths which was a very even class was also keen, and again the awards were fairly well distributed with S. Dolson & Sons securing perhaps a little the better of the argument. Jos. Laycock's pen of Poland Chinas was the only one in that class. With Duroc Jerseys Oscar Miller was successful in getting a large share of the prize money.

Sheep.

The sheep pens were filled this year to their utmost capacity, and showings made in these were excellent. With the exception of a couple of classes the competition was keen. Although the Ontario breeders were successful in carrying off the major portion of the honors the Western breeders got well into the money in many of the classes. In Shropshires A. McEwen, had a good showing but there was no competition. With the Oxford breed there was strong competition and Peter Arkell & Sons of Teeswater, Ontario, received the long share of the prize money, although Gilbert and Stewart both Alberta breeders secured creditable positions in some classes. Possibly the most keenly contested classes were with the Suffolk-Down breed in which the honors were fairly well distributed. Ontario was represented by Jas. Bowman's flock and Alberta by Lou Hutchinson & Son, and W. R. Stewart. In the ram classes Bowman secured one first and three seconds, but was more successful in the ewe classes, winning three firsts and three seconds. His pen of four lambs and also his flock secured the highest honors. The Southdowns brought out gave the judge plenty of work. The breed was represented by flocks of S. Dolson & Sons, and Peter Arkell & Sons from Ontario, and Johnston Bros. and H. W. Watkins of Alberta. Johnston Bros. gave the Ontario breeders the most strenuous kind of competition and in several instances secured top honors. Herbert Smith, Camrose, Alberta, was the only exhibitor of Leicester sheep. His flock has won considerable reputation for itself and shows select breeding and excellent type.

A New Canal Proposal.

An alternative plan to the construction of the twenty-two foot Georgian Bay ship canal, or the deepening of the St. Lawrence River canals west of Montreal to correspond with the Welland Canal, now being deepened to a twenty-five foot draft, has been outlined before the Ottawa Board of Trade by Noulan Cauchon, a well-known civil engineer. His proposal is to construct a 50-mile ship canal from the town of Cardinal, near Prescott in Grenville County on the St. Lawrence River, to Ottawa, which he claims can be done at a saving of \$100,000,000. Until Ottawa was reached no locks would be required and it would run through a level, clay country. From Ottawa City the Ottawa River would be used to Montreal, as in the case of the Georgian Bay Canal. The present St. Lawrence River Canal, which begins at Cardinal, has a fourteen foot draft with eighteen locks and 68 miles of river stretches, which would also require deepening in that plan at a cost of \$150,000,000, besides probably causing international complications through altering the Lake Ontario levels. The estimated cost of the Georgian Bay Canal is also put at \$150,000,000, while the Cardinal-Ottawa Canal is but \$50,000,000, and would make at once effective the \$60,000,000 now being expended on the Welland Canal. It would commend itself to Toronto and other Great Lake centres which are not favorable to the Georgian Bay Canal project, and by it Nova Scotia coal could be economically laid down in Western Ontario, which would thus be released from dependence upon American coal supplies. From Ottawa to Montreal is 120 miles. It would be somewhat longer than the present St. Lawrence River canal route, but

this would be offset by the great saving in construction and operation. The Georgian Bay Canal project involves rock cuttings, largely, through 320 miles.

Fancy Eating.

BY FETER MCARTHUR.

Sheppy is to blame for everything I shall have to say to-day. When we went after the mail together he suddenly began to make a terrible racket under one of the cement bridges at the corner. He was "strafing" in a tone of voice that suggested rage, surprise and helplessness. This aroused my curiosity and even though the papers were full of big headlines and war news I climbed down and went under the bridge to see what was the matter. I found him circling around a large turtle and trying to find a point of attack. To my surprise the turtle would heave its shoulders and snap at him whenever he got close enough. The turtles I had seen in the past had contented themselves with disappearing into their shells and waiting until the storm blew over, but this one showed fight. Apparently it was a snapping turtle, although I do not know enough about hardshells of this kind to know one variety from another. I remember that they used to talk about snapping turtles being in the swimming-holes when I was a boy, but I never saw one. All turtles were mud turtles to me. The one that Sheppy found was peculiar in having its back covered with green moss or slime of some kind. Not caring to take chances on its snapping jaws I did not investigate this peculiarity though I suppose it would be quite easy for it to get such a covering accidentally by rising under the masses of green slime that are now in the stagnant holes in the Government drain. I do not remember seeing one mosed over in this way before and have not read that they make a practice of protecting themselves in this way, so that feature of the turtle is a mystery to me. All I can do is to record the fact for the experts to pass upon.

Not having anything with which to poke the turtle and turn him on his back in the approved manner of turtle hunters I left him to go his way. After a few more general remarks of an insulting character Sheppy also left him. It was only when I got through with the papers that I thought of the turtle again and then I realized that if it was a true snapping turtle I had allowed a treat that would have tempted an epicure to get away from me. I recalled the fact that I had once come across a clergyman in a New Jersey swamp who explained that he was hunting for snapping turtles. He assured me that snappers are every bit as good eating as terrapin and as he was a clergyman I did not doubt his word. You know that terrapin are regarded by fancy eaters as the most delicious form of human food—except perhaps the iguana, a Mexican lizard. When you see terrapin mentioned on the bill of fare of a hotel or restaurant you may make up your mind that there are some high flyers in the vicinity. I have never seen it quoted at less than two dollars and a half a portion—and the portions are usually mighty skimpy at that. The turtle that I had allowed to escape would have made at least a dozen ordinary portions. That means that I allowed about thirty dollars worth of fancy epicurean food to crawl away. But I had to do it. What on earth would people say if they heard that I had taken to eating turtles. That would be worse than anything I have done in the way of foolish farming. Eating turtles! Phew! did anyone ever hear of the likes! A man ought to be run out of the country for doing such things. And yet if you ever get in a position where you could be of use to a railway, and a lobbyist got after you a terrapin banquet would be about the first thing he would offer you. And terrapin is only a kind of turtle which the clergyman assured me is not a bit better eating than the snapping turtle. But no one else in this part of the country has ever eaten snapping turtles—the disgusting things—and for that reason it would cause a public scandal if anyone started eating them.

Then there are the frogs. I have been assured that bull-frogs have never been so large and plentiful as they are this year. Every night I hear them bellowing from the cattle pond and the holes that are left in the government drain. But though I remember that it used to be said that you could catch bull frogs with hooks baited with red flannel I haven't had the nerve to go and catch a mess. Still I am going to confess that I have eaten frogs' legs and they are very good eating. It is only the hind legs that are used and when you get good plump ones they are hard to beat. They serve the best and biggest I have ever come across in the Ottawa hotels and as they cost only fifty cents for a liberal feed a fellow can afford them without waiting for a lobbyist to come around and buy them for him. Frogs' legs are not unlike the hams of good spring chickens, but they are daintier and more appetizing. But no one in this district eats them and it would never do for me to be the first to start. Frogs legs! Ugh! Don't talk about them! A man who would eat them would eat anything! You see I know how people would talk. So although I know where a man ought to be able to get enough frogs' legs to salt down for the harvest I haven't the nerve to go after them, and I am allowing another valuable lot of food to go hopping away unused.

But that isn't all. The banks of the government drain are full of muskrats—commonly known as "mush-rats"—and I am too much afraid of public opinion to have a feast of muskrat stew. It usually appears at

a dollar a portion on the bill of fare of restaurants where they sell terrapin, so you can make up your mind that it is high-class food. I have been told that even epicures find it hard to distinguish from terrapin. Yet no one here would think of eating muskrats. A few years ago some Indians who were husking corn in the neighborhood used to dig out muskrats and eat them, and I can remember the look of disgust on people's faces as they talked about it. Salt pork was good enough for them. And yet people who make eating their main business in life eat muskrats and will travel miles to get a stew. There must be at least fifty dollars worth of muskrats' meat within a mile of me and it is all going to waste. Even when hunters catch muskrats for their skins they throw away the carcasses. Possibly if I had a recipe for muskrat and snapping turtle stew or knew just how to prepare frogs legs for the table I would sample them, but I don't know. Public opinion is a dangerous thing for a man to go against. It would be almost as bad for a man to go back on the customs of the country in the matter of eating as it would be to desert the political party in which he was raised. I guess I had better stick to beef and pork with an occasional old hen thrown in.

There are other dainties to be had on the farm that are not so startling to think about but I have never heard of their being tried. Bobolinks are about the most famous of delicacies after they have migrated to the south. There they are known as reed birds and ricebirds. Thousands of them are served in the American restaurants every day when they are in season. They are said to be quite as good as the ortolans of Roman banquets, and in some places they are called ortolans. If I am not mistaken they are protected as songbirds in Canada and it would get a man into trouble to have broiled bobolinks on his bill-of-fare. In the southern states they are very fond of our common robins, but no one thinks of eating robins here. I have also heard sparrow pies spoken of with favor in England, but I do not think I should care for it. I am too familiar with sparrows and their habits to think they would be appetizing. Blackbird pie is also said to be of the very best—quite as good as lark pie, but I am afraid public opinion would be against it. It is really too bad that we have so much good eating around us that we do not dare to try simply because our parents did not eat "strange flesh" of these kinds. It has been said that "He was a brave man who ate the first oyster," but the man who would eat snapping turtles or muskrats in this part of the country would be still braver.

Estimated Acreage in Crop.

The July report issued by the Census and Statistics Office, Ottawa, gives an estimation of the acreage in crops at the end of June. The area sown to wheat in Canada is estimated at 11,517,600 acres, or 11.3 per cent. below the high record of last year, but 11.9 per cent. above the harvested area of 1914. The estimated acreages sown to other crops are as follows: Oats, 10,644,000 as against 11,365,000 last year; barley, 1,397,900 against 1,509,350; rye, 159,685 against 112,300; peas, 104,420 against 196,200; mixed grains, 410,770 against 466,800; hay and clover, 7,974,000 against 7,875,000; alfalfa, 89,900 against 92,630. Of late-sown crops the acreages are as follows: Buckwheat, 355,500 against 343,800 in 1915; flax, 723,000 against 806,600; corn for husking, 183,700 against 252,300; beans, 34,490 against 43,310; potatoes, 448,800 against 478,600; turnips, etc., 156,200 against 172,700; sugar beets, 15,000 against 18,000, and corn for fodder, 297,070 against 343,400. In practically all crops there is a decrease from that of last year.

The report shows that prospects of the grain crops are excellent throughout the west, but owing to the lateness of the season there will be a greater risk of damage from early frost than last year. From the reports of correspondents it is estimated that there is a slight decrease in number of horses, milch cows, sheep and swine, but an increase in beef cattle and stockers in the country as compared with 1915.

Preventing the Spread of Noxious Weeds.

In Manitoba there is a Threshermen and Weeds Act, which aims at compelling the owners and operators of threshing outfits to thoroughly clean their machine before leaving a farm. The Act states that it shall be the duty of every person, owning or operating a threshing machine, immediately after completing threshing grain at each and every point of threshing, to clean or cause to be cleaned the said machine, together with all wagons and other outfits used in connection with such threshing, so that seeds of noxious weeds shall not be carried to or on the way to the next place of threshing by the aid of the said threshing outfit. There is a heavy penalty for persons not complying with the provision of the law. A copy of the Act is supplied free from the Municipal Weed Inspectors, and it is imperative that a copy be affixed to each threshing machine.

Not only in Manitoba but elsewhere a good many farms receive their first noxious weeds by seeds clinging to and being carried on threshing outfits. Many machine owners make no effort whatever to clean their machine before drawing it out of a barn, consequently, if there is wild oats, mustard, sow thistle or some other noxious weeds in the crop which has been threshed, these seeds frequently stick in corners and crevices of the separator and are carried to the next farm. During the operation of threshing these

may become dislodged and find their way to the bin. If the farm does not contain any of these weeds it is an aggravation to the owner to be forced to put up the continual fight during the growing season to keep the weeds from reproducing. A little care on the part of the threshing gang would save many farmers a good deal of trouble.

An act of this nature enforced is certainly a step in the right direction, and should receive the support of every owner of a clean farm.

Commission on Canadian Railways.

The promised Royal Commission to inquire into and report on the general railway situation in Canada, has been named by the Government at Ottawa. While the Grand Trunk Railway and the Canadian Pacific Railway are not financially dependent upon the state, the Grand Trunk Pacific and the Canadian Northern are, and the Intercolonial is a government-owned and operated road, and still another great project, the Hudson Bay Railway, is under way by the Government. The possible nationalization of these systems and the whole transportation problem, including the obligations of Canada financially, are, therefore, within the scope of the Commission, obviously one of the most serious matters ever referred to such a body in this country. The work has been entrusted to three of the most eminent and capable men of the day, viz., Alfred H. Smith, President of the great New York Central Railway System, Chairman; Sir Henry Drayton, Chairman of the Dominion Board of Railway Commissioners, and Sir George Paish, a well-known and recognized British authority on financial and economic subjects.

Edmonton Exhibition a Success.

Once again Edmonton enjoyed good weather for its annual summer exhibition. With a greatly increased list of entries in practically all the classes of live stock, with good crowds and good weather it was only natural that an air of optimism should pervade the entire event. The agricultural products were worthy of special mention and the exhibit of wool was above par. The horse classes were hardly up to the standard in point of numbers. Clydesdales, as is usual at Edmonton, made by far the strongest display of the heavy horse breeds. The bovine exhibit, both in point of number and in the quality of the individuals exhibited, set a new standard. In the beef breeds particularly there was a pleasing uniformity of quality and keen competition. Controversy was not so keen in the dairy breeds with the exception of the Holstein classes. Sheep and swine classes made an exceptionally strong showing. In fact, the Berkshires provided as keen competition as did any class of live stock.

The following judges officiated and placed the classes of the various breeds. Clydesdales and Shires, Fred Richardson, Columbus, Ont.; Percherons, Belgians and Suffolk-Punch, Robt. Graham, Toronto; Short-horns and Herefords, John Gardhouse, Weston, Ont.; Aberdeen-Angus, Chas. Gray, Chicago, Ill. All dairy breeds, W. H. Standish, Lyons, Ohio; sheep, J. McCaig, Edmonton; swine W. J. Elliott, Olds, Alta.

Horses.

Clydesdales made by far the best showing of the heavy horse breeds. In the aged-stallion class Scotland's Splendor from the stables of D. Thorburn, De Winton, Alta., was again given the red ribbon by a narrow margin over Baron Ian shown by P. M. Bredt, of Calgary. Collynie Dictator and Dawning Light stood next in the order named in the aged class. In the three-year class Kildare was first, while Castor was best of the two-year-olds. A number of well-known mares lined up in the female classes, Maggie Fleming, shown by D. Thorburn beat her stable mate Rosie Elcho in the aged mare class. The well-known mare, Poppy exhibited by G. H. Cresswell, Edmonton, was best of the yearlings and was awarded the female championship with Maggie Fleming reserve. Scotland's Splendor was proclaimed the champion stallion with Baron Ian reserve.

The showing of Percherons was much smaller than at Calgary during the previous week. The quality, on the whole, was fairly good. Geo. Lane of Pekisko had out by far the strongest string in the breed, in fact, his entries numbered 18 out of a total of 31. Tranien, a big blocky grey repeated his performance of the spring show by winning in the aged stallion class for G. C. Groat, Spruce Grove, Alta. He was given the reserve ribbon in the open championship, being beaten by the good two-year-old, Marvel, shown by Geo. Lane. The yearling mare class was by far the strongest in the females. Bichette maintained her unbeaten record by heading a line of six. She was also given the open female championship. Lady Halifax beat her stable mate Lorna Doon in the three-year-old class and worked her way to reserve championship.

Beef Cattle.

Shorthorns were out in greater numbers than in Calgary, but with the exception of one or two changes the placings in the majority of the classes were virtually the same as at Calgary the week previous. Burnbrae Sultan exhibited by A. F. & G. Auld, Guelph, Ont., was again unbeaten in the aged bull class, with Opportunity and Edgocote Turk, exhibited respectively by Yule & Bowes and J. Graham, next in the order named. Burnbrae Sultan was also proclaimed senior and grand champion, while Kyle Bros'. Sea Gem's Pride, the winning two-year-old, was reserve senior champion.

In the aged female cow class Spring Valley Buckingham, shown by Yule & Bowes, was placed ahead of Lady of the Valley 7th, which had been shown so successfully by Kyle Bros. This was contrary to the Calgary decision which some could not understand, as the latter cow possessed great scale and depth. Aulds' Silver Queen was again best of the three-year-old cows, and later senior and grand champion. Countess 16th was proclaimed the best two-year-old heifer. Kyle Bros. won on Jealousy 7th, in the senior yearling class, and Aulds in the junior yearling class on Evelyn.

The showing of white-faces was virtually the same as at Calgary. L. O. Clifford of Oshawa, Ont., and F. Collicut of Alberta, taking the lion's share of the money. Lord Fairfax was again given premier honors over Beau Perfection 11th and was also awarded the senior and open male championships of the breed. J. C. Sherry of Clover Bar, had out the two-year-old, Refiner 37th. In junior yearlings Clifford won on Lord Fairfax 2nd and was also first and second in the senior calf class with Wilton Fairfax and Carl Fairfax. In the female classes Clifford was again quite successful. He won the aged cow class with Miss Armour Fairfax, the three-year-old class with Miss Princess 41st, and in two-year-olds with Delia Fairfax. Lord Fairfax was made grand champion bull and Miss Armour Fairfax champion cow.

The Doddies quantitatively did not make quite so good a showing as at Calgary. The massive Black Abbot Prince again won in the aged class and worked his way to the open championship for J. D. McGregor of Brandon, Man. Jas. Bowman, Guelph, Ont., stood second in both these classes with Young Leroy. In the female classes the aged cows again made an impressive showing. McGregor was first in the aged class on Key of Heather 2nd, Bowman was first in three-year-olds on Elm Park Rosebud 17th. Elm Park Rosebud 20th won in heifers, two years old, and in senior yearlings Bowman was again first on Emmeline of L. F. Key of Heather 2nd was senior and grand champion female and Elm Park Rosebud 20th reserve.

Holsteins.

This popular breed made the strongest showing in the dairy classes, although they were not quite so strong numerically as at Calgary. In all the classes competition was exceptionally keen. In the aged bull class Principal De Kol from the Duke of Sutherland's herd, a fine typey fellow of good conformation, but a little slack behind the shoulders was a very close second to the Calgary winner, Korndyke Posch Pontiac. The great length and better breed character of the latter gave him first place by the narrowest of margins, the same bull was later awarded the senior and open championship. Count Tensen J., a growthy youngster, showing abundance of breed character was first in the junior yearlings and also won the junior championship, with Sir Abbekerk Palestine, a calf with excellent prospects, in reserve. In the senior calf class the controversy was of a close order, with Segis De Kol Artis winning first. In the aged cow class the Calgary decisions were reversed somewhat. Princess Holdenby De Kol was given the red ribbon with her stable mate Ruby Jean, second.

Ayrshires.

The Ayrshire breed was not nearly so well represented as at the Calgary show, only two exhibitors being present, R. Ness of De Winton and H. Runnels of North Edmonton. The latter had splendid individuals and in another year or two should be heard of in the western shows. The Ness herd forged to the front

in every class. Morton Mains Planet again took first in the aged bull class, and took the championship with Lakeview Gold Mine in reserve. In the aged cow class Lessnessock Pansy 2nd from the Lakeview herd stood at the head of the line. This splendid cow was also awarded the championship.

Jerseys.

Three Jersey herds were exhibited and the classes were much better filled than at Calgary. In spite of stronger opposition the Westloch herd again won premier honors in practically every class they were shown in. The aged bull, Pet Kentucky Wonder of the Westloch herd was first in his class and also won championship. The junior championship was given to Kentucky's Jolly Wonder, the junior yearling winner. The aged cow class was probably the strongest of the breed and was won by the fine typey cow, Noble's Ibsen. She again won senior and open champion. Kentucky Butterfly the winner in the junior yearling classes was awarded the junior championship.

Sheep.

The sheep pens were well filled and the majority of the classes showed keen competition. Greater interest than usual was taken in the judging by the on-lookers and the sheep exhibit was the attraction of an increased number of farmers during the week. A number of Ontario exhibitors were present and succeeded in winning a large number of the honors, although the local sheep breeders provided keen controversy and in many cases wrested the honors from the Eastern breeders. A. McEwen, Brantford, was the only exhibitor in the Shropshire classes, consequently was awarded all the prizes. With the Oxford-Down breed Arkell & Son of Teeswater, Ont., secured highest honors in several classes, and also won the championship. Jas. Bowman's Suffolks succeeded in winning the majority of the first prizes in their classes and also won the championship over two other flocks. In Southdowns the two Ontario breeders Arkell & Son, and Dolson & Sons competed against Johnston Bros. from Alberta. The honors were fairly evenly divided. Arkell & Son had the champion ram and Dolson & Sons the champion ewe. The Hampshire breed was represented by four flocks with Campbell & Ottwell showing the champion ram, and A. McEwen securing the ewe championship. The prizes were fairly evenly divided. Dolson & Sons had no competition in the Cotswold classes and Herbert Smith was the only exhibitor in Leicesters. In the mutton classes—pure-bred—Dolson & Sons won first with a ewe, two shears or over, and also with a shearling ewe or wether. Johnston Bros. from Alta., won on the pen of three shearlings.

Swine.

The entry in swine was the largest that has been seen at an Alberta show for some time, and the quality of the exhibits, taken generally, was also ahead of other years. In no other class of live stock was the average quality of the individuals shown any better or the competition any keener than in the hogs. The Berkshire classes were especially keenly contested with Gilbert and Dolson & Sons successful in most classes dividing the honors fairly well between them. A number of local herds were in the running at all times and in some classes got well into the money. Miller and Bailey had a battle royal in Durocs with the former getting a little the better of the argument. The Gillies' herd was well to the front in the Yorkshire classes taking both the male and female championships. The competition between Gilbert and Miller in the Tamworth

classes was keen and again the honors were practically even. In Hampshires Hoover & Son took most of the awards and in Poland Chinas J. J. Bell.

Championships at Edmonton.

Clydesdales—Scotland's Splendor, D. Thorburn; Poppy, G. H. Cresswell.
Percherons—Marvel, Geo. Lane; Bichette, Geo. Lane.
Belgians—Gambonte de Questenne, F. Jackson; Lady Isabel, N. Bilsborrow.
Suffolk Punch—Ashmoor Cupbearer, F. J. Hartell; Colleen, F. J. Hartell.
Shorthorns—Burnbrae Sultan, A. F. & G. Auld; Silver Queen, A. F. & G. Auld.
Herefords—Lord Fairfax, L. O. Clifford; Miss Armour Fairfax, L. O. Clifford.
Aberdeen-Angus—Black Abbot Prince, J. D. McGregor; Key of Heather 2nd, J. D. McGregor.
Holsteins—Korndyke Posch Pontiac, Jos. Laycock; Princess Holdenby de Kol, Jos. Laycock.
Ayrshires—Morton Mains Planet, Rowland Ness; Lessnessock Pansy 2nd, Rowland Ness.
Jerseys—Pet Kentucky Wonder, Jos. Harper; Noble's Ibsen, Jos. Harper.
Shropshires—Ram, A. McEwen; Ewe, A. McEwen.
Oxfords—Ram, Arkell & Sons; Ewe, Arkell & Sons.
Suffolks—Ram, Jas. Bowman; Ewe, Jas. Bowman.
Southdowns—Ram, Arkell & Sons; Ewe, Dolson & Son.
Hampshires—Ram, Campbell & Ottwell; Ewe, A. McEwen.
Leicesters—Ram, H. Smith; Ewe, H. Smith.
Berkshires—Boar, Wm. Gilbert; Sow, Dolson & Son.
Yorkshires—Boar, A. R. Gillies; Sow, A. R. Gillies.
Poland-China—Boar, J. J. Bell; Sow, J. J. Bell.
Tamworths—Boar, Dolson & Son; Sow, Wm. Gilbert.
Duroc-Jersey—Boar, Oscar Miller; Sow, Oscar Miller.
Hampshires—Boar, Hoover & Son; Sow, Hoover & Son.

New Appointment at the Ontario Agricultural College.

O. J. Stevenson, M. A., Doctor of Pedagogy, assistant master Toronto Normal School, has recently been appointed professor of English at the Ontario Agricultural College in succession to Professor J. B. Reynolds who resigned some time ago to become principal of Manitoba Agricultural College. Professor Stevenson has had a wide experience and has many qualifications for the position. His success as a public school teacher gained for him the appointment of school inspector and later that of high school principal and teacher in the normal school as well as in the faculty of education, Toronto University. Professor Stevenson has devoted a good deal of time and attention to nature study and rural life, and in addition to teaching experience he has done considerable literary work, being author and editor of several Ontario school text books. Professor Stevenson enters upon his new duties at Guelph the first of September.

Successor to C. C. James.

W. J. Black has been appointed to succeed the late Dr. C. C. James as Commissioner of Agriculture under the Agricultural Instruction Act. Mr. Black was born at Mansfield, Ontario. He graduated from the Ontario Agricultural College and Toronto University in 1902. In April of 1905 he was made President of the Manitoba Agricultural College and Professor of Animal Husbandry. In October of 1915 Mr. Black became Secretary of the Economic Commission.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts of live stock at the Union Stock Yards, West Toronto, from Saturday, July 22 to Monday, July 24, numbered seventy cars, 1,375 cattle, 216 calves, 407 hogs, 219 sheep and lambs. Cattle, sheep, lambs and calves steady to strong. Hogs weighed off cars, \$12.00; fed and watered, \$11.75. It was a very light market on Monday, July 24.

The total receipts of live stock at the City and Union Stock Yards for the past week were:

	City	Union	Total
Cars	38	362	400
Cattle	202	3,951	4,153
Hogs	481	4,630	5,111
Calves	49	659	708
Sheep	493	1,402	1,895
Horses	138	1,838	1,976

The total receipts of live stock at the two markets for the corresponding week 1915 were:

	City	Union	Total
Cars	16	457	473
Cattle	129	4,017	4,146
Hogs	147	8,201	8,348
Calves	90	786	876
Sheep	835	3,217	4,052
Horses	87	2,608	2,695

The above figures show a decrease in the combined receipts at the two markets of 73 carloads, 3,237 hogs, 2,157 sheep, 168

calves and an increase of 7 cattle and 719 horses.

There was a very light run of all kinds of live stock on the Toronto market the past week.

Butchers' Cattle.—Heavy fat steers were few in number and much reduced in price; the market was very slow for this grade of cattle. Buyers do not want them, and they are hard to sell at any price. Good light and handy weight butcher cattle were fairly popular at slightly reduced prices. Strictly good to choice cows and heifers were steady to firm. Bulls of the good kind were steady, but very few of this class were on the market. Stockers and feeders.—There was a strong demand for good feeders weighing 750 to 800 lbs. In fact, buyers could not fill orders. Milkers and springers were steady to firm at from \$5 to \$10 less than the previous week. Choice lambs were steady to strong, and advanced in price 1½c. to 2c. per lb. during the week. Light handy butcher sheep remained much the same as in the week previous. Heavy fat sheep were slow, hard to sell and not in demand. Veal calves were steady to strong; choice veal selling at 11c. to 12c. per lb. Hogs.—The hog market was strong and active. On Thursday they reached the record price of \$12. Farmers and drovers must, however, remember that there was a very light run of all kinds of live stock last week, and while some select lots brought very high

prices it would be a mistake for them to expect such prices if there is a large run on any line, more especially if the hot weather continues.

Butcher Cattle.—Choice heavy steers, \$8.40 to \$8.65; good, \$7.75 to \$8.25; butcher steers and heifers, choice, \$8 to \$8.50; good, \$7.75 to \$8; medium, \$7.25 to \$7.75; common, \$6.50 to \$7 cows, choice, \$7.25 to \$7.40; good, \$6.75 to \$7; medium, \$6.25 to \$6.50; common, \$5.25 to \$5.75; canners, \$3.75 to \$4.75. Bulls, best, \$7.50 to \$8; good, \$6.50 to \$7; medium, \$5.75 to \$6.25; common, \$5 to \$5.50. Milkers and springers, best, \$75 to \$90; medium, \$45 to \$65. Stockers and feeders, \$6 to \$8. Veal calves, choice, 11c. to 12c. per lb.; common to medium, 8½c. to 9½c. per lb.; Eastern grassers, 5c. to 6c. per lb. Sheep and lambs, choice spring lambs, 13½c. to 14½c. per lb.; common spring lambs, 10c. to 11½c.; light handy sheep, 7¾c. to 8¾c. per lb.; heavy fat sheep, 4c. to 5c. per lb. Hogs, weighed off cars, \$11.75 to \$12; fed and watered, \$11.50 to \$11.65, less government condemnation loss.

Breadstuffs.

Wheat—Ontario, (according to freights outside) No. 1 commercial, 98c. to \$1; No. 2 commercial, 95c. to 97c.; No. 3 commercial, 89c. to 91c., according to freights outside; feed wheat, 87c. to 88c., according to sample. Manitoba

wheat (track, bay ports)—No. 1 northern \$1.22½; No. 2 northern, \$1.20½; No. 3 northern, \$1.17.

Oats.—Ontario, No. 3 white, 47c. to 48c., according to freights outside. Manitoba oats (track, bay ports)—No. 2 C. W., 49½c.; No. 3 C. W., 48½c.; extra No. 1 feed, 48½c.; No. 2 feed, 47½c.

Rye.—No. 1 commercial, 94c. to 95c.

Buckwheat.—Nominal, 70c. to 71c.

Barley.—Ontario, malting, 65c. to 66c., according to freights outside; feed barley, 60c. to 62c., according to freights outside.

American Corn.—No. 3 yellow, 89c., track, Toronto.

Peas.—No. 2, \$1.75 to \$1.85; sample peas, according to sample, \$1.25 to \$1.50.

Flour.—Ontario, winter, \$4.05 to \$4.15 in bags, track, Toronto; \$4.15 bulk, seaboard. Manitoba flour—Prices at Toronto were: First patents, \$6.50; second patents, \$6 in jute; strong bakers', \$5.80, in jute; in cotton, 10c. more.

Hay and Millfeed.

Hay.—Baled, car lots, track, Toronto, No. 1, best grade, \$16 to \$17; No. 2, per ton, low grade, \$13 to \$15.

Straw.—Baled, car lots, \$6 to \$7, track, Toronto.

Bran.—\$19 per ton, Montreal freight; shorts, \$22, Montreal freights; middlings, \$24, Montreal freights; good feed flour,

per bag, \$1.65 to \$1.70, Montreal freights.

Country Produce.

Butter.—Prices remained stationary on the wholesales during the past week. Creamery, fresh-made pound squares, 30c. to 31c.; creamery solids, 29c.; dairy, 23c. to 25c.; separator dairy, 25c. to 27c.

Eggs.—New-laid eggs kept firm, case lots selling at 30c. to 31c. per dozen, and cartons at 33c. to 34c. per dozen.

Cheese.—Old, 22c. per lb.; new, 17c. to 17½c.

Beans.—Primes, \$4.50; hand-picked, \$5 to \$5.25.

Poultry.—Live-weight prices—Spring chickens, lb., 25c.; spring ducks, lb., 17c.; turkeys, young, lb., 20c.; fowl, 4 lbs. and over, lb., 15c.; fowl, under 4 lbs., lb., 14c.

Hides and Skins.

City hides, flat 20c.; country hides, cured, 18c.; country hides, part cured, 17c.; country hides, green, 16c.; calf skins, per lb., 30c.; kip skins, per lb., 24c.; sheep skins, city, \$2.50 to \$3.50; sheep skins, country, \$1.50 to \$3; lamb skins and pelts, 55c. to 70c.; horse hair, per lb., 43c. to 45c.; horse hides, No. 1, \$5 to \$6; No. 2, \$4.50 to \$5.50. Wool, washed, 42c. to 46c. per lb.; wool, rejections, 35c. to 38c. per lb.; wool, unwashed, 32c. to 35c., per lb. Tallow, No. 1, 6½c. to 7½c.; solids, 6c. to 7c.

Wholesale Fruits and Vegetables.

The continued hot, dry weather has played havoc with the fruits. The bulk of those which arrived on the market during the past week, either being very small or showing a large percentage of waste. Canadian peaches made their first appearance last week, but were of poor quality.

Strawberries gradually decreased, until towards the end of the week there were only very small shipments received. The fruit was exceedingly soft, and declined to 7c. to 10c. per box during the first part, closing at 8c. to 11c.

Raspberries gradually increased in quantity, but the bulk of the fruit was very small; it varied in price from 14c. to 18c. per box, an odd lot of choice ones bringing 20c. per box.

Red currants were an exceedingly slow sale, declining in price until they sold from 4c. to 6c. per box; 20c. to 30c. per 6 qts., and 35c. to 50c. per 11 qts.

Gooseberries were not shipped in so heavily after having brought such poor prices week before last; the medium-sized fruit sold at 35c. to 50c. per 11 qts.; while some extra choice large ones brought 75c. to \$1 per 11 qts.

Cherries were especially wasty, and varied greatly in price, according to quality, closing at 50c. to 75c. per 11 qts. for sour ones, and 75c. to \$1 per 6 qts., and \$1.50 to \$2 per 11 qts. for sweets.

The imported fruits were of good quality. California peaches selling at \$1.50 to \$1.75 per case. Plums at \$2.25 to \$2.75, and Bartlett pears at \$2.75 to \$3 per case. The Georgia peaches selling at \$3 to \$3.25 per six-basket case.

Watermelons were an especially good sale at 60c. to 75c. each.

Lemons advanced by leaps and bounds, partly due to the extremely hot weather, creating an abnormal demand, and partly because they are hard to secure, closing at \$5.50 to \$6 per case.

New potatoes declined, selling at \$3.50 to \$3.75 per bbl.

Carrots and beets came in more freely, declining to 25c. and 15c. to 20c. per dozen bunches, respectively.

New cabbage also declined slightly, selling at \$2.75 to \$3.25 per case.

Montreal.

The weather was exceedingly hot, and, as is usually the case under such circumstances, the tone of the market for cattle was somewhat easy. Offerings of cattle on the local market were very light, this being partly due to the hot weather, and partly due to the fact that farmers were very busy throughout the province harvesting a record hay crop. The lighter offerings naturally had the effect of supporting prices to some extent, and butchers' steers

changed hands at 9c. to 9½c. for good quality, the medium quality being 7½c. to 8½c., and the common selling as low as 7c. per lb. Good butchers' cows sold at 6c. to 7c. per lb., and the common as low as 5c. Butchers' bulls brought 6½c. to 7c. for the best, and 5½c. for the common. Canning stock sold at 4½c. to 5c. per lb. There was a good demand for sheep and lambs at fairly steady prices, sheep being quoted at 7c. per lb., and lambs at 11c. for the best. Milk-fed calves continued to change hands at 8c. to 9c. per lb., while the grass-fed sold at 5c. per lb. Select hogs ranged all the way from 11½c. to 12½c. per lb., mixed lots brought 10½c. to 11½c., and the common down to 9½c. per lb., weighed off cars.

Horses.—The market for horses was entirely neglected; prices held about firm, however, being as follows: Heavy draft horses, weighing 1,500 to 1,700 lbs., \$200 to \$250 each; light draft horses, weighing 1,400 to 1,500 lbs., \$150 to \$200 each; small horses, \$100 to \$125 each; culls, \$50 to \$75 each; fine saddle and carriage horses, \$200 to \$250 each.

Dressed Hogs.—Supplies of dressed hogs on the market were a little lighter, but prices showed no change, fresh-killed, abattoir-dressed continued to sell at 16½c. to 16¾c. per lb.

Potatoes.—Old potatoes are now, to all intents and purposes, finished for the season. No new Canadian potatoes were on the market, but imported American stock was cheaper than a week ago, being quoted at \$3.50 per barrel, in car lots, ex-track, and at 50c. per barrel more in smaller lots, ex-store.

Honey and Maple Syrup.—The tone of the market for honey was firm, with white clover comb selling at 15c. and extracted at 12c. to 12½c., while brown clover comb was 12½c. to 13c., and extracted 10c. to 11c. per lb. Buckwheat honey sold at 9c. to 10c. per lb. Syrup was steady and neglected. Prices were 85c. to 90c. for 8-lb. tins; \$1 to \$1.10 for 10-lb. tins, and \$1.25 to \$1.50 for 13-lb. tins, according to quality. Pure maple sugar sold at 12c. to 14c.

Eggs.—The market for eggs continued to advance. Production was fairly large, but the weather worked against quality. Straight-gathered stock was quoted at 30c. per doz., while No. 1 candled was 29c., and No. 1 selected, 32c.; No. 2 candled being 26c. to 27c. Strictly new-laid eggs were scarce and dear at 35c. per doz.

Butter.—The quality of the offerings was not finest at this time of year, but the best was quoted at 29½c. to 29¾c. per lb., with fine creamery at about ½c. less, and undergrades at 28½c. to 28¾c. Dairy butter ranged all the way from 22c. to 25c., according to quality.

Cheese.—The market for cheese was firmer, there being a good export demand. At the auction here, Quebec cheese sold at 16½c. for No. 1 white, and 15 15-16c. for No. 2 white; No. 3 being ¼c. less, and No. 2 colored 16½c. per lb. Finest Westerns are quoted firmer also, and the price spoken of here is less than the Peterborough board price of 16½c. to 16¾c.

Grain.—The market for oats showed a weaker disposition, No. 2 Canadian Westerns being quoted at 53c. to 53½c.; No. 3 at 52c. to 52½c.; No. 1 feed, 52c. to 52½c., and No. 2 feed at 50c. to 50½c. Ontario and Quebec No. 2 white was 52½c.; No. 3 was 51½c., and No. 4, 50½c., per bushel, ex-store. Barley was quoted at 86c. for No. 3, and 82c. for No. 4.

Flour.—The market was dull and steady at \$6.60 per barrel for Manitoba first patents; \$6.40 for seconds, and \$5.90 for strong bakers', in bags. Ontario patents were \$6 to \$6.25 per barrel, in wood, with 90 per cent's. at \$5.40 to \$5.60, and straight rollers at \$5.10 to \$5.30, the latter being \$4.80 to \$5 in bags.

Millfeed.—Bran was firm at \$21 per ton, in bags, shorts being \$24; middlings, \$26 to \$27; pure grain mouille, \$31 to \$32, and mixed, \$28 to \$30.

Baled Hay.—Old hay was in good demand, but slightly easier at \$20 per ton for No. 1, in car lots; extra good No. 2 being \$18.50 to \$19; No. 2 being \$17.50 to \$18, and clover mixed, \$15.50.

Hides.—Horse hides were \$1.50 for No. 3; \$2.50 for No. 2, and \$3.50 for extra No. 1. Sheep skins were steady at 7c.,

and calf skins at 31c. for No. 2, and 32c. for No. 1. Horse hides are 21c. per lb. for No. 3; 22c. for No. 2, and 23c. for No. 1. Rendered tallow advanced to 8c. per lb., while rough was firm at 2½c.

Buffalo.

Cattle.—Another bad trade last week here on cattle. Liberal receipts at all markets, plenty of the grassers moving to market, with the result that the big fellows lost no opportunity to continue pounding prices. Values were declined another half dollar last week on shipping steers, while butchering steers went off from a quarter to fifty cents, with cows selling fifteen cents to a quarter under the previous week. Steers were generally a dollar to a dollar and a half under two weeks ago, and there was nothing like the snap to the trade. Best shipping steers last week ranged from \$9.85 to \$10.00, with best handy butchering steers from \$8.85 to \$9.25, choice yearlings landed at \$9.50 and these prices were a full half dollar under the previous week. A few extra fancy heavy heifers brought \$7.60 to \$8, with fancy, fat cows \$7.50 to \$7.75, but good butchering cows generally sold from \$6.00 to \$6.75. Stockers and feeders trade, while a shade easier last week, showed a more healthy condition than for some weeks past, and as compared with fat cattle feeders were selling weak, best feeders last week bringing \$7.50 to \$7.60. Bulls sold a quarter lower, best ones at around \$7.25 to \$7.35. Milchers and Springers brought full steady prices. Feeling for the future of the trade appears to be that some light runs will have to be had right along before any substantial improvement can be looked for. Several loads of Canadians were among the offerings this week, mostly mixed lots. Receipts for the week were 4,500 head, as against 4,275 head for the previous week and 3,550 head for the corresponding week last year. Quotations:

Shipping Steers.—Choice to prime natives, \$9.60 to \$10.00; fair to good, \$9.00 to \$9.50; plain, \$8.50 to \$8.75; very coarse and common, \$7.75 to \$8.25; best Canadians, \$9.25 to \$9.50; fair to good, \$8.50 to \$9.00; common and plain, \$7.50 to \$8.00.

Butchering Steers.—Choice heavy, \$9.00 to \$9.50; fair to good, \$8.00 to \$8.75; best handy, \$8.75 to \$9.25; light and common, \$7.00 to \$7.50; yearlings, prime, \$9.25 to \$9.50; yearlings, common to good, \$7.50 to \$8.50.

Cows and Heifers.—Best handy butcher heifers, \$7.40 to \$7.60; common to good, \$6.50 to \$7.25; best heavy fat cows, \$7.00 to \$7.50; good butchering cows, \$6.00 to \$6.75; medium to fair, \$5.25 to \$5.75; cutters, \$4.50 to \$4.75; canners, \$3.25 to \$4.25.

Bulls.—Best heavy, \$7.00 to \$7.35; good butchering, \$6.25 to \$6.50; light bulls, \$5 to \$5.25.

Stockers and Feeders.—Best feeders, \$7.50 to \$7.75; common to good, \$6.75 to \$7.25; best stockers, \$7.25 to \$7.50; common to good, \$6.25 to \$7.00.

Milchers and Springers.—Good to best, in small lots, \$80.00 to \$100.00; in car loads, \$70.00 to \$75.00; medium to fair, in small lots, \$60.00 to \$65.00; in car loads, \$55.00 to \$60.00; common, \$40.00 to \$50.00.

Hogs.—Prices were pretty uniform last week. Demand was good and everything was well cleaned up from day to day. Monday, Tuesday and Wednesday a few good hogs made \$10.35, but the bulk of the sales the first half of the week were made on a basis of \$10.30. Thursday and Friday prices were up a nickel, few bringing \$10.40, with bulk changing hands at \$10.35. The fore part of the week pigs sold up to \$10.00 and after Tuesday these weights sold generally at \$9.75. Roughs \$8.85 to \$9.00 and stags \$7.50 down. Receipts last week reached around 25,100 head, as against 22,543 head for the week before and 30,900 head for the same week a year ago.

Sheep and Lambs.—Receipts continued to run very light last week. Demand was light and after Monday a few top lambs reached \$11.15, with majority around \$10.75, trade was slow and on lambs prices were lower, range on tops the following four days was from \$10.50 to \$10.75. Cull lambs went from \$9.00 down and latter figure was top for yearlings. Sheep were held steady all week, top handy wethers that contained a few ewes sold

around \$8.00 and the range on strictly ewes was from \$7.00 to \$7.50, as to weight. For the entire week the run reached approximately 3,750 head, as compared with 3,325 head for the week previous and 4,300 head for the same week a year ago.

Calves.—Market last week was active for all handy lots, but anything weighty continued very unsatisfactory sale. Top handy veals, with the exception of one or two days, when the quality was not very good, sold generally at \$13.00, and while some real good handy culs brought as high as \$12.00, most of the throwouts went from \$11.50 down. Buyers continued to discriminate against anything on the weighty order and as a rule, calves weighing better than 200 pounds, undersold the handier lots of the same quality and finish by from \$2.00 to \$3.00 per cwt., and they were slow to find sale even at that. Receipts for the past week were 2,350 head, being against 1,996 head for the week before and 2,050 head for the same week a year ago.

Chicago.

Cattle.—Beeves, \$6.75 to \$10.60; western steers, \$7.75 to \$8.90; stockers and feeders, \$5 to \$8; cows and heifers, \$3.30 to \$9.20; calves, \$3.50 to \$12.

Hogs.—Light, \$9.10 to \$9.85; mixed, \$9.00 to \$9.95; heavy, \$9.85 to \$9.95; rough, \$8.95 to \$9.10; pigs, \$7.50 to \$9.10; bulk of sales, \$9.25 to \$9.75.

Sheep.—Lambs, native, \$6.50 to \$10.25.

Cheese Markets.

Brockville, 17c.; Cornwall, colored, 17 1/2-16c.; white, 16 1/2c.; London bid, 16 1/2c.; Belleville, 15 1/2c.; St. Hyacinthe, Que., 16 1/2c.; Vankleek Hill, 16 7-16c.; Montreal, finest westerns, 17c.; finest easterns, 16c.; New York State, whole milk flats, fresh specials 15 1/2c., average fancy, 15 1/4c.

Gossip.

In the advertisement of A. McKinnon, Erin, which appears in another column of this issue Kilbran Beauty should read Kiblean Beauty, and, also a 600 lb. dam should read, out of a 600 lb. dam.

Coming Events.

Saskatoon Summer Exhibition, July 31 to August 5.

North Battleford Summer Exhibition, August 7 to 9.

Prince Albert Summer Exhibition, August 10 to 12.

Vancouver Exhibition, Vancouver, B.C., August 14 to 19.

National Exhibition, Toronto, August 26 to September 11.

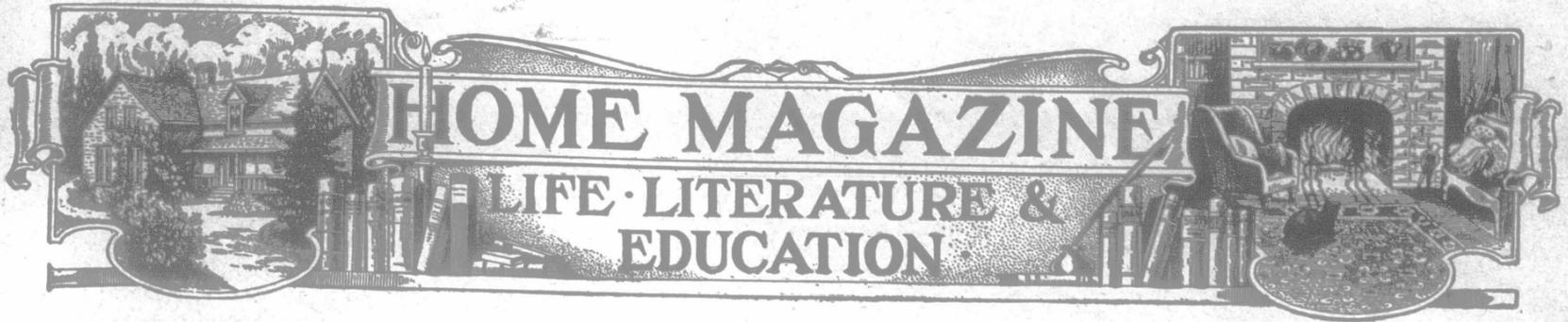
Western Fair, London, Sept. 8 to 16.

Central Canada Exhibition, Ottawa, Sept. 9 to 16.

Eastern Exhibition, Sherbrooke, Que., Sept. 2 to 9.

A New Feature.

With a view to developing a school of successful feeders of cattle, sheep and swine from the ranks of the youthful members of farm homes the International Live Stock Exposition to be held at Chicago, Dec. 2 to 9, 1916, has included in its premium list, prizes on animals fed by boys sixteen years old and under. Class 55 is for Best Steer or Heifer under 30 Months and the premiums are as follows: 1st prize, \$50; 2nd prize, \$40; 3rd prize, \$30; 4th prize, \$20; 5th prize, \$10. Class 56 is for Best Pen of Three Lambs of Any of the Mutton Breeds, and the same prizes as for class 55 are listed. Similar prizes again are offered in class 57 which is Best Pen of Three Barrows Under 10 Months. All entries must be made in the name and by the feeder. Exhibitors will be required to personally care for their animals without the aid of an assistant. The feeding term is from August 1 to opening of the International. In judging these classes quality and finish will count 70, gain 15, and cost of gain 15 per cent. Notice of intention to enter one or more of these breeding contests should be mailed at once to B. H. Heide, Sec'y., Union Stock Yards, Chicago, who will forward formal entry blanks. No entrance fees will be charged in these classes.



To the Skylark Behind Our Trenches.

(BY E. DE S., IN THE 'TIMES,' LONDON.)
France, May, 1916.

Thou little voice! Thou happy sprite,
How didst thou gain the air and light—
That sing'st so merrily?
How could such little wings
Give thee thy freedom from these dense
And fetid tombs—these burrows whence
We peer like frightened things?
In the free sky
Thou sail'st while here we crawl and creep
And fight and sleep
And die.

How canst thou sing while Nature lies
Bleeding and torn beneath thine eyes,
And the foul breath
Of rank decay hangs like a shroud
Over the fields the shell hath ploughed?
How canst thou sing, so gay and glad,
While all the heavens are filled with death
And all the World is Mad?
Yet sing! For at thy song

The tall trees stand up straight and strong
And stretch their twisted arms.
And smoke ascends from pleasant farms
And the shy flowers their odors give,
Once more the riven pastures smile,
And for a while
We live.

Mecca, Holy City of Islam.

One of the developments of the war during the present summer, which has brought peculiar satisfaction to the Allies, has been the news, which arrived in London about the end of June, that the Grand Shereef of Mecca had thrown off the yoke of the Turk and proclaimed his independence. Later it was reported that the revolution had spread to Jiddah, and was making way among the tribes all over Arabia.

The importance of this news lay in the fact that the Grand Shereef is really a sort of pope of Islamism, holding great authority, not only in Arabia, but in the many countries over which Mohammedanism has made way—considerable portions of Africa, Persia, Russia in Asia, Afghanistan, and even India. Notwithstanding the hereditary power of the Shereef, the Sultan of Turkey has long claimed to be spiritual head of all Islam, and Turkish Governors have been put in charge at Mecca and other holy places; and the effect of the uprising, which recommends itself to the support of the European Allies, can only be that the Turks will lose greatly in prestige over a vast territory.

The holy city of Mecca is situated 45 miles east of Jiddah, the chief port of Arabia, in a hollow among barren hills upon which the hot sun of Arabia beats as the long caravans from the outlying deserts, and the endless trains of pilgrims, riding on camels and mules, wind in and out among their devious ravines. The city itself, too, is immediately surrounded by a dry and sandy area, but strangely enough, circling about this, in the valleys, is a ring of verdure, with fruit-trees, and even springs and rippling brooks.

Although to-day associated only with Mohammedanism, as its holiest city, Mecca was held sacred long before the days of Mahomet. It is of great antiquity, and there are signs to show that it may have been founded by the patriarchs, thence drifting into paganism taking its career through a long course of it until the pagan elements were expelled by Mahomet to make way for the strange mixture and corruption of Judaism which is to-day known as Islamism. It is said that, when he entered the Kaabah, the conqueror of

Mecca, the "prophet" found in the temple an image of Abraham holding in his hand seven arrows without heads or feathers, such as are used by Arabs in divination. This image was surrounded by those of many other inferior "deities" among which was one of Ishmael, also holding in his hand divining arrows. All of these statues Mahomet caused to be destroyed at once, loudly proclaiming, "Great is Allah! There is but one God and Mahomet is his prophet!"

The City.

The houses of Mecca are all built of stone, and the city contains a fixed population of about 60,000, with, in addition, a vast floating population of pilgrims and caravans who come in with their wares and produce. As from time immemorial, the religious observances and festivals of the city were always connected with "fairs," and as these fairs occur many times a year, the animated and colorful appearance of the bazaars and especially in the area surrounding the mosque, may well be imagined—booths everywhere, long trains of camels winding in with tinkling bells, fierce Bedouins from the desert, tourists in sombre garb, red-fezzed Turks, gaily striped tunics, multi-colored caftans, and everywhere bartering and bargaining and the crying out about

from the desert, continually goes on. The Kaabah itself seems to be a rude imitation of the old Jewish tabernacle, and is built of heavy stone, 18 paces long by 14 wide, and about 40 feet high. It may be recognized in our illustration as a cube of black, like a huge catafalque, this appearance being lent to it by the vast drapery of rich black brocade with which it is continually covered. The adornment of gold embroidery, proclaiming "There is no God, but God and Mahomet is His prophet," etc., does not, of course, appear in the illustration.

There is but one door to the Kaabah, and it is placed near one corner, 7 feet from the ground. It is wholly plated with silver. The structure itself has a double roof, supported within by three pillars of aloes-wood, between which hang a number of silver lamps. The floor is paved with rich marble and the ceiling is draped with colored silk.

Possibly the most interesting object inside the building is the famous "black stone," which is set in the wall at a convenient height to receive the kisses of pilgrims. The legend told about it is that it was brought down by the angel Gabriel at the creation of the world, and was then white as snow, its present lugubrious shade being due to the sins of the millions of pilgrims who have

quadruple row of columns united by arches from which are suspended myriads of lamps. In all there are here 448 pillars of gray granite, red porphyry and white marble, each four of which support a dome, thus forming a series of domes all around the wall. In addition, at each of the four corners of the quadrangle, and at three other points, rises a lofty minaret surmounted with a gilded crescent. In the space between the Kaabah and the arcades are several objects of interest, including three oratories and the famous holy well Zemzem, said to be the spring which the angel discovered to Hagar in the wilderness. The water, which is supposed to cure all diseases, is eagerly drunk by the pilgrims.

All told, it is a strange and interesting scene, and the whole effect, especially after night and at the time of the holy month Ramadan, must be, as has been said by Burckhart and others, indescribably weird yet brilliant—the mysterious drapery, the profusion of gold and silver, the blaze of lamps, the red, yellow and blue "colors" of Mohammedanism, the kneeling multitudes.

The mosque in its present form was really founded by the Caliph Mahdi, Mahomet merely made use of it almost as he found it, contenting himself with destroying the idols and covering the Kaabah on the outside with a striped cloth, for which Caliph Mahdi substituted the black brocade. But it is to the honor of Mahomet that the whole place has been dedicated.

Mahomet.

The story of this wonderful man reads like a fairy tale, one of the colorful fairy-tales of his mysterious, colorful Orient. He was born at Mecca, A. D. 569 or 571, of the Koreish tribe, and during the earlier portion of his life seems to have led an ordinarily successful mercantile career, helped on, doubtless, by an extraordinarily bright and winsome personality. Tradition, however, has woven a wonderful web about those early years, and to-day all Islam devoutly believes that even his birth was hailed by miraculous circumstances. As soon as born, it is said, he fell prostrate, praying aloud, and calling out "God is great! There is no God but God, and I am His prophet!"

At 28 he married a rich widow, Cadijah, twelve years his senior, and went on amassing wealth, and, perhaps, thinking out the plan for his future greatness. At about 40 he began to withdraw himself much to the cave of Hera for silent meditation, then, one day, he suddenly announced to a few followers that on the night now celebrated as Al Kadr the angel Gabriel had suddenly appeared to him with the word, "Read, in the name of the Lord who hath created all things!" The wonderful things that the angel had commanded him to read he had written down; thus began the series of visions which were to be carried over twenty-two years and were to reach their climax in his miraculous journey through the seven heavens.

At first Mahomet's statements were received in Mecca with jeers and opposition, especially among his own tribe, the Koreish, who, at last, even began to persecute his followers. He himself found it advisable to withdraw to Taif, now renowned as one of the holy cities, but before long he boldly returned, took up his stand in the Kaabah, and began to denounce Mecca for its pagan idolatry, declaring with loud voice the unity of God. Moses and Christ, he affirmed, were the two prophets already sent from on High; he himself was the third.

A prophet is not without honor save in his own country, hence it was that Mahomet's doctrines first took root in Medina, a city to the north. From this place, in the twelfth year of the



Where the Allies are Making Their Drive.

The two arrows show where the Anglo-French offensive began towards Bapaume and Peronne.

fruits and wares in the flowery, torrid description of the orient.—It was not without reason that Mahomet retained and adapted the festivals, pilgrimages and fairs of his pagan predecessors.

The Kaabah.

Architecturally, the only feature of Mecca is the Kaabah, the great temple. This unique building, which is of very great antiquity, stands almost in the center of a great enclosure surrounded by arcades, in which bartering for cucumbers and pomegranates, dates and silks, mutton and milk and butter

kissed it. To the scientific eye it appears to be of volcanic or meteoric origin. In the fire that occurred in the siege of A. D. 683 it was broken into seven pieces, but these have been carefully put together with cement, and the whole is now surrounded by a thick band of silver.

At a short distance from the Kaabah runs a circular enclosure of 32 slender gilt pillars, between every two of which are suspended 7 lamps. Outside of this again, at a considerable distance, is an oblong colonnade made up of a

mission, came twelve men, who on the hill of Al Akaba, a little to the north of Mecca, took an oath of fidelity to the new prophet. This enjoined among other things, that all idolatry be renounced, that the followers of the prophet should not steal nor commit fornication, that they should forbear to kill superfluous children as had been customary among the pagan Arabs, and that they should obey the prophet in all things reasonable.

Eventually opposition to Mahomet in Mecca became so great that he and his followers fled to Medina. This was in A. D. 622, the "Hejira" or year of flight, from which subsequent events have been dated throughout the world of Islam.

A Triumph Epoch

From a fugitive Mahomet now became a monarch. At Medina he found an army of people already devoted to him, and before long a new note began to appear in his utterances—the sword against all infidels—soon crystallizing into what was virtually a battle-cry, "The Koran, death, or tribute!"

His first actual fighting was with his kinsfolk, the Koreish, and their retainers, who advanced to defend a rich caravan upon which the prophet had designs. Singularly like the battle cry of the great Cromwell after him—"Now let God arise and His enemies shall be scattered!"—was the exclamation of the prophet at the beginning of the encounter, "O God, if these (his own troops) are destroyed by whom wilt Thou be worshipped on earth?" And equally successful was the outcome of the battle, the famous Battle of Beder, at which, all Islam now claims, angels on black and white horses assisted the men from Medina.

In rapid succession came other victorious ventures, Mahomet himself leading in no fewer than 27 expeditions; then in the sixth year of the Hejira he went on his first "peaceful expedition" to the holy temple at Mecca. Two years later, with 10,000 men, he came again to the city, which surrendered without a blow, even the chiefs of the Koreish prostrating themselves before him and begging for mercy. On that very day he ordered his crier—muezzin—to mount to the top of the temple at noon and call the people to prayer, a practice since carried out five times daily from the minarets of every Mohammedan mosque. Even before this time Mahomet had instituted the holy feast, Ramadan, the great holy festival of the year in Mecca. He himself, however, continued to live at Medina

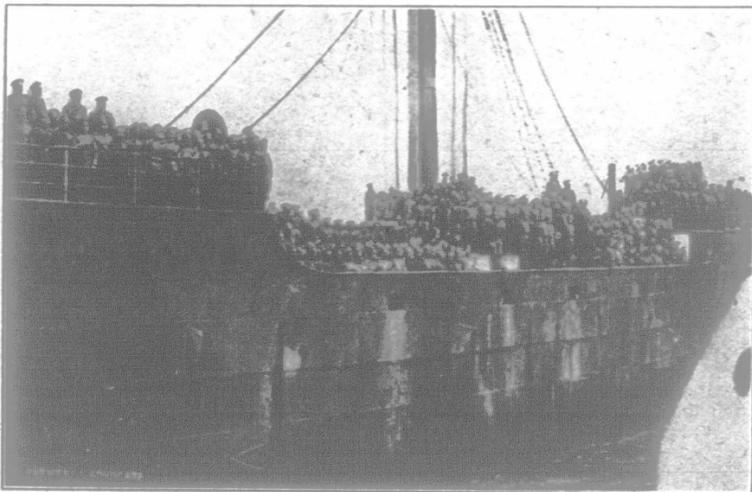
until his death, practical sovereign of Arabia, spiritual head of a great following that spread rapidly over northern Africa (including all Egypt), Turkey, Afghanistan, Persia and parts of India.

In the tenth year of the Hejira, A. D. 632, in the 63rd year of his age, Mahomet fell ill from the effects of poison inserted in a shoulder of mutton given him to eat by a girl called Zeinab after his conquest of Chaibar. At the time the Prophet's life had been saved with difficulty. Now the effects came back again, and he suffered great pain. He knew that the end was near, and commanded that he should be carried to the mosque. There he blessed his followers and gave them counsel, afterwards setting all of his slaves at liberty. Three

and assumed political superiority. The Shereef, however, was permitted to hold his position in Mecca. He is always the head of a princely family which claims descent from the prophet. After the Shereefs, the principal family is the house of Shaibah, which holds hereditary custodianship of the Kaabah.

It is this Shereef who has now dared to declare himself independent of Turkish rule, and political as well as religious head of all Islam. The importance of the revolt to the Allies has been dwelt upon at length in the papers of Western Europe. It may be sufficient to quote from the London Daily Telegraph:

"Toward the Grand Shereef we shall carry out a policy of friendly neutrality,



Russian Troops Arriving at Marseilles, France.

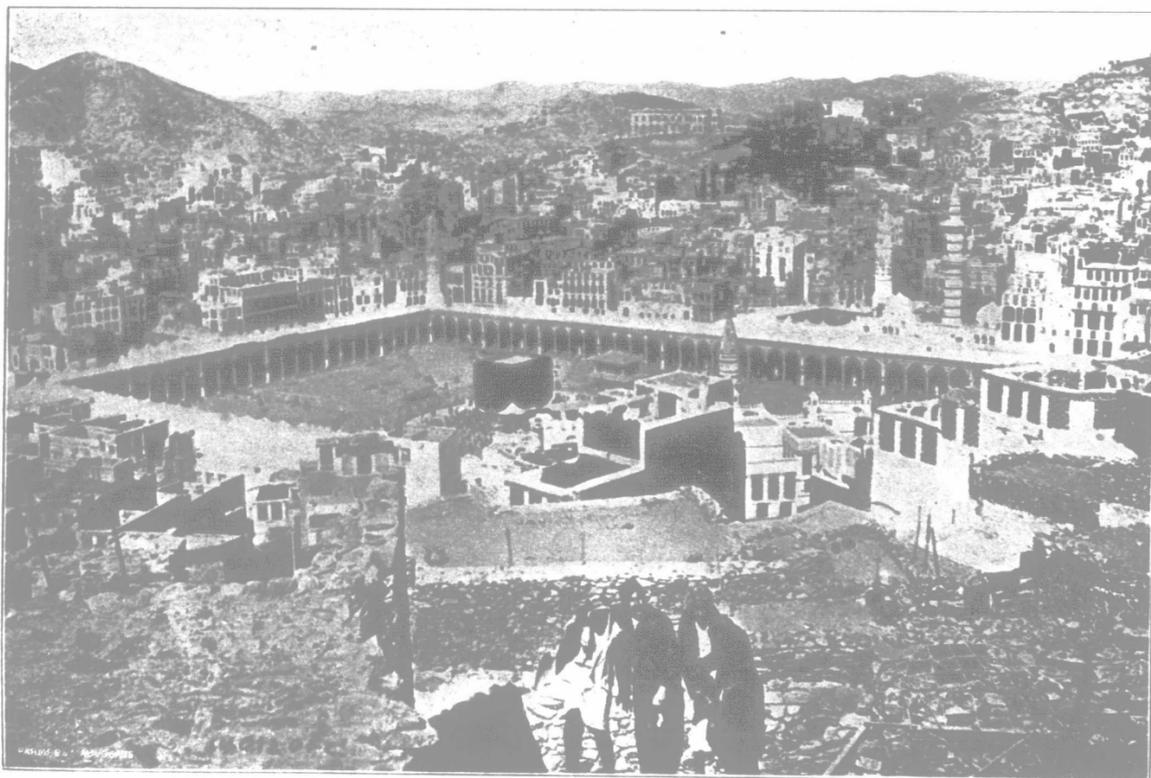
days later he died, and was buried beneath the floor of his house, which was taken down to make way for a costly tomb, still a shrine for pilgrims at Medina. He was survived by his wives Ayesha, Hafsa, Zeinab and Safya, with a number of concubines, among whom Mary, an Egyptian, was his favorite. His only children, however, were the eight born to him by his first wife, Cadijah, and one son, whose mother was Mary the Egyptian.

The prophet interdicted to all his wives the privilege of marrying again after his death, and although some of them were still young, they scrupulously obeyed his command.

In 1517 the Turks, having taken Egypt, gained supremacy also in Arabia,

helping him, should he desire it, to keep open the routes of pilgrimage, but carefully avoiding any interference with his supreme jurisdiction.

"The revolt is another evidence of German miscalculation of race-psychology. Berlin was confident she would be able to stir the Moslem world into revolt against the British Empire, as was evidenced by her efforts in Egypt and in India. The success of these efforts was insignificant, and the only result of her machinations has been to confront her ally, Turkey, with a new formidable danger, for an Arab revolt confronts Turkish sovereignty at a vital point. Instead of a holy war against Great Britain, we are witnessing the outbreak of a serious war against German domination in Constantinople."



View of Mecca.

The black cube in the center is the Kaabah or temple. Tradition says that it was built by Abraham and Ishmael as a temple of pure monotheism.

Hope's Quiet Hour.

One Master.

Ye call Me Master and Lord: and ye say well; for so I am.—St. John 13:13.

No man can serve two masters.—St. Matt. 6:24.

We must buy and sell in the market.

We must earn our daily bread, But just in doing these usual acts may the soul be helped and fed.

It is not in keeping the day's work and the day's prayer separate so, But by mixing the prayer with the labor, that the soul is taught to grow.

SUSAN COOLIDGE.

St. Paul told his converts that they could glorify God even through such commonplace acts as eating and drinking; and that a Christian slave was God's freeman—serving of his own free choice his heavenly Master.

Our Lord, in telling us that we cannot serve God and mammon, is not speaking sternly but tenderly. "Therefore," He says, "be not anxious" about the future. A soldier does not worry about his food or clothing. His business is obedience. So a christian soldier must make God's service his object in life, and all necessary things shall be added unto him.

Sister Dora, the famous nurse of Walsall, told a servant who was being engaged to work in the hospital that all who served there, in whatever capacity, ought to have one rule—love for God—and the love for their work was sure to follow. She often reminded her household that God's blessing in the hospital would surely come if they prayed faithfully for it. When tending a wound or a fractured limb her prayers went up for God's gift of healing. Even when helping in an operation, her spirit seemed able to continue instant in prayer, while mind and body were on the alert to understand and obey the slightest sign of the surgeon.

This is an age when amateurs have very little chance of making a success of anything. There is much competition, and specialists forge steadily ahead. Farmers are inclined to treat with scorn the proposal that women should take their places and free them to go to the war. Farming is a science nowadays, and can't be learned in a hurry or picked up by instinct.

Strange to say, there is one business—and that the most important of all—for which people seem to think no special training is needed. It is time men woke up to the fact that no one can make a success of christianity if he is satisfied to attend to it only in odd moments or on Sundays. To be worth offering to God it must be the first business in life.

When great multitudes followed Christ He did not seem delighted—as a clergyman is apt to be when people crowd into his church. No, He turned and made such a tremendous claim on their loyalty that only a few would be likely to stand the test; for He said unto them: "If any man come to Me, and hate not his father, and mother, and wife, and children, and brethren, and sisters, yea, and his own life also, he cannot be My disciple." We know something of the whole-hearted devotion of men who are ready to give up those dearest on earth, yea, and their own lives also, when their country is in peril. But shall they give up their God? His claim towers high above all other claims.

When Livingstone was a young man a friend said to him: "Now, lad, make religion the everyday business of your life, not a thing of fits and starts; for if you do not, temptation and other things will get the better of you."

The youth acted on this wise advice, and there was no sign of the amateur about his christianity. As one writer has declared: A more perfect example of downright simple, honest life, whether in contact with queens or slaves, one may safely say, is not on record on our planet." His steady devotion to his loved Master won for him worldwide

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and lasting fame—although he cared little for that—for God's promise holds good: "Them that honor Me I will honor."

The boy, who worked more than twelve hours a day in a cotton factory, became a man who made up his mind to "open up Africa or perish." No danger or difficulty could stop one who said: "Providence seems to call me to the regions beyond. I will go, no matter who opposes."

How great in the world's eyes this humble missionary became may be guessed from the way H. M. Stanley was sent to find him. No one knew whether Livingstone were alive or dead when the manager of the "New York Herald" told Stanley to search Africa for him. The order was: "Act according to your own plans, and do what you think best—BUT FIND LIVINGSTONE." What a tremendous sum the search would cost! was objected. The answer was: "Draw a thousand pounds now, and when you have gone through that draw another thousand, and when that is spent draw another thousand, and so on; BUT FIND LIVINGSTONE."

The search was successful, but the sick and worn-out missionary could not be persuaded to leave his beloved Africa. On his 59th birthday, five days after Stanley left him alone with his black friends, he wrote in his diary:

"Birthday. My Jesus, my King, my life, my all; I again dedicate my whole self to Thee. Accept me, and grant, O Gracious Father, that ere this year is gone I may finish my task. In Jesus' name I ask it. Amen, so let it be.—David Livingstone."

A little more than a year he waited for the summons into the presence of the Master Who was his all-in-all. Then—while kneeling in prayer—his strong spirit was yielded up to God. His body was carried home to England, and buried with highest honor in Westminster Abbey. One of his friends has left it on record: "If ever man carried out the scriptural injunction to take no thought for the morrow, that man was David Livingstone." Why? Because he was seeking first the kingdom of God, leaving lesser matters to his Master.

Common work will be changed from drudgery to service, if done with a high purpose—done to please our Master. No life can be commonplace if consecrated unreservedly to God's service. Many and many a time we have failed to serve Him singleheartedly. How often we have done our righteousnesses "to be seen of men," or gone wearily through the day's necessary work with no higher motive than habit or necessity. How often we have tried to buy with "good works" God's free gift of salvation. No amount of service can buy entrance into heaven. Our Master is also our Saviour. He has paid the awful price for sin—for the sins of the whole world—and we serve Him because we love Him and will not go out free. If we have failed in loyalty in the past—and which of us has not?—He is still ready to accept us as His servants.

"Oh how many a glorious record had the angels of me kept, Had I done instead of doubted, had I warred instead of wept, But, my soul, look not behind thee, thou hast work to do at last, Let the brave toil of the present, over-arch the crumbling past."

When our Lord told His disciples that they were making no mistake in calling Him "Master," He went on to say: "If I then, your Lord and Master, have washed your feet; ye also ought to wash one another's feet."

We have no right to claim Him as our Master while we refuse to stoop in lowly service for our fellows. We serve Him in serving them, and we are not worthy to stoop down and wash His feet.

And what of those who offer shining jewels of priceless worth in serving their enemies? Think of the men on a British ship, in an hour of dire peril to themselves, who tore up their shirts into bandages for wounded Germans!

The opportunity to serve our Master, secretly and splendidly, is open to us all, if only we are not too busy to notice it. A man used to walk along the streets of London praying for the people he met. One day he said: "I like to walk down Fleet St. where everyone

seems so bent on business that he may need my prayers to help him." The poorest may scatter blessings wherever they go, for the doors of our Master's treasure-house stand open to His servants. Our prayers are too often selfish, and so we miss the chance of helping others. St. Paul told his friends that he was constantly praying for them, and he confidently looked for help from their prayers for him. "I know," he wrote, "that this shall turn to my salvation through your prayer." So we hear often from the men in the trenches such messages as these: "Don't give up praying for us." "We know whether you are praying for us." "I wasn't the only fellow who sent up a prayer." Our Lord, in His agony, looked for the prayers of His nearest friends—and looked in vain. Don't let us fail Him now, when—in the persons of those hardly-pressed brethren of His—He says to us: "Watch and pray. Could ye not watch with Me one hour?"

If we claim Christ as our Master we must make it our first duty to obey Him. Are we, in this day of testing, obeying His command to pray not only for our friends but for our enemies? If we are disobeying that command is He likely to claim us as His servants?

"My proud foe at my hand to take no boon will choose— My prayers are the one grace which he cannot refuse."

DORA FARNCOMB.

Gifts from Readers.

One good friend of mine has sent \$2.00 for the poor, which has gone to help a crippled woman who is bravely earning her own living.

To-day I received another donation of \$5.00 for the needy, from "A Reader of the Quiet Hour". This was forwarded to me. I am spending a few weeks in the country, and I will spend it on my return home. With many thanks to the givers. HOPE

Fashions Dept.

How to Order Patterns.

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

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

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



8581 Semi-Circular Skirt with Yoke, 24 to 32 waist.



8932—House gown, 34 to 44 bust.



8357 Box Plaited Skirt, 24 to 32 waist.



8689—Shirred blouse, 34 to 42 bust.



8737—Blouse with vest effect, 34 to 42 bust.

The Ingle Nook.

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

The "Stock" Recipe.

One of the elements in keeping cool during trying periods of hot weather is to keep from being "fussed up" over things; when the mind is placid the body finds it easier to keep cool and comfortable, and the nerve-strain is greatly lessened.

Of course, every sensible woman will cut down sharply on extra work in hot weather, and will drift naturally into out-of-doors living and simpler meals with the dog-days. Yet a certain variety is necessary for the table; with too much monotony appetites fall away, and it is very needful that food be eaten with a relish during the strenuous days of harvest, which make so steady a drain on the energy of those who must work in the fields. That every good home-maker realizes this is very evident from the frequency with which one hears it said, "If I only knew what to get for meals!"

One of the ways by which this problem may be simplified is to have a few good "stock" recipes, "things to make" that are always sure and that may be varied in a score of ways without much taxing of brain or ingenuity. The following are a few recipes that have been tested and found satisfactory.

Stock Layer Cake.

The stock batter is made as follows: Beat together 1 cup butter and 2 cups sugar. Next add 3 beaten eggs, then 1 cup sweet milk and 3 cups flour sifted with 1 teaspoon cream of tartar and 1/2 teaspoon soda. The oven should be moderate.

Variation No. 1.—Bake the batter in two layers. When done split each in two, then put the four layers together with plain vanilla boiled custard, or lemon or orange filling. The top may be sprinkled with pulverized sugar, or covered with lemon or orange icing or whipped cream.

Variation No. 2.—Bake as above in two layers. When done put crushed, raw fruit of any kind between and on top, and serve with good cream and sugar. This makes a splendid fruit short-cake.

Variation No. 3.—Use the same batter, but mix with it chopped nuts or bits of lemon peel. Bake in one layer in a moderate oven.

Variation No. 4.—Divide the batter in two, and with one part mix a square or two of chocolate melted. Bake and put together with jelly. Put whipped cream on top. Or the light and dark batters may be put in the baking-dish.



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in alternate spoonfuls and baked in one loaf as a "marble cake."

Variation No. 5.—Divide the batter in four. Color one part with melted chocolate and another with pink cake-coloring, leaving two layers white. When baked put the four together in this way: brown for the bottom layer, then white, then pink, then white on top. Jelly may be used between. This makes a very pretty "ribbon cake" when cut in slices.

Variation No. 6.—When part of any of these cakes has become stale it may be steamed and served with a good sauce as hot pudding. Or it may be made into a delicious "trifle" as follows: Crumble the cake in a glass dish, mixing with it some chopped nut-meats. Over all pour some fruit juice of any kind. Finally add a little boiled custard and serve cold.

Stock Fruit Pudding.

Keep an enamelled or "granite" pudding-dish of just the right size on hand. Put fruit of any kind, with sugar to sweeten, in the bottom and cover with batter or pastry. If the fruit is firm you may use the batter; if very juicy, as when stewed or canned fruit is used, the pastry may be preferable.

Pastry for Pudding.—Sift together 2 cups (level) of flour and $\frac{1}{2}$ teaspoon baking powder. Rub in 3 heaped dessert spoonfuls of butter, and add a little cold water to make into pastry. If the butter is very fresh a pinch of salt should be sited in with the flour. A teaspoonful of sugar may be added also if liked. Mix the dough with a knife and handle just as little as possible. Bake in a hot oven. If the pastry is brushed over with a little sweet milk before it is put into the oven it will brown prettily.

Roly-poly.—Roll out the pastry, made as above, spread with jam, roll up and bake or steam. Serve with cream and sugar.

Apple Pudding.—Cut the cores out of nice tart apples and peel them. Cut off bits of pastry made as above (do not roll it first) and place an apple on each piece. With floured hands work the pastry up around the apple. Fill the hole in the centre with sugar and add a clove or two, then work the pastry all over the top. Brush with milk and bake from $\frac{1}{2}$ to $\frac{3}{4}$ hour in a sharp oven. The pastry should be divided evenly into as many pieces as there are apples. The quantity of pastry given should cover 4 to 6 apples, depending on size. Serve with cream and sugar.

Fruit and Cornstarch Pudding.—An easily made pudding very nice for a hot day has for its foundation any kind of fruit—berries, currants, gooseberries, etc. Stew the fruit with enough sugar to sweeten it nicely. When cooked enough add cornstarch to thicken, blended in a little cold water. Serve cold with rich, sweet cream and sugar. If liked, the beaten white of an egg may be folded into the mixture, and the pudding served with a boiled mustard made with the yolk of the egg.

A Stock Pie.

Cream Pie.—Beat 1 egg, add a large cup of milk, a tablespoonful of cornstarch dissolved in a little milk, a little sugar. Cook until thick enough, stirring constantly, then flavor with vanilla and pour into the pie-shells. When cold cover with a thick layer of whipped cream.

This makes a very nice pie just as given, but the recipe may be varied in many ways. 1. Cooked cherries may be put in the bottom of the pie-shell and the filling poured over. 2. Mashed bananas may be added. 3. Sections of orange may be added. 4. Shredded cocoanut may be added.

Letter from Our Shut-in Friend.

Dear Ingle Nook Friends.—As I always try to write you a letter in June, I will again try to write while alone in my room, for time quickly passes, July almost here, with its flowers and sunshine and much to give cheer.

Well dears this is a bright, sunny day, glorious to see the sunshine. How eagerly we looked for it after all the rain and cool weather. How few think

of the giver, but let shadow come awhile and after, when sunshine comes, how thankful people are then! This is a time of pleasures not known of years ago; autos fly up and down, and there are all kinds of amusements, and how people do go and enjoy it, but the shut-in ones are left more alone. Yet in the quiet hours Jesus, the comforter, says, "I will never leave nor forsake thee."

It is July now. I could not finish this before, and on reading the Quiet Hour of June 29 about the poor woman feeling Jesus' presence so near her, and I do know it can be, for I saw Jesus so plainly over my bed one morning as I lay alone and heard Him say, "Not yet; wait yet a little while."

The room seemed full of brightness. How grateful the Lass is for those kind letters and cards. I am often lonely dears. My flowers still bloom to cheer others, so much to be thankful for, counting up the blessings from day to day, hoping each of you have a pleasant summer, and especially our busy workers, dear Hope and Junia. I am sorry not to think of something to send to help the Nook, but am afraid it is impossible now. Where are Bernice and Ruby and Anna, Margaret and so many others? Do write again. How far the dear Advocate goes! I wonder if they take it still over in Australia? Thanking each one again for kindness shown me.

Your shut-in friend,

LANKSHIRE LASS.

Wellington Co., Ont.

Hard Soap.

"C. P. A." and others kindly sent methods for making hard soap. We thank all, but will close with the following for the present:

Dear Junia.—I noticed a request in "The Farmer's Advocate" for a recipe for hard soap, made with Gillett's Lye. There are always directions on each can, but here is a recipe somewhat different which I saw in "The Farmer's Advocate" a few years ago, and which I almost always use.

One quart water into which put one tin of lye, then cool to 80 degrees. Six pounds grease heated to 120 degrees. Two tablespoonful ammonia and one tablespoonful borax stirred into the grease. Pour the lye slowly into the grease, stirring constantly, and also for about ten minutes afterwards.

This recipe is for just pure grease. On the wrapper of the lye can will be found a good recipe for rough grease and bones.

Lanark Co., Ont.

"PANSY."

House Plant Queries.

Dear Junia.—As my father has taken "The Farmer's Advocate" for some time, I like reading the stories in it, and I find it very interesting for lots of things. I now come to ask a few questions about house plants. (a) Should you water house plants every day? If not, how often? (b) What kind of soil would be best to plant them in? (c) How many days should it take young plants to root?

Wellington Co., Ont. SUBSCRIBER.

Some marsh plants, e.g., the Calla, may need water every day during the growing season; the umbrella plant even does best when the pot in which it is growing is kept in a bucket of water. A general rule for other plants is to give them water whenever the soil seems dry. This can usually be ascertained by the noise given forth by the pot when it is tapped on the outside. Give enough water to soak through but not to run out freely, as that is likely to wash away some useful food constituents for the plant.

Soil scratched from about the grass roots in old sod is said to be one of the very best potting soils.

The number of days required for rooting will depend altogether on the kind of plant and favorableness of conditions.

Sunday Knitting.

There are still some letters on this subject. We have been interested in having the different opinions, but as so many have appeared, the letter from "E. M. P." closes the list.

Dear Junia.—Never before have I written this Circle, but I have always enjoyed the wise counsels and helpful suggestions given therein. But I was sadly disappointed at your answer

given to a question re Sunday Knitting. If many "really good" women knit on Sundays, I wonder if they realize the harm they may do. To many, it is but the thin edge of the wedge that will open up to doing other things on Sunday besides knitting. We must not let the Sabbath be lightly or wrongfully spent, and even in these strenuous times, surely we can give the Master one day in seven exclusively for Him. As a busy girl on a large farm, I find I can so arrange my work as to have a certain amount of time each day for knitting. I have several near and very dear friends overseas in the King's uniform, for whom I would sacrifice a very great deal, but not the principles instilled into me from earliest years, to keep holy the Sabbath day. When our boys come back, (those of them who will live to do so) let them find us sticking close to the God who alone can give the victory to a right-living people. If knitting is to be a Sunday occupation, many will make it an excuse for absenting themselves from God's house, from the Sunday School, and many will bring in other occupations to desecrate the holy day. We must look to the welfare of our country after the war, and our present actions will determine what the future will be. Let us follow closely in His steps.

A. M. P.

Working System.

Dear Junia.—I have been a silent reader of your Circle for fifteen years, and like many others have come for help. Will you please tell me the work that should be done on each day of the week—so as to have a short rest each afternoon, where there are two doing the work and living in the country? Also, tell me the correct way to set a table. Thanking you very much in return. Your interested reader.

Huron Co., Ont. BROWN EYES.

It seems to me that so much depends upon circumstances that each will have to make out a system for herself; a plan that would suit one very well indeed might not suit another at all. One hint that might be mentioned is that a great many people now prefer to have Tuesday rather than Monday for wash-day. This gives a chance to "tidy up" after Sunday without being over-worked. Friday may be sweeping-day, and Saturday forenoon set apart for baking.

I think it would be very interesting if some of our readers who have worked out satisfactory plans would write us about them. Then each could pick and choose, taking an idea here and there, and adapting all to her own needs. It is certainly very desirable to arrange ones household work so as to leave a little time for other things. Will some of our practical women who have achieved practicable plans kindly answer? A picture for setting a table will be given soon.

The Scrap Bag.

To Remove Scorch From Linen.

Dip the article in soapsuds and hang in bright sunshine. If this does not remove the scorch dip it in a solution of borax and expose to the sunshine, repeating again and again until all trace has gone.

To Keep Butter Usable.

If the ice supply runs out in hot weather put the butter in a bowl in a pan of cold water. Invert over it a flower-pot, and cover with a damp towel, letting the ends go into the water. Put in a cool place where the air can circulate freely, and the evaporation will tend to keep the butter cool and firm.

A Refrigerator Hint.

Fish and other foods which leave odors after them should be put in a tin box or pail with a tight-fitting lid before being placed in the refrigerator.

A Handy Funnel.

If you want to use a funnel, and a tin one is not at hand, take half an egg-shell with a hole punctured at the bottom.

To Remove Obstinate Stains.

This is recommended for all white goods. Put a tablespoonful of sulphur

on a plate, moisten it with pure alcohol and ignite. Cover with a tin funnel. Wet the stained portion of the goods and hold over the fumes until every part of the stain has been penetrated, then rinse in clear water to which a little ammonia has been added, after which launder as usual.

Corn Cure.

Apply strong acetic acid every night and morning for a week, putting it on with a brush. This is said to be efficacious for either hard or soft corns.

To Drive Away Ants.

Buy five cents worth of tartar emetic, divide it into 3 saucers, mix with sugar and place where the ants are troublesome. Keep the mixture away from children.

Baking Pie Shells.

Try baking pastry for pie shells on the outside of the tins. Press it down well, and the shells will be even and of good shape.

Lotion for Hives.

A lotion that will give relief to hives is made as follows: Mix together 1/2 oz. powdered borax, 1 oz. glycerine, 1 quart camphor water. Apply several times a day.

Lotion for Prickly Heat.

Mix together 1 oz. glycerine, 1/4 oz. rosemary water, 20 drops carbolic acid. Apply as necessary.

To Remove Freckles.

Apply lemon juice mixed with a little water very frequently, and wash off in water softened by boiling bran in it. Strain and use cold.

Poison Ivy Cure.

A one-per-cent. solution of potassium permanganate applied hot two or three times is said to be a quick remedy for ivy poisoning.

Correspondence.

Welcome News.

Readers of the Ingle Nook will be pleased to hear that our efforts have been successful in finding the uncle of the Belgian lad of whom Mrs. Anna Bryant wrote us some time ago. She writes as follows:

Dear Sir:
At last I can write and tell you that my letter to Weyburn found the uncle of the young Belgian soldier, and I thank you for assisting me.

Yours respectfully,
(MRS.) ANNA BRYANT.

Infantile Paralysis.

What is it?

The following instructions regarding Infantile Paralysis are issued by the Provincial Board of Health:

Infantile Paralysis, also called Anterior Poliomyelitis, is a communicable disease chiefly of children between the age of two and fourteen years. Older children and adults may also be affected by the disease.

The cause is unknown. It is known, however, that the agent causing the disease is present in the secretions of the nose and mouth, and in the intestinal tract from being swallowed.

The disease is epidemic in some United States cities, and in at least one town in Ontario.

It is believed that infantile Paralysis is spread from one child to another by means of the secretions of the nose and mouth by direct transfer. It is possible also that it is spread by flies which have been in contact with intestinal discharges. It may become widespread in country as well as in crowded city districts, and persons who have been in contact with cases of the disease may harbour the contagion and give it to others without contracting the disease themselves; that is, they are "carriers."

What to do About it?

1. Every case must be quarantined for a period of six weeks.

2. All children who have been in contact with a case must be quarantined and kept under observation for a period of two weeks.

3. Adult members of the family who are wage earners may be allowed to go about their work, subject to the regulations of the Provincial Board, and on the discretion of the medical Officer of Health.

4. Where there is an outbreak, gatherings of children, such as picnics, picture shows, and playgrounds, should be prohibited.

5. The source of origin of each case should be carefully enquired into in order that proper quarantine may be maintained.

6. In houses where cases appear all doors and windows should be screened, the premises kept clean, and no accumulation of garbage or waste permitted.

7. All cases should be at once notified to the Medical Officer of Health, and by him to the Chief Officer of the Provincial Board.

8. Mild cases, showing slight headache, rise of temperature and vomiting persisting for a few days, with slight muscular weakness and absence of paralysis, should be quarantined. These are probably one of the chief sources of contagion.

9. As Infantile Paralysis is a most serious disease, and in the present epidemic giving a high death-rate, the public is urged to second the efforts of the authorities in every way in order to prevent a severe outbreak in the province.

10. All materials, such as cloths, etc., carrying secretions and discharges from patients should be burned, boiled, or disinfected.

If the disease shows any tendency to spread, special quarantine measures may be necessary.

JOHN McCULLOUGH,
Chief Officer of Health.

Current Events.

Prof. Elie Metchnikoff, the famous bacteriologist, died in Paris. It was he who advocated the drinking of sour milk to ward off the effects of old age, claiming that old age is due to a germ upon which the lactic acid of the milk has effect.

Another contingent from Russia has disembarked at Brest, France.

At time of going to press there is a comparative lull on the Western war-front. During the week, however, there has been sharp fighting, especially along the British lines along the Albert-Bapaume road and the Leipzig salient. On the whole, however, everything is satisfactory, the British troops having pierced the German third-line defence at several points. On the Eastern front Gen. Brusiloff's army has made another advance on the Styr. The Germans are said to be massing enormous forces before Kovel, which will not be given up without a desperate struggle.

The Dollar Chain

A fund maintained by readers of "The Farmer's Advocate and Home Magazine" for (1) Red Cross Supplies. (2) Soldiers' Comforts. (3) Belgian Relief. (4) Serbian Relief.

Contributions from July 14th to July 21st:

I. H. G., Stratford, Ont., \$1.00; "Reader," \$3.00; N. McC., R. 2, St. Mary's, Ont., \$1.00; Mrs. C. H. B., \$5.00.

Amount previously acknowledged.....\$2,629.70

Total to July 21st. \$2,639.70

I. H. G., Stratford, Ont., also contributed a very nicely knitted pair of socks.

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

"Silver Gloss"

THE CANADA STARCH CO. LIMITED
MONTREAL, BRANTFORD, CARDINAL, FORT WILLIAM.
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For calendar and terms: R. I. Warner, M.A. D.D., Alma College, St. Thomas, Ont.

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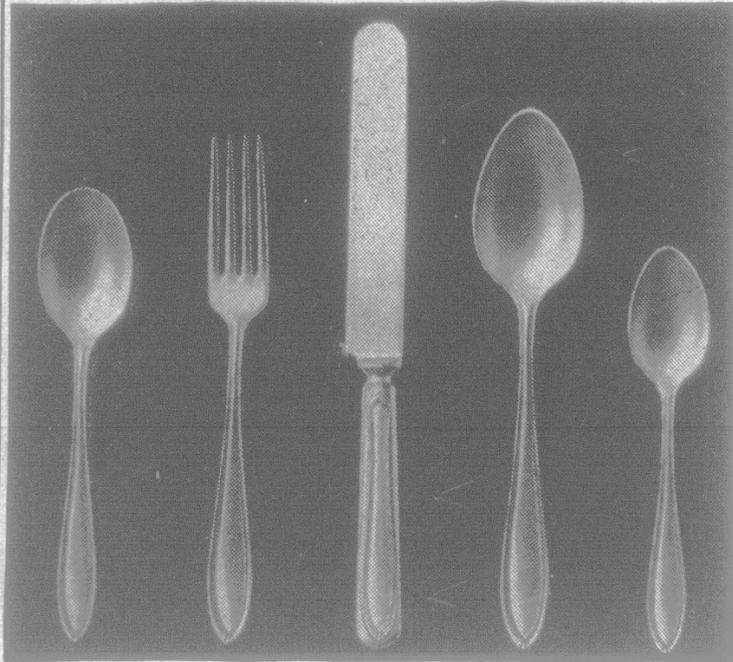
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COLLEGE RE-OPENS SEPTEMBER 12th, 1916
FOR CALENDAR WRITE REV. F. L. FAREWELL, B.A., PRINCIPAL

Silverware as Premiums To Users of Quaker Oats



Two Coupons Free See the Coupon Below

We Give Premiums to users of Quaker Oats. Dozens are pictured in every package. They are things you want, like Jewelry, Aluminum Cooking Utensils and Silverware.

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Quaker Oats stands supreme among oat foods. It is flaked from queen grains only, so the flavor is doubly delicious. The flakes are big and luscious. We want you to know its unique fascinations, so we make you these offers to get you to try it.

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The Tableware we picture is made by the Oneida Community. It is their famous Par Plate, with the best nickel base. The wearing qualities are guaranteed by the makers and by us.

This pattern—the Dominion Pattern—is made exclusively for us. It closely resembles Old English Sterling patterns. You never saw a more exquisite design.

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The Fork—a medium fork—is given for 20 coupons, or 5 coupons and 20c.

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Cut out the coupon in this ad. It takes the place of two of the Quaker Oats coupons. Each 25c package has two coupons—each 10c package has one. Buy Quaker Oats and get them. Send them to us with the coupon we print here, and get a full set of this Silverware free. We send it prepaid.

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This coupon counts the same as two coupons from the Quaker Oats packages, when sent with the regular coupons. But only one of these coupons can apply on any one article. The rest must be Quaker Oats coupons. A

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(1355)

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to step into the ranks and fill one of the many vacancies caused by the war. Preparation is necessary.

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Successful Educators

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The Windrow.

"Every alcoholic drink you take shortens your life 25 minutes," says Dr. Edwin F. Bowers, of New York, in American Magazine.

One of the most important results of the war, it is predicted, will be that the drink-evil will come to be universally regarded as a national problem which must be given more serious attention.—Literary Digest.

During the fighting of the past month British gunners worked so hard and were so weary that as soon as a battery was allowed to cease firing for a moment the gun-crews would stretch themselves out and fall peacefully asleep in the midst of the thunder of the other guns all around.

The Russian Ministry of Agriculture has opened a number of avenues in American commercial circles whereby the unique hand-made articles of the peasant, especially in linen, made in the snow-bound izbas during the long Russian winter, will be placed within reach of Americans.

By the new Russo-Japanese treaty Russia and Japan agree to take part in no political combination directed against either country, also to consult with each other in case the territorial rights or interests of either in the Far East are menaced.

A woman judge has been placed over a "woman's court" in Calgary.

At the last annual meeting of the Commission of Conservation a report of a survey, conducted on 400 farms during 1915, was presented. . . . It is a regrettable fact that only two farmers out of every hundred have bath-rooms in their homes.—From "Conservation."

A novel example of church union comes to light in a small Ohio town where a Methodist, a Baptist and a Lutheran congregation have been organized into one as Presbyterians. The village, Pleasant Plain, has fewer than 500 inhabitants, who were trying to carry the burden of three churches.

There are some fishes which, though not always wasted entirely, are by no means fully utilized. One of these is the horse-mackerel, or tuna, a huge fish which sometimes reaches a weight of two or three hundred pounds. M. Pierre Lemy, a large Parisian merchant engaged in the prepared food business, says that, after the sardine, the tuna is the fish most important as a preserved product. There is an upward tendency in the price of these fish at present in the United States market.

A few years ago, sword-fish fishery was unknown on our coasts. Now there is a special fleet of boats engaged in capturing sword-fish. Eighty of these fish were caught last year at Ingonish, C. B. They ranged from 300 to 400 pounds in weight, and one was caught at Sydney which weighed 565 pounds. At four cents a pound, such a fish would be a prize for a fisherman. In Boston or New York, the price of sword fish to the consumer is about 25 cents per pound. Thus, this once neglected fish is now yielding ample returns.

The same thing is true of sturgeon. A generation ago sturgeon were thrown up on the beach of the St. John River for manure; now, in some cases, good lake sturgeon are worth as much as a good-sized cow. Thirty cents per pound has been recently paid for sturgeon in the New York markets, and the weight ranges from 30 to 100 pounds.—From "Conservation."

The tuna, referred to in the above clipping, is fast becoming one of the popular canned fishes. It is not as strong in flavor as salmon or sardines, and many prefer it.

An English sculptor, Mr. Derwent Wood, has found a new avenue for his talents. The story is told by Harold Begbie in the "Daily Chronicle":

"Derwent Wood was soon drafted into the wards. He took plaster casts of damaged limbs. He became a master of splints. In the course of this work he saw some of the saddest sights of the war; he saw the human face so awfully disfigured that a man must shudder to behold such havoc. This sight moved the sculptor's compassion. He went to his colonel and said to him, 'Let me see what I can do to these poor smashed faces; let me see if I can build them up again.' Gladly did the colonel consent. But who was to pay for such work? The colonel has a benevolent fund at his wonderful hospital, and out of these gifts of money from rich friends and grateful patients he does many a kind and beautiful action which could hardly pass the official auditor. He said, 'The benevolent funds shall pay.'

"There was a fine trooper in the hospital, a married man, whose face had been broken by an explosive bullet. I must not attempt to describe the ruin of that face. Enough for you to know that this noseless man himself said it was impossible to live in that condition. And of a truth it was a thousand times better for him to be dead. Well, I have just been talking to this man. Across a room it is impossible to detect anything unusual in his face. At the distance of a few paces you see only a mark like a scar on one of his cheeks. And he laughs when he talks to you, and he tells you that he is going to drive a taxicab, and he says that he can now paint his nose whatever color he chooses—green if he likes! Ah, but he speaks in a quite different voice, and he does not jest at all, when he tells you, or tries to tell you, what his feelings are toward Derwent Wood. This man has a wife who adores him, and his home is his heaven.

"I saw other men in this same repairing shop. I saw them with their masks and without their masks. At one moment I had to set my teeth as I looked, and at the next I was talking to a whole man and exchanging jests with him. A boy would come forward whose face made it hard for me not to utter a groan. Derwent Wood pointed out the bullet's work, showed the surgeon's difficulty, showed his difficulty and then said, 'Now put on your mask.' The boy lifted a little, light, delicately-moulded metal thing in his hands, passed something behind his ears, and I was looking at a brother man whose face was whole and whose sham eye seemed to have as much pride and pleasure as his real eye. The moulding of the mask is as perfect as the painting of the flesh."

"The room where these wonders take place was once the scullery of a recreation hut. It is small, it is gloomy, it is without a soul. The stone floor strikes coldly through your feet; a sink at the side of the walls makes for melancholy; as a place for washing of dishes you could give it a fair number of marks; but as a sculptor's studio it is impossible. Alterations are to be made; for directly Sir Alfred Keogh heard of this wonderful work, he not only relieved Colonel Bruce Porter's Benevolent Fund of all such charges, but with the imagination and sympathy of a great organizer he gave orders that all cases of facial damage should be sent to Third London. And so Derwent Wood is to have a studio.

"But I wonder whether any other room will ever give him the fine rapture of these first experiments in a disused scullery? To find that you can give a man back his face, to find that you can fill up horror with a semblance of human beauty, to discover that a boy who has fought for you, and who has become so tragically blasted that it were better for him to die, can be patched and repaired in such a manner that no one can detect his ruin—I doubt if life can give many greater moments than these. The first rapture, of course, will go. The work will become hard, fatiguing, monotonous. Instead of the discoverer's thrill, the artist's craving for creative work will come and will stay. The highest qualities of the human mind—patience, a sense of duty and endurance—will have to be summoned, and summoned often. And in those days Derwent Wood will have to go back, I think, many, many times to this shabby and cold scullery for strength and for inspiration."

The Beaver Circle

OUR SENIOR BEAVERS.

(For all Beavers from Senior Third to Continuation Classes, inclusive.)

The Butterfly.

BY HELEN M. RICHARDSON.

From flower to flower I idly fly,
 A happy, care-free butterfly.
 I have been taught no other way
 To pass a pleasant summer day.
 But, though no work I find to do,
 I make a charming sight for you.
 My spotted wings in airy flight
 Are both a pleasure and delight.
 And, though I know not how to work,
 I never have been called a shirk.
 Since being happy in God's way
 Is what I do from day to day,
 That is my duty—just to be
 The happy butterfly you see.

A Fishing Expedition.

One fine summer day as I was plodding wearily homeward from my days work I met my cousin Sandy McGregor. He was a bonnie specimen of healthy youth and was all smiles, so I thought that he had something very important to tell me.

"How do you do old sobersides?" he shouted as soon as he came within speaking distance.

"Fine," said I, only I am a little tired.

"Well no wonder at you being tired," he replied, "shut up in that dismal office of yours all day."

"How would you like to come with Uncle Duncan and me on a fishing expedition?"

"I think I would like nothing better than a trip, but where are you going?"

"We are going to Rocky Cove over across the bay, where they say a Spanish Galleon was wrecked long ago."

"Well, all right, I guess I will go," I replied, overjoyed at the prospect of some sport.

"Be sure and come early," he said and hurried on.

I got up bright and early next morning and started for the boathouse. I had only gone about half way there when I remembered that I had not given notice that I would not be at the office till next day, so I hurried back and phoned there. This was a bad beginning, but I got to the boat house the second time and found my friends waiting for me.

The engine was easily started and we were soon speeding across the five miles of bay which separated us from Rocky Cove. When about half way over I noticed Sandy putting together a strong-looking article.

"What have you there?" I asked.

"Oh, this is one of the latest models in diving suits."

This somewhat astonished me, and I must have shown my astonishment in my voice when I asked,

"What in the name of goodness are you going to do with it?"

I suppose you think I am crazy," he answered, "but I think I can find some of that sunken treasure over in Rocky Cove."

I did not say anything, but I had my own opinion of how it would turn out.

In due time we arrived at our destination, and after securing our boat we got our fishing tackle together and went up to an old camping ground to eat our lunch. When we had finished Uncle Duncan said:

"Which will we take to fish, the motorboat or the canoe? For myself I would rather take the boat." "I don't mind which," I said. "Well, we will leave it to Sandy to decide," said my uncle. Of course, Sandy said "the canoe." So it was the canoe that went, but as it would only hold two Sandy volunteered to stay ashore and have another lunch ready for us in the afternoon when we came in.

We went out to the favorite fishing ground and dropped our hooks into the calm waters of the bay. I was the first to land a fish, which was a large-sized flounder. Almost at the same instant Uncle Duncan landed another, and so on until we had all the fish we wanted, and we then turned our canoe shoreward and soon landed.

We could see no sign of Sandy, so

we called for him. He soon came running up with part of the diving suit on.

"What do you think I found?" he shouted, "a treasure ship full of silver." We were all amazed and hurried as fast as we could over to where he pointed, and we beheld a heap of silver on the shore.

Sandy was wild with delight and wanted to stay and recover some more of it, and I was of the same mind, but Uncle Duncan said we had better go home and investigate. We piled the silver into the boat and started for home. When well out from the shore we beheld an electric launch speeding after us, and thinking they wanted to race we threw on full speed ahead and were soon going at a great clip.

The other boat crept up on us, and looking back we saw it was filled with men. Just then a shot rang out, and a bullet whizzed over our heads, and we heard the order to halt. Of course we stopped at once, and were all arrested on a charge of theft. We expostulated but in vain, for the officers (as they turned out to be) turned a deaf ear to all our talk, and reminded us that everything we said would be used against us. We were allowed to proceed, but had to follow the police boat up the river to the wharf. They then took us to the police station and we were locked up with a strong guard over us and left there until ten o'clock the next day. We wondered what the cause of it was, but could not guess.

Ten o'clock came at last, however, and after a great deal of red tape and form had been gone through we were charged with stealing silver from a government salvage company. We were committed to trial in three days, and were hauled out of jail on the spot by our friends.

It appears that a mail steamer had been wrecked in Rocky Cove five years before, and the salvage work had been started but there had been some hitch and it had been stopped. Meanwhile the wreck had broken up and the current had carried the contents up on to a shoal where Sandy had found it. It was the guards which came up just as we started across the bay.

When our trial came off we were acquitted, and the officers apologized to Uncle Duncan, but gave Sandy a severe warning to not go looking for any more treasure, and so we were let off.

That all happened a long time ago, but it all remains as fresh on my memory as the time it happened. Uncle Duncan is dead and Sandy is president of a large salvage company, but I often think of the time Sandy tried to find the Spanish galleon.

Eganville, Ont. ROY KITCHENER PIERCE.
 You are quite a fiction writer, Roy.

For Every Kind of Shooting—

whether it be moose, bear, rabbits, ducks, partridge—at the Traps or on the target range—the selection of the proper Shot Shell or Cartridge for each purpose goes a long way toward producing the best results.

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are made in sizes that operate perfectly in all popular makes of shot guns and rifles. The exact proportion of powder and shot in Dominion loading gives the shooter Ammunition that hits hard and stops what it hits.

The big "D" trade mark on a box of Cartridges is your guarantee of accurate, speedy, well balanced, Canadian Ammunition. Twice the price won't buy better.

Send for free colored hanger "A Chip of the Old Block."

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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.

RINGLET BARRED ROCKS, BRED-TO-LAY stock, 8-weeks old cockerels and year-old males for sale cheap. Coldham, Kingston, Ont.

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

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

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HEROLD'S FARMS, Beamsville, Ont.

Tamworths—A few nice young Tamworth boars, three months old, for sale. Price to suit purchaser.

JOHN MCKORKINDALE
 R. R. 3 Wyoming, Ont.

Suits Free.

Remarkable Cloth that Won't Wear Out!
 Now readers, would you like a suit or pair of pants absolutely free! A most astounding offer is being made by a well-known English firm! They have discovered a remarkable Holeproof Cloth. You can't tear it! Yet it looks just the same as \$20 suiting. You can't wear it out no matter how hard you wear it; for if during six months of solid, hard grinding work every day of the week (not just Sundays), you wear the smallest hole, another garment will be given free! The firm will send a written guarantee in every parcel. Think readers just \$6.50 for a man's suit, and only \$2.25 for a pair of pants sent to you all charges and postage paid and guaranteed for six months' solid, grinding wear. Now, don't think because you are miles away you cannot test these remarkable cloths, for you simply send a 2-cent post card to The Holeproof Clothing Co., 56 Theobalds Road, London, W. C., Eng., for large range of patterns, easy self-measure chart and fashions. These are absolutely free, and post paid. Send 2-cent post card at once! Mention "The Advocate."—Advt.

Our Serial Story

The Road of Living Men.

BY WILL LEVINGTON COMFORT.
 Author of "Down Among Men," "Fate Knocks at the Door," "Red Fleece," "Routledge Rides Alone," "Midstream," "Child and Country," etc.
 Serial Rights Reserved.
 III.
 5
 A man's life is less where his body moves than where his thoughts are. I hungered for letters from Mary Romany

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Pure cane. "FINE" granulation. High sweetening power. Order by name in original packages.

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Get your new suit from Catesby's, London, England, for half what you pay local tailor. Best materials, style, fit guaranteed, or money back. Write for free catalogue, self-measurement form and patterns. Address: GATESBYS LIMITED, Canadian Office 119 West Wellington Street, Toronto Mention "Farmer's Advocate"

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GETS EVERY DROP OF CREAM

So perfect is the design of the Magnet skimmer that it will skim milk hot or cold. No wobbling—the balance and weight of the Magnet allows proper skimming even when the machine is not level. And the double support of the bowl—running at top and bottom on bronze cushion bearings—ensures every drop of cream being taken cleanly and quickly.



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LASTS 50 YEARS

MAGNET

CREAM SEPARATORS

[A CHILD CAN RUN IT]

There's just the exactness of construction in the Magnet—just the careful balance and heft in the square gears that makes this long-life separator so easy running that even a child can manage it. No sudden pull-up of speed when milk is poured into the tank—the heft of the gears carries the weight. Many farmers have written telling us their children do the separating.

ONE-PIECE SKIMMER

No awkward discs in the Magnet Skimmer. It's different in design and better for skimming—right down to the last drop. Open, and so never chokes up. Impossible to get clogged with dirt.

EASY TO CLEAN AS A MILK PAN

Five minutes, no more, is all you need to devote to the cleaning of the Magnet. Skimmer, bowl and spouts are detachable in a moment. Skimmer, too, is one-piece, so that you can easily clean with a brush. Every part is open and easy to get at—no cracks, or crannies to reach into. "Magnet" saves hours of toil for you in your dairy. Sweet and clean in next to no time.

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tory, its special features. Also it will show you what other farmers think of this wonderful Made-in-Canada separator. And if you wish we will gladly bring a Magnet to your own dairy and show you just what it can do—this at not a cent of cost to you.

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HAMILTON WINNIPEG EDMONTON REGINA CALGARY VANCOUVER MONTREAL ST. JOHN, N.B.

as for the fulness of life; and this, of course, was the key to all my conjecturing, as to whether Libertad was absolutely cut off from the valley. All the crinkle was gone from the tough thin sheets that had waited for me in Guayaquil—two letters, one from Covent and one from New York, written within a week after my departure. I had hoped that her father would have the third for me. As I lay under the mosquito netting that first night and the hours passed, I seemed farther and farther from resigning myself to a state of calm for any lengthy period—with letters piling up in Libertad, and only a few soldiers of this Orion person, to prevent their delivery. . . . It was close to daylight when a voice challenged the watchman at the door of Headquarters. The old Master couldn't have been asleep, for he was on his feet and striking a match, before the challenger was admitted.

"Hello, there," I heard him say, as he lit a cheroot. His face was gaunt and gray in the flare of the match, but there was a flash of power in his eyes that was far from sleep. Then the lantern flamed and I saw Santell—red mouth, black wavy hair, a light rippling laugh with its shock of emptiness, and a blood-curdling oath for no particular reason. . . . I did not hear the news he brought, but the smoke of a cigarette floated to me, and I heard him dive, fully dressed, into a cot. Romany stood by the lantern for many minutes. . . . The episode must have disordered my old wakeful trends of mind, for there is a blank between the last glimpse of the figure in the lantern-light, and the crack of the dredge which roused me. The canvas above was leaking dawn. As I sat up, two letters fell from my chest to the blanket—transcripts from the mind and the heart of the Lovely Lady.

The sun was rising through the impassable gorge at the far end of the valley—a spectacle of such magnificence that a man must awake with good reigning in his soul from the vista, if not from the blessedness of incomparable correspondence. All the reds of morning blent their inner flames and intensified. That gorge which men could not enter, was a portal of the Gods. And down among the last shadows of the night on the river, the men of Romany were already toiling. I heard a step and he was beside me.

"This being alive gets rather deep at times," he said questioningly, as he pointed to the multiple glory.

I was startled at the way he had picked up my thought and given it to me. Then I said I would stay, if he cared to arrange a regular dawn-delivery of letters.

"It will be some time before I can," he laughed. "There'll be a fight at the Headland first, but we'll do our best after that, Mr. Ryerson."

We watched the river activity in silence for a moment, and then he spoke of the men who had rushed in from the nearer towns when the magic word had gone out from Tropicania.

"They're worth knowing," he said. "I often think they're like migratory birds, that beat themselves to death in a cage, if held from their southern flights. Certain men must get off in the open somewhere. Back home they don't belong to the scheme of civilization at all. They've already enlisted for a fresh war before any mass-meetings are called in the town-hall. They're legging it frontier-ward, picking up equipment on the way—by the time the more stable citizens are weighing chances of eventualities. . . . And good riddance to most any community. Yet such are at the base of civilization. They clear the reek from far lands. When they pass on lawlessness dies out with them. . . . A particular type of the man I mean—is your friend Huntoon, I take it—"

He had dawn a trifle closer, and I imagine there was an unusual intensity in his glance.

"There are two Huntoons," said I. "I like them both, but one very much. I'm waiting for him to come back."

He understood. "Such men aren't worth much down on the dredge, but out on the line with old Viringhy—Huntoon is the soft, it seems to me, who would be there, when it came to action—"

"He's proven that to my satisfaction," I said. "Isn't Santell—that kind?" "Poor lad, he's only happy when he

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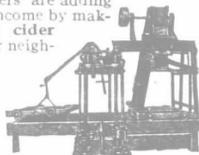
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sees a good chance to get himself killed. I've always remembered that morning—how you crossed the river for him. They would have had him but for you. I liked that—more than you know."

"I didn't see how he could live—"

"Nor I, at first. . . He's apt not to speak of it. You won't mind, will you?"

"I'd much rather he wouldn't," said I, and inquired how many men were in the valley.

"There are over two hundred miners below. With Viringhy's force and the garrisons along the trail—about three hundred in all. I think there's a fight in nearly every man," he added. "A rifle and a dozen rounds of ammunition—positively no mining tool is so important."

Huntoon was coming toward us. Plainly on the gain he was.

After breakfast, the old Master led us through the ruined city. Huntoon was quick to see the possibilities for pits and emplacements. . . Two machine-guns, which we did not see, but which Romany commented on in blithe fashion, were ready to command the approaches to the mines. The slopes everywhere, Huntoon remarked, should be ruffled with intrenchments.

"They don't breed 'em down here, that could force a couple of hundred white men into your Vatican," he said. "That is, given guns, plenty of rounds and a system of rifle-pits."

Romany appeared absorbed in modern defensive possibilities.

"I'd like to spend a day here, and show you the arsenal in the Vatican," he said. "But I'm off for the Headland. Perhaps you would ride with me."

Huntoon nodded. I eagerly assented.

The fourth of the party was Leek—whether orderly, armor-bearer, personal servant or partner, I was unable yet to make out. He might have been just American, but the tendency of my mind was to make a mystery of him. Leek had nothing to say, external to the day's work, appeared abroad at all times, and second in swiftness only to Romany's thought. He was short, forty at least, but athletic. His face was intelligent, if inscrutable. . .

We had traveled leisurely for an hour and a half, and the Pass was behind, when Leek, who was riding in the lead, reined up and raised his hand. Directly as the ring of hoofs subsided, the sound of firing reached us from ahead. The look of Romany's profile was a shock to me. More bloodless than ever, it had become in a second flinty—so hard it seemed a stone would glance from it, leaving no mark. Leek held his mule stiff in her tracks, and twisted around, watching his chief for the first command. "What day is this?" Romany asked suddenly.

Leek answered.

Huntoon and I were asked to stay where we were. The other pair spurred out of ear-shot. . . It occurred to me that I had something to say in private to my companion at this juncture, which Romany had chosen for a covered conference with his second. I swung my mule about in front of Huntoon, so that my back was toward the two below, leaned over and touched his knee.

"Huntoon—what have you got on—with that other outfit?"

He looked white and sick. It was worse than I thought.

"Have you spoken to the Old Man?" he asked.

"No."

"Don't. I'm in trouble—but I'll get out. . . Oh, don't worry to-day. I won't wobble to-day—"

I liked his look when he said that. "I've got to think a bit—that's all," he added.

This sufficed. Romany beckoned.

Leek passed as we spurred forward. He did not appear to observe that we were on the trail but quickened his mule back toward the settlement.

"If it's a skirmish down on the shore," Romany remarked quietly, as we joined him, "it's only just begun, or Viringhy would have a courier on the way back to us."

He had hardly finished when we heard the drum of hoofs, and a running mule darted around a bend of the trail a few hundred yards ahead. The rider was Santell.

To be continued.



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From the beginning of the war every effort has been made to compensate those who have been injured in defending the country. A scale of pensions was adopted and is in force, but money alone will not restore an injured man to his place as an active and useful member of the community. Many returning will be able to resume their former occupations, but there are others whose injuries handicap them seriously in their old occupations or bar them out altogether. An effort is being made to give these men an opportunity to fit themselves for a life of usefulness. By vocational re-education the men can be enabled to fit themselves for their old or some other occupation. The parliamentary committee decided that this education should be paid for by the Dominion Government. The Military Hospitals and Convalescent Homes' commission, with Sir James Loughheed at the head, has taken steps to organize the training required in many parts of the county. The aim is to benefit not only disabled members of the Canadian expeditionary force, but also disabled reservists of the British and allied armies, who were bona fide residents of Canada when the war broke out. The commission is receiving the co-operation of technical schools, agricultural colleges and other public institutions. The training will be free to the men, and the period of training for a new vocation will vary according to conditions.

The scale of maintenance for the men undergoing training and for their dependents, which the commission has been empowered to establish is as follows: It will be understood throughout that maximum age means 16 for a son and 17 for a daughter:

1. A single man, with pension, living in, receives free maintenance; that is, board, lodging and washing.

2. A single man, with pension, living out,—60c. a day.

3. A married man, with pension, living in,—free maintenance and \$8 a month, with the following additions:—

For wife having no children, \$35, less her husband's pension.

For wife and one child, if child is under five, \$38; from five to ten years, \$39.50; from 10 to maximum age, \$42.50; less, in every case, the amount of husband's pension and children's allowances under the pension regulations.

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For wife and three children,—\$44 to \$50 (less pension and allowances), according to ages.

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For wife and five children,—\$50 to \$55 (less pension and allowances), according to ages.

For wife and six children,—\$53 to \$55 (less pension and allowances), according to ages.

A wife with seven or more children under the maximum age may be given the maximum allowance of \$55, less pension and allowances.

All these allowances for wife and children will be paid direct to the wife, unless otherwise thought fit by the commission.

4. A married man living at home will receive 60c. a day. (This of course is in addition to the allowances for wife and children).

5. A widowed mother, if dependent entirely upon the unmarried son who is receiving training, and if the son made an assignment of his pay to his mother and also arranged for her to receive separation allowance while he was on service, may be paid at the same rate as the wife of a married man with no children.

6. The parents of a man undergoing training, if both are old and past work, and entirely or partially dependent upon him, may also be paid at that rate.

7. The guardian of a widower's children (under the maximum age) will be paid monthly:—for one child \$10; for two, \$17.50; for three, \$22; and \$3 for each child in excess of three, with a maximum of \$35.

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The President of the Military Hospitals Commission states that any further information desired will be gladly given on application to the Secretary, at 22 Vittoria Street, Ottawa.

Questions and Answers. Miscellaneous.

Weed of the Vervain Family.

Accompanying plant made its appearance in a restricted plot by the fence. It is slow growing, but reaches a height of at least 2 1/2 feet. It has small, inconspicuous flowers, a running root-stalk and thorns, and some branching stalks from the bottom. It is persistent. Please identify and say if likely to become a serious pest.

T. O'H.

Ans.—The weed received at this office belongs to the Vervain family. It is not considered to be a troublesome weed on a farm where a rotation of crops is followed. It frequently appears in waste places and along fences. It may also appear in old meadows and pasture fields, but gives little trouble in grain crops. Prevent it from seeding and be careful to secure timothy seed from fields not infected.

Gossip.

John Miller Jr., of Ashburn, Ont., has lately landed at his farm his new importation of 125 Shropshires. Twenty-five are rams of extra type and quality and 100 are ewes. Among this lot are a number of high-class show calibre, and the importation as a whole is claimed to be one of the best landed in this country for some years. In Mr. Miller's herd of cattle are a number of good cows with calves at foot and also a number of heifers in calf.

Latest Edition of American Short-horn Herd Book.

The American Shorthorn Breeders' Association have recently issued volume 88 of the American Shorthorn Herd Book. This latest edition contains 20,000 pedigrees of which 8,000 are for bulls numbered from 429,001 to 437,000, and 12,000 for cows numbered from 205,001 to 217,000. This volume contains valuable information and should be in the library of every Shorthorn breeder. A copy may be had by non-members for \$2.00, charges paid. Write the secretary of the association, 13 Dexter Park Avenue, Chicago.

"Say, Reed," said Higgins, as he met a friend, "do you know why you are like a donkey?"
"Like a donkey!" echoed Reed thoughtfully. "No, I don't."
"Because your better half is stubbornness itself," said Higgins.
"That's not bad," said Reed. "I'll have to try that on my wife when I get home to-night."
Accordingly, when they were at dinner, Reed asked:
"Annie, do you know why I am so much like a donkey?"
He waited a moment, expecting Mrs. Reed would give it up. But, on the contrary, she gazed at him somewhat commiseratingly as she replied:
"I suppose because you were born so."
—New York Times.

A strange man had been sent to polish the floors. His manner was anything but energetic, and the lady feared he would not polish them properly.
"Are you quite sure that you understand the work?" she inquired.
His indignation was tremendous.
"You know Colonel B's folks, next door but one?" he said. "Well, I refer you to them. On the polished floor of their dining room five persons broke their legs last winter and a lady slipped clear down the grand staircase. I polished all their floors!"—New York Times.



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THERE WAS NEVER BEFORE as good a time to buy a De Laval Cream Separator as right now.

THE "DOG DAYS" ARE AT hand, when dairying is most difficult without a separator, and when the increase in quantity and improvement in quality of cream and butter are greatest through the use of a good separator.

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rator, aside from all its other advantages.

THIS IS LIKEWISE THE SEASON when De Laval superiority counts for most over other separators—in closer skimming, larger capacity, easier running, easier handling, easier cleaning and absolute sanitation.

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The only herd in America that has two sires in service whose dams average 119 lbs. milk a day and over 35 lbs. butter a week. Cows that will give 100 lbs. milk a day are what we are trying to breed. At present we have more of them than any other herd in Canada. We can supply foundation stock of this breeding. Visitors always welcome. Long-distance Phone.

D. C. FLATT & SON, R. R. 2, Hamilton, Ont.

King Segis Pontiac Paul 15940

WE have for sale a few sons of the above bull, ready for service, and whose dams are large, heavy-producing cows. Here is an opportunity to get the blood of KING SEGIS and KING OF THE PONTIACS at reasonable prices. Correspondence solicited.

Also Berkshire and Yorkshire Swine

Larkin Farms

Queenston, Ontario

Lakeview Farm, Bronte, Ont.

Offer for sale sons and grandsons of 100-lb. cows; one is out of a 24.56 lb., 3-year-old daughter of Lakeview Rattler's 28.20 lbs., the latest Canadian champion 30-day butter cow, 8 months after calving, and is half brother to L. D. Artis, 34.66 lb. Canadian champion senior 3-year-old. Terms to suit purchaser.
Major E. F. Osler, Prop. T. A. Dawson, Mgr.

Clover Bar Holsteins

A splendid 14-mos. old son of Minnie Paladin Wayne, who has just completed a record of 26.87 lbs. butter, 545 lbs. milk in 7 days. Her 2-year-old record was 22.33 lbs. For type and color he is second to none. Also her 3-weeks-old bull calf and a few others from good R.O.M. dams.
PETER SMITH R. R. No. 3, Stratford, Ont.

Dumfries Farm Holsteins

Think this over—we have 175 head of Holsteins, 50 cows milking, 25 heifers due to calve in the fall, and 60 heifers from calves up to 2 years, as well as a dozen yearling bulls, and anything you may select is for sale. Breeding and individuality the very best.
S. G. & ERLE KITCHEN, St. George, Ont.

FAIRVIEW HOLSTEINS

Anything in herd for sale, which consists of 22 cows, 6 two-year-old heifers bred to freshen next fall and early winter, nine yearling heifers not bred and nine heifer calves. All bred in the purple and priced right.
FRED ABBOTT, R. R. 1, Mossley, Ont.

Evergreen Stock Farm Registered Holsteins

The kind that tests 4% and wins in the show ring. Could spare a few yearling heifers, or if you want a choice young bull 8 months old, we have one that is strictly a gilt edge individual, almost as much white as black. The records of his dam, sire's dam, and grand-sire's dam average over 30 lbs. butter in 7 days and nearly 100 lbs. of milk per day. For quick sale we have priced him within your reach—\$150
A. E. HULET BELL PHONE NORWICH, ONTARIO

For Sale---Sons of King Segis Walker

From high-testing daughters of Pontiac Korndyke. Photo and pedigree sent on application.
A. A. FAREWELL, OSHAWA, ONT.

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Holstein bulls only for sale, four fit for service one being a son of Lakeview Dutchland Lestrage, and the others from one of the best grandsons of Pontiac Korndyke, and large producing, high testing R. of P. cows.
APPLY TO SUPERINTENDENT

Riverside Holsteins

Herd headed by "King Johanna Pontiac Korndyke," a brother of Pontiac Lady Korndyke, 38.02 lbs. butter in 7 days, 150.92 in 30 days—world's record when made. His 10 near relatives have official records that average 34.94 lbs. butter in 7 days. His daughters have made good in official test. The present R. of P. cow of Canada was bred here. Choice young bulls for sale.
J. W. RICHARDSON, R.R. No. 2, Caledonia, Ont.

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 TRADE MARK REGISTERED
 U.S.S. Soft Centre Steel Moldboards, highly tempered and guaranteed to clean in any soil. Steelbeams, steel landsides and high carbon steel couler. Clevises can be used either stiff or swing. Each plough is fitted especially with its own pair of handles—rock elm, long and heavy and thoroughly braced. The long body makes it a very steady running plough. Shares of all widths—specials for stony or clay land. The plough shown turns a beautiful furrow, with minimum draft and narrow furrow at finish. Ask for catalogue.

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Good Luck
 COTTON SEED MEAL
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 WRITE FOR OUR PRICES BEFORE SELLING
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 OF GUNS, TRAPS, NETS,
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JOHN HALLAM, LIMITED
 No. 3 HALLAM BUILDING - TORONTO

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 A few young bulls for sale from Record of Performance dams, imported and Canadian-bred, sired by Auchinbrain Sea Foam (imp.) 35758, grand champion at both Quebec and Sherbrooke. Write for catalogue.

GEO. H. MONTGOMERY, Proprietor
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Stockwood Ayrshires—Sired by my royally-bred and prizewinning bull, Whitehall King of Hearts, imp., for sale are in calf heifers and young bulls, out of imp. and big producing cows.
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High-Ayrshires If you are wanting a richly-class bred young bull out of a 50-lb.-a-day and over cow, imp. or Canadian-bred dam or sire, write me. Females all ages. Prices are easy.
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 Two yearling bulls sired by Lakeside Day Star (Morton Mains Planet). Write for description.
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Pedigreed Jersey Cattle for immediate sale. Eight cows, one bull; also three pedigreed Holstein bulls.
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 Young stock, either sex, for sale from our imported sows and boar. Also some from our show herd headed by our stock boar, Ringleader. Terms and prices right.
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A. McKinnon, Erin, R. M. D. Hillsburg or Alton station. Long distance phone.

Questions and Answers.
 Miscellaneous.

Disinfecting Stable—Painting Burlap—Plantain in the Lawn.

1. I have a pure-bred heifer that carries her tail very high above the level of her back, what is the cause and treatment if any?
2. I tested my herd for tuberculosis and found three reactors. How will I clean my stables to be safe for healthy cattle? The floor and mangers are all cement with iron stalls and stanchions, 4-foot cement wall and about the same of wood, the ceiling is boarded. There are a few box stalls made of boards. Would like to know in particular about cleaning the manger.
3. We have a large bevel mirror which has become spotted, could we re-silver it at home, if so give full instructions. If not where could we have it done?
4. We have dark red burlap on the lower part of the wall in our dining room we wish to make it a dark green. Please give full particulars how to paint it.
5. What is the enclosed weed, and how would I get rid of it, as it is choking out the grass in the lawn?

A READER.

Ans.—1. If the heifer has always carried her tail high it may be the natural position, and nothing could be done to lower it. If it is due to some local trouble, conditions would possibly right themselves by the removal of the cause. From the symptoms given it is difficult to state definitely the cause of the trouble.

2. The stable walls and ceiling should be swept down and then all litter removed from the floor. If it is spread on plowed land the sunlight will soon kill all germs. Sunlight and air are nature's disinfectors and as much as possible of both should be allowed to have access to the stable. An antiseptic solution as creolin, crude carbolic acid or any coal-tar product, should be sprayed over the entire stable. Fresh whitewash is an excellent disinfectant. It kills germs and lightens dark places. One of the antiseptic solutions mentioned might be added to the wash and applied while hot. The material can be applied with a brush or a spray pump. Be careful to force it into the cracks and crevices of the walls and floor. Clean the mangers thoroughly and apply about a four-per-cent. solution of a coal-tar disinfectant. Turpentine is an excellent disinfectant and has been used satisfactorily, but is too expensive to use over a large area. If live steam were available it would prove satisfactory for cleansing the mangers.

3. The silvering of mirrors is usually done on a moderately hot table especially built for the purpose and heated by steam. Possibly a more satisfactory job would be done by a regular manufacturer, but it is possible to repair a mirror at home. Place the mirror face downward on a table and thoroughly clean the spots to be silvered. Then spread over the spot a piece of tinfoil a little larger than the area to be repaired. After spreading it out smoothly let fall on the center of it a drop of metallic mercury and with a bit of chamois rub the foil until it becomes brilliant. Cover with a sheet of smooth paper and apply a light weight to keep the new amalgam in close contact with the glass. The amount of mercury needed will be about 3 drachms to the square foot of surface to be silvered. Practice is required to do the work neatly. If desirous of sending the mirror to a firm to have the work done consult your local dealer in mirrors regarding a firm to deal with.

4. Several coats of paint will be necessary to prevent the red from showing through. Ready-mixed paints of the desired shade can be secured and it is only a matter of applying it evenly over the surface. When the first coat is dry, apply the second.

5. The leaf received at this office is believed to be that of the common plantain. The only method of eradicating it from the lawn is to spud it out. If the lawn is badly infested it is advisable to break it up and give it a season of thorough cultivation.

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Canada's Most Beautiful Jersey Herd—Half the herd imported from the Island of Jersey. Several cows in the Record of Merit, and others now under official test. Some very choice stock for sale. When writing, state distinctly what you desire, or, better still, come and see them. Farm just outside city limits. We work our show cows and show our work cows.

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 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, Ont.**

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JAMES BEGG & SON, R.R. 1, St. Thomas, Ont.

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 100 Imported Shearling Ewes 75 Canadian-bred Shearling Rams **JOHN MILLER**
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 75 Canadian-bred Shearling Ewes 5 Bulls of serviceable age **Myrtle Sta., C.P.R. & G.T.R.**

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 We are in a position to supply boars and sows of different ages. We have an established type of Yorkshires that has been produced through many years of careful breeding and selection.
J. E. Brethour & Nephews, Burford, Brant County, Ont.

YORKSHIRES Our offering never better. Champion hog winner of 12 firsts, 5 championships, 2 years showing, still at the head. Boars and sows, all ages, same breeding as winners of export bacon in keen competition at Toronto in 1915.
Wm. Manning & Sons Woodville, Ontario

ELMHURST LARGE ENGLISH BERKSHIRES
 From our recent importation of sows together with the stock boar, Suddon Torredot, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.
H. M. Vanderlip, Breeder and Importer, R.R. 1, Brantford, Ontario
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CLOVERDALE LARGE ENGLISH BERKSHIRES
 Sows bred, others ready to breed; boars ready for service; younger stock, both sexes, pairs not akin. All breeding stock imp. or from imp. stock. Prices reasonable.
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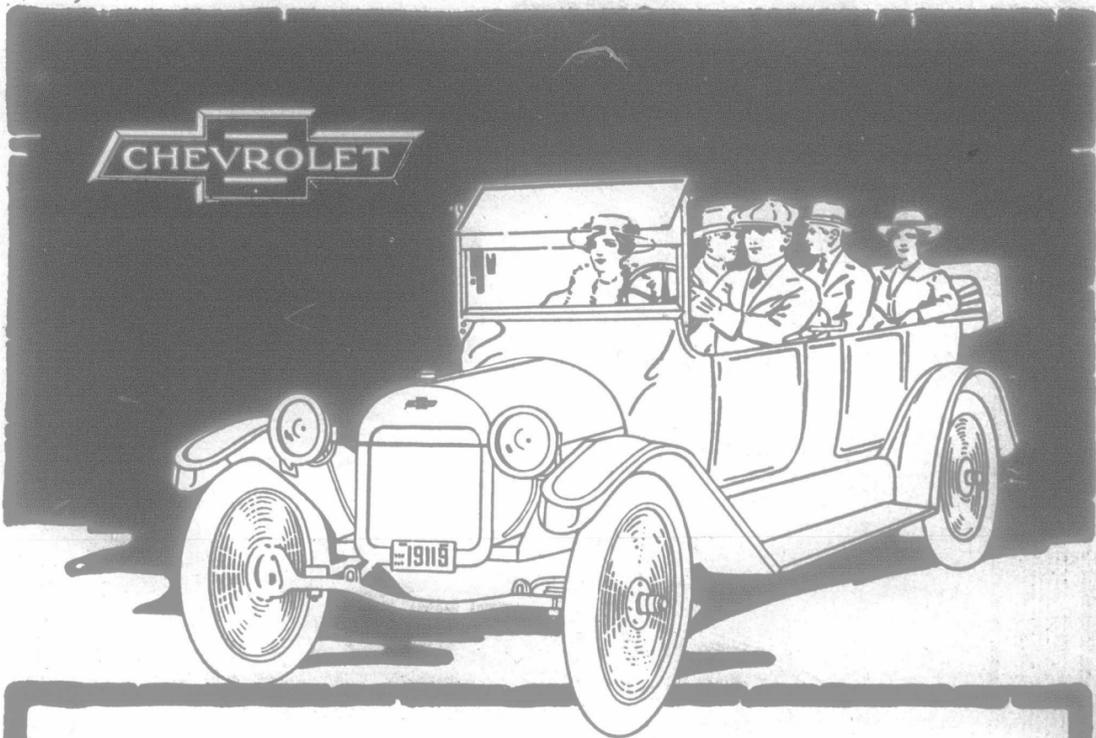
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A. DEVINEY, St. Mary's, Ont.

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Tell them also that we have recently inaugurated two new departments:

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