

BRITISH COLUMBIA



Vol. X., No. 9

SEPTEMBER, 1917



Prolific Tree of Wealthy Apples, Lillooet, B. C.





# Leckie's School Shoes

There are the popular school shoes for boys—

No. L 246—Sizes 1 to 5.

No. L 346—Sizes 10 to 13.

The above are strong and serviceable—stand the hard knocks of the red-blooded boy.

No. L 214—Sizes 1 to 5

No. L 314—Sizes 10 to 13

These are also very serviceable but are in finer leathers and a little more refined in appearance.

At your dealers—if he hasn't them he can get them, and you'll know them by the name "LECKIE" stamped on every pair.



## FOR FALL PLANTING

We offer a complete list of Fruit and Ornametal Trees, Small Fruits, in fact everything that is hardy and desirable for the garden and profitable for the orchard. Large stock of strictly first-class goods at reasonable, honest prices—all home grown. Inspection of nurseries solicited. Price list on application.

### LAYRITZ NURSERIES

VICTORIA, B.C.

Established 1890.

## A Community Motor

will solve your labor difficulties and yet bring down the investment to meet your pocketbook.

Four farmers in the Fraser Valley recently clubbed together on the purchase of a silage cutter and electric motor.

By taking turns on its use, they are saved a separate investment for each of them, and they obtain the advantage of

## Electric Power

Write or enquire from our agents.

*B.C. Electric*

Vancouver.

New Westminster.

Chilliwack.

Abbotsford.

## TABLE OF CONTENTS FOR SEPTEMBER

	Page
Irrigation Question in Okanagan .....	3
By Okanagan Settler.	
A Study in Co-Operation .....	4
By a Staff Correspondent.	
The Raspberry .....	6
By Nurseryman.	
The Work of the B. C. Goat Breeders' Association for 1917 .....	8
Among Our Advertisers at the Vancouver Exhibition .....	14
Evolution of Agriculture .....	15
By L. S. Klinck, Dean of Agriculture, University of B. C.	
Teaching Farming at the University .....	19
By Professor Clement.	
Editorial .....	20
Alexandra Ranch, Tranquille, Kamloops .....	22
Beekeeping in British Columbia .....	26
By Williams Hugh.	
Gardening for the Home .....	30
By H. M. Eddie, F.R.H.S.	
Poultry Section .....	32
Women's Section .....	33

# Fruit and Farm Magazine

A Monthly Journal Devoted to the Interests of the Man on the Land.

Vol. X.—No. 9

Vancouver, British Columbia

\$1.00 per year  
in Advance

## Irrigation Question in the Okanagan

(By an Okanagan Settler.)

There is no more urgent problem in the Okanagan Valley at the present time than the storage and distribution of water. Upon the successful solution of that problem hangs to a great measure the future prosperity of the whole valley.

It is very important that every one in the province, at least, should know the absolute necessity of a steady and abundant supply of water, if we are to produce those thousands upon thousands of carloads of food-stuffs which the country is so capable to produce and which the Empire needs so urgently.

The early settlers in this valley followed the ordinary branches of farming, viz., the raising of cattle, horses, sheep and swine, while their crops consisted of hay and small grain, and gardens and small orchards on some of the ranches. This system involved the cultivation of only a small part of the whole area, and the irrigation system at that time, while crude and small, and with little provision for storage, were sufficient to meet the needs of the district.

The greater quantity of the water ran away in the spring freshets and was lost and when the hot, dry weather came the water became scarce. There was always trouble between the ranchers, who cut each other's ditches, sold each other's water and fought many battles about it.

Then followed the later development, when it was discovered that fruit and vegetables grew to perfection, and enormous crops were raised under proper irrigation and cultivation. Out of this grew the land and irrigation company boom, when companies sprang up all over the valley, bought up land at low prices, dug new ditches and in some cases constructed reservoirs, and subdivided and sold acreage.

Systems installed under these conditions were very likely to be unsatisfactory, and such proved to be the case. Both ditches and reservoirs were often too small to properly serve the lands created thereunder. The lands were subdivided, advertised and sold in small lots at high prices as fruit land, with often a disregard of its capabilities for that purpose. There are some land agents who would sell a stone quarry as orchard land, particularly if it was covered with snow at the time of sale.

Some companies gave a contract to deliver one miner's inch of water per acre

twenty-four hours in each week for four months. This is about one acre foot per acre in the season; our rain and snowfall gives us about another acre foot. They assured intending buyers that that amount of water was more than enough for all their needs and would be for all time. To prove their statements they showed the buyer splendid young orchards two to four years old being cultivated, which had made wonderful growth with only two to four irrigations a year—much less than they undertook to give. The settler usually found out in five or six years, when perhaps all he had was invested in his orchard, that when his trees came into heavy bearing and some covering crops were necessary to keep the land fit, his amount of water was not half enough. When this stage is reached, usually, very much land is under cultivation and the demand for water is so extensive that there is not enough to give everyone the amount of water as per agreement, the ordinary shortage of water being aggravated by the bad condition of the flumes and ditches by which much is often lost.

It is often the case, too, when this stage is reached, that the company has gone broke and its funds have disappeared, and possibly the company with them, involving the expenditure of heavy repairs by the ranchers themselves.

There are also companies who are working on borrowed money or on the proceeds of the sale of stock, put in large irrigation systems of a temporary character at a heavy cost and are able to deliver water much below cost of operation. Settlers who have been getting water at \$2 or \$3 an acre wake up to the fact that the system is old and needing repair, that no sinking fund has been provided, and that a large sum of money is necessary to refit it. They may also possibly find that, had proper book-keeping been installed and a sufficient sinking fund been provided, the water would have cost double the amount which they had been paying, that in the future these contingencies will have to be provided for, including the cost of repairs. In some cases this will amount to \$6 to \$8 per acre, which a good many regard as a prohibitive price.

The problem for the settler is to know just how he stands regarding the water supply, the possibility of increasing that supply by storage, the present cost of operating per acre served, the possible acreage which may be irrigated, the status of the water company and the ability to fulfill their contract.

This is where the water comptroller can be of good service, as he has most of this information. The settlers should also ask

the government to pass an order-in-council, which recent legislation permits them to do, prohibiting the sale of more land as irrigable than can be abundantly supplied with water at reasonable rates, and to prohibit the sale of any lands as orchard or garden land which is unfit for the production of all crops of that nature. This involves government classification of land and employment of experts to do the same.

The whole problem involves not only the grower but the consumer, as on this solution hinges the prices of produce. We have the land and the climate, and with enough water this country can compete with any. Unless the water supply is increased, and that very materially, the fate of this valley is one that should occasion serious concern to all involved.

There has been some agitation in the past in regard to the government taking over all water storage and land companies and creating new ones where necessary and supplying the different districts involved, which will become water municipalities. Information based on this has been in the possession of the government now for several years, but no action has followed. On one hand we have an appeal from the federal government to produce more food crops and we fail because of lacking assistance from the local government to irrigate our crops. Every year there is some crop shortage due to lack of sufficient water. Last year, after a long, dry season, a very heavy rain came and saved the situation, but it was a near thing. This year, in like stress, the rain did not come, and a great crop loss is certain, as creeks are dried up. In the district in which I reside there are two creeks which were half full of water during July, but they have been dry since the first of August. The same conditions prevail generally in the valley.

The Minister of Lands and the Water Comptroller have been through the valley, and, while expressing sympathy and recognizing the serious condition, they suggest that it is up to the farmers to help themselves. The contract is too large a one for the individual farmer or for anyone but the government to handle. Many threaten that if the government do not take steps to prevent a recurrence of this loss and rendering it safe to plant crops, they will leave the valley. They consider agriculture is as worthy of aid in the crisis as railways, mines and shipbuilding, and if this aid is not forthcoming it is going to give a serious setback to agriculture in British Columbia for years to come.

# A Study in Co-Operation

## Some Pitfalls Which the Farmer Encounters

(By a Staff Correspondent.)

Ask the average fruit grower what is the most pressing need in his district today and he will tell you in one word, CO-OPERATION. Ask him if there is a successful co-operative fruit marketing association throughout the length and breadth of the Fraser Valley and he will candidly inform you that there is not and that he does not anticipate there will be in the immediate future.

I asked a well-known Mission fruit rancher the other day why a successful co-operative agency could not be organized in his district and he gave the self-same answer that I had received from almost a hundred other fruit men when he replied:

"Every fruit grower thinks that he himself is a better salesman than his neighbor. I go further and state that practically every fruit grower is afraid that by joining up with a co-operative organization, which of necessity is to be controlled during the fruit season by one or two heads he will jeopardize, perhaps, his chances to procure a higher price for some portion of his product in some other manner, or by the old method of shipping to a broker in the Northwest. He refuses to place implicit faith in anyone, as a matter of fact, and that is the fundamental reason underlying the failure, partial or entire, of every co-operative organization which has started in the valley, and their name is legion."

Even the case-hardened old grower who has been shipping fruit L. C. L. to brokers or commission men for years past is willing to admit that conditions could be better, that there is too big a margin between the price he actually receives and that which the ultimate consumer is forced to pay. He knows the kind of co-operation he wants, he will tell you, but he is not prepared to join any organization which has not proven itself the success he desires.

In other words, he ardently desires co-operation, but he is not prepared to go in with his neighbor, form the organization, give it his undivided support for a season or two and take the bad luck with the good, until the organization is strong enough to withstand all opposition.

One man, who said he was convinced that co-operation meant the difference between a steady grind to keep the pot boiling and comparative affluence, said he would hesitate to join any co-operative agency, because the Northwest brokers and commission men, who guard their sacred (to them) rights as intermediaries between the producer and the retailer, would combine and balk every move by the organized fruit growers.

"They would get together," he said, and his tone left no doubt of his absolute faith in his own deductions, "and flood every city or town to which we shipped with berries from other sources, likely the American side, and would undersell us until we went to the wall. Let me tell you something from my own experience, young man: Not so many years ago a Fraser Valley co-operative organization was formed right here in Mission. It was flourishing in the year I mention, and we knew the brokers were stacking the cards for us somewhere; just how it was going to break we could not learn.

"There is a town in Alberta where at that time we had fully 90 per cent. of the business and were shipping there heavily, as it drew its trade from a rich farming section surrounding it. Well, one day we sent two cars of fruit there, worth about \$4000 at the current price. About ten hours before it was due to arrive our broker friends wised up, dumped a huge amount of the same fruit into the merchants, under-quoted us 50 cents on a crate, and before arrangements for unloading our two co-operative cars were perfected the fruit was unmarketable and we lost the whole darn kaboodle.

"Less than one week after that story broke back here 50 per cent. of the growers had withdrawn from the organization, refused to fight the broker octopus, and quit cold. You can't do anything with co-operation with a bunch of quitters, can you? Yet that is what happened and would happen again if we tried a similar experiment and did not have a membership ready to carry the war into the enemy and keep it up despite a few losses and setbacks."

That co-operation is the keynote of successful fruit growing and means better prices for the producer and a lower consuming price, has been abundantly proven in other lines of commerce and industry. A notable example of successful co-operation is afforded by a glimpse at the books of the United Farmers, Limited, of Maple Ridge. A more recent, but none the less successful, merger was the amalgamation of the majority of the milk producers of the valley into the Fraser Valley Milk Producers, Limited. This organization comprises slightly more than 90 per cent. of the big milk shippers from Chilliwack to the Gulf of Georgia. Already they have come in for considerable adverse criticism because the price of milk per pound butter fat has been advanced, but the officials of this combine (and it is a combine or trust in the sense that every co-operative effort must be to attain stability) have as their primal objective a desire to secure higher rates for their product at the expense of the consumer.

It is not the consumer that the association is attempting to ride, but rather they wish to eliminate the present expensive and too elaborate system of overlapping distribution. As the fruit grower complains of the extra charge necessary through marketing his produce through the middleman, so do the milk vendors declare against the myriad host of milk distributors who purchase their wares from the producer and then boost the price in order to defray distributing costs and to ensure a fair margin of profit on the outlay.

The milk producers assert vehemently that once the unnecessary distributor is eliminated prices will reach and remain at a selling figure affording a proper margin of profit on their capital expenditure, and that the consumer will be the beneficiary. There is no valid reason for doubting their assertion, any more than there is to doubt the fruit grower's declamation that both himself and the ultimate consumer will be better satisfied when the broker vanishes, never to return.

Candidly, the British Columbia fruit grower, in his inherent distrust of a co-

operative organization, which he nevertheless acknowledges spells the difference almost between success or failure, seems to be given over to fears. They "feared" that reciprocity would take away from them their home markets. They "fear" to pack their crop in case the price may not stand up. They are "fearful" now that British war regulations may cut off their export markets for apples, and they profess to see "blue ruin" staring them in the face from every corner. In the same manner they "fear" to give their undivided support to any movement for co-operation because similar moves, through incapable officials or for lack of proper backing by the growers themselves, has failed in the past.

True, it requires a deal of courage and stick-to-itiveness to make a large co-operative organization such as the amalgamation of the fruit growers of the Fraser Valley would be, the success that it must become before the middleman is ousted, but it can be done and would be an undoubted blessing to the growers and to the general public, who are not interested so much in the preliminaries of organization, nor how it was accomplished, so long as the particular fruit to which they are partial comes to their tables at a figure which does not cause the lord of the manor to squirm uneasily and mutter anent the outrageous prices one is compelled to pay for the ordinary luxuries of life.

Far-seeing growers and farmers are doing their bit in educating their more thoughtless neighbors to the urgency of forming a general combination for protection of their vested interests. Sooner or later these seeds so planted must begin to bear fruit. It cannot all fall upon barren ground. When that time comes the work will be taken up and pushed through with the customary vigor and energy which is inherent in every man who has made a success of the perilous business of fruit growing. Its final consummation and success must mark the beginning of a new era of prosperity for the grower and for Mr. and Mrs. Ultimate Consumer.

### FOR SALE

Registered Hampshire ram lambs, also one registered shearling ram (Hampshire). Order now for Fall delivery.

**WASHINGTON GRIMMER,**  
Port Washington, B. C.

### FOR SALE

Registered yearling Jersey bull from record of performance dams; tuberculin tested.

**GRIMMER BROS,**  
Port Washington, B. C.



# Co-Operation is the Basic Principle of Success

MR. FRUIT-GROWER, we buy our Fruit and Vegetables for preserving and pickling in British Columbia. One good turn deserves another. Show your appreciation by buying our products, which cannot be excelled.

EMPRESS products are guaranteed pure. Manufactured in your own province. Ask your grocer for and insist upon getting

## Empress Goods

We manufacture: Jams, Jellies, Spices, Extracts, Pickles, Baking Powder.

Blenders of Tea and Coffee.

Use Empress Teas and Coffees.

## Empress Manufacturing Co., Ltd.

1106 HOMER STREET.

VANCOUVER, B. C.

AUTUMN TERM OPENS TUESDAY, SEPTEMBER 4

at the

# Spratt-Shaw BUSINESS SCHOOL

336 Hastings Street West

Vancouver, B. C.

When choosing a school be careful to select one with the best equipment (every mechanic must have good tools); the best qualified staff (knowledge is always power); extensive and favorable circle of business patrons (one's friends are one's real assets); honest, unequivocal, reliable business methods (a tree is known by its fruits).

### OUR SCHOOL HAS

The largest, most complete and most expensive equipment in B. C.

The largest and most highly qualified staff in B. C.

The largest circle of business patrons in B. C.

The greatest number of opportunities of placing its students.

A well-established reputation for honest, upright and honorable dealing; mudslingers to the contrary notwithstanding.

The largest and strongest chain of schools in Canada.

### FOURTEEN BRANCHES

R. J. SPROTT, B.A.,  
Manager.

SEY. 1810.

H. C. DUFFUS,  
Principal.

# The Raspberry

## How to Grow It and Treatment of Soil and Canes.

(By Nurseryman)

The raspberry is a good garden market fruit because it comes into fruitage very promptly and very surely. Anyone beginning a country home near a market and wishing immediate profits, will find no berry more likely to meet his needs than the red raspberry. The fact that it cannot be shipped very long distances cuts off competition from the south.

The raspberry will grow in all soils, but it prefers loose and well-cultivated clay. It must not, however, be overlooked that the varieties of this plant are sharply individualized. Some of them dislike exactly what the others prefer. The Cuthbert, for example, prefers to be grown in solid rows, while some others prefer hill culture. In all cases the land where raspberries are to be grown must be thoroughly drained. It is also desirable that there shall be a very large amount of humus. Barnyard manure alone is not recommended for raspberries—this neither acts as a good fertilizer to raspberries nor to increase the proper humus. On the other hand, it is liable to encourage the development of diseases, especially root gall. A very liberal application of autumn leaves is preferable to serve as a mulch and sort of cover crop during the winter; to be plowed under in the spring. This is the natural fertilizer supplied by nature to the bush in its wild state.

Set the plants deep for preference—that is, the red kind. The blackcaps are best set shallow and only in spring. A raspberry field will show its tendency to suck-erage by filling all the space between the rows with young shoots. What you want is a good, solid row of new canes. Run your cultivator through and through to destroy the superfluous shoots and to keep the ground in good tilth. An old-established field must be cultivated from plowing time until picking time; in fact, cannot be too often loosened up with hoe and cultivator.

Trimming and care of a red raspberry garden consists in cutting the canes out that have borne; and this should be done soon after picking. You will then cut off the new canes, leaving them four to five feet high. It is not desirable to do this part of the work until growth has ceased, in October or later. Fork out the waste rubbish and burn. Now it remains with you to decide in what way you will keep the canes from being broken down by snow during the winter and out of the way of the plow when it is used. A system of double wires between which the canes are placed is admirable, the wires being clamped together at intervals. The wires should be stapled to stakes at the end of the rows and to other stakes placed about every twenty feet in the rows. When the work is done your garden is very neat and tidy; the canes are upright and will remain so through the winter, even if the snow is heavy. The ground is ready for fall plowing in October or November if you decide that it is desirable.

Purple caps are planted farther apart than the reds, and each cane should be staked separately.

If the winter has been very severe and killed back the canes, so that the buds start

feebly, it is better to go over the raspberry field once more, in the spring, with shears and cut back the canes sufficiently to remove the weaker buds, and concentrate fruitage energy below. In this way you will sometimes secure a very excellent crop; while if not thus cut back you will get a large lot of seedy and worthless fruit.

The growth of blackcaps must be checked by nipping off, whenever a cane has grown about 18 to 20 inches. This pruning must continue as long as the growth continues. The object is to produce a solid, thick bush, well armed with fruit-bearing limbs. Birds are very fond of blackcaps. Blackcaps are subject to cane rust, and the best thing to do is to dig up the affected plant and destroy. Do the same when the red raspberry is attacked by cane borer, cutting off the cane below the ring of eggs and burning them.

Cuthbert, or Queen of the Market, is a large, red berry of a rich crimson color and good quality productiveness. The dryness of the berry makes it a good shipper and it is fine for canning. It is not hardy enough for the interior of British Columbia. Marlborough is very early, large, good color and absolutely hardy. Herbert is perhaps the best all-round berry, being a very hardy, main-crop kind. Of the ever-bearing reds, St. Regis and Souvenir hold high places. Of the blackcaps, Munger is much better flavored and a better shipper than the aver-

age and is particularly fine for canning. The Scarff is very productive and quite hardy. Reds such as Cuthbert, Marlborough and Herbert should be planted in rows about seven feet apart and the plants two and a half feet apart in the row. Blackcaps and Purplecaps should be planted five or six feet apart in the row. Reds and purples require picking daily or alternate days, but blackcaps will stand three or four days without injury.

## WANTED

By Englishman, 38 years old, single, work on a good farm. Reply stating wages offered to. Box 1, Fruit and Farm Magazine, 615 Yorkshire Bldg., Vancouver, B. C.

*A Breeder's Card this size will cost only \$1.25 per month. Advertise the stock you may wish to sell.*

## Last Call for Fall Orders

We close our Booking for Fall orders on October 1st, for Vancouver, Victoria, New Westminster, Vancouver Island, Fraser Valley and all coast points. Send us your list of wants right away.

### JUST A FEW OF OUR EXCLUSIVE SPECIALTIES

- THE GOAL EVERBEARING APPLE**—The only everbearing apple in existence. A delicious all-the-season fruit. Fine trees, each **\$1.00.**
- THE VANDERPOOL RED APPLE**—The great export apple and keeper. Each **\$1.00.**
- THE ORENCO APPLE**—The best dessert apple. Each **50¢.**
- THE YAKIMENE PEACH-APRICOT**—A remarkable combination of the apricot and peach. Hardy. Each **\$1.00.**
- THE VROOMAN FRANQUETTE WALNUT**—Produces food of great nutritious value on a highly ornamental tree. Each **\$1.00.**
- THE SOUVENIR EVERBEARING RASPBERRY**—The greatest ever-bearer. Hundred, **\$14.00.**

### SPECIAL SAMPLE OFFER

We will send **PREPAID** to your nearest station this Fall or next Spring one of each of these splendid trees and a dozen of Souvenir Raspberries on receipt of a \$5.00 bill, or C. O. D. \$5.50. Orders should be placed **NOW** for these or any other of our well-known stock. We do not ship into the interior in the Fall.

We issue a **SEVENTY-PAGE CATALOG** of Fruit and Ornamental Trees, etc., also an **ARTISTIC ROSE CATALOG**. These will be sent on request, together with a pretty colored calendar for this month.

We have a vacancy for a full-time salesman, also for one or two men with spare time.

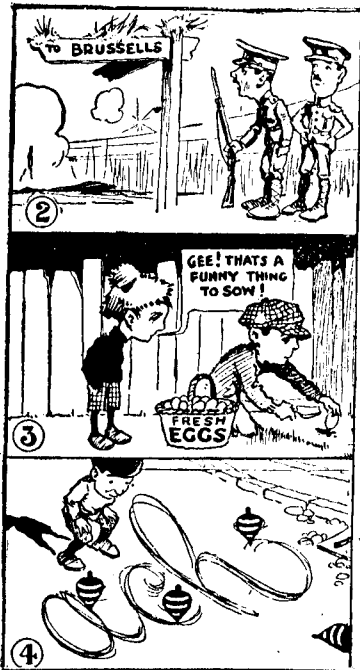
## BRITISH COLUMBIA NURSERIES CO., LTD.

1493 Seventh Avenue West, Vancouver, B. C.

Nurseries at Sardis.



# What Did We Plant in Our Vegetable Garden?



What vegetables do these pictures represent?

WHEN your answers to this interesting puzzle are received we shall gladly mail you without cost a sample copy of the latest issue in order that you and your friends may become acquainted with this great new publication and realize the place in Canadian Home Life that RURAL CANADA now occupies.

It is entertaining as well as instructive. It abounds in fine short stories, timely articles, fashions, embroideries, crochet work, recipes, a children's page, a family doctor and many other fine features. Its editorials are inspiring and uplifting. In short, to know RURAL CANADA is to love it. You and your friends will be glad to make the acquaintance of so bright, interesting and good a magazine.

## Follow These Simple Rules Governing Entry to the Contest

WRITE on one side of the paper only. On one sheet of paper put your answers to the puzzle pictures, with your full name and address, (stating Mr., Mrs. or Miss) in the upper right hand corner. Anything other than this must be on a separate sheet of paper.

Boys and girls under ten years of age are not allowed to send answers to this Contest, because

## Vegetable Garden?

TO help win the war we must all produce, so every patriotic Canadian has a vegetable garden this year. We have a fine assortment of vegetables in our garden, and if you will study the pictures at the right you may be able to discover what we are growing. Each of the pictures represents a common vegetable that you all know. Here are two examples from the series our artist drew and we will tell you that No. 1 is Cauliflower (Call-eye-Flower) and No. 8, Beets (Bee-eats). Now see if you can solve the rest and when you have them all, write your solutions on a sheet of paper and send them to us.

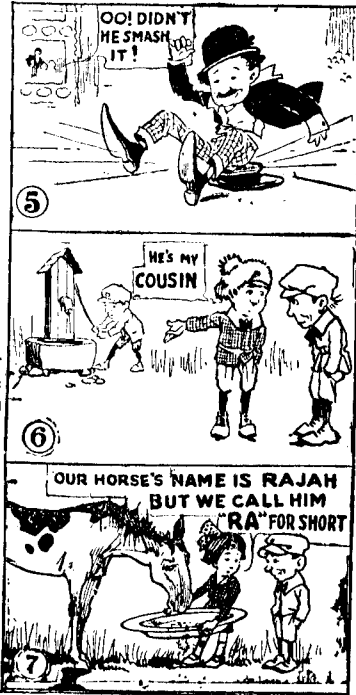


## This Contest is Free of Expense to All

YOU do not spend a single penny of your money, nor will you be asked to buy anything in order to enter this great Contest and win the Chevrolet Car or a fine prize. The Continental Publishing Co., Limited, one of the strongest and best known publishing firms in Canada is conducting this interesting Contest in order to quickly advertise and introduce "RURAL CANADA for Women" the wonderful new magazine for Canadian Farm Folk and land-lovers everywhere.

RURAL CANADA is different entirely from any other Canadian Farm Paper, because it is edited and published mainly for the women folk in our Canadian farm homes.

AS soon as your answers are received we shall write and tell you how many of the names you have solved correctly, and send you free a copy of this month's fine issue of RURAL CANADA. Then when you know your standing for the big prizes you will be



What vegetables do these pictures represent?

asked to help us advertise and introduce RURAL CANADA in your neighborhood by showing your copy of the new magazine to just four of your friends and neighbors who will appreciate the worth and high purpose of RURAL CANADA and want it to come to them every month. State your willingness to accord us this simple favor when you send your answers. It will only require a few minutes of your time and you are guaranteed and will be sent at once a big cash payment or valuable reward for your trouble. If you wish we will gladly send you extra sample copies to leave with your friends to read.

later on we intend to have a fine contest for our boy and girl friends. Employees of this company are absolutely debarred from competing.

To ensure absolute fairness and impartiality in awarding the prizes, the properly qualified entries will be judged by a committee of three well known gentlemen, having no connection whatever with this firm, and contestants must agree to abide by their decisions. The prizes will be awarded to the duly qualified contestants whose entries have the greatest number of correct or nearly correct names and are consid-

ered by the judges to be neatest and best written. (proper spelling, punctuation and style of entry also being given consideration). A contestant may send in as many as three sets of answers to the puzzle, but only one set may win a prize and not more than any one prize will be awarded one family or household. The Contest will close December 27th, immediately after which the judges will award the prizes.

Send two two-cent stamps to pay postage on your free sample copy of RURAL CANADA, prize list, etc.

1st PRIZE



1st PRIZE  
\$750 CHEVROLET  
Touring  
Car

New 1918 5 Passenger  
Model Fully Equipped

5 Passenger  
Chevrolet

# Touring Car

And More than \$1,000.00 in Handsome Prizes to be Awarded

THE BIG PRIZES include this magnificent \$750.00 Chevrolet Car, a \$350.00 Upright Piano, a Dandy Shetland Pony and Cart, a High Grade Bicycle, \$60.00 Clare High Oven Range, Singer Sewing Machine, Phonograph and Records, Waltham Watches for men and women, Standard Cream Separator, 1900 Washing Machine, Perfection Oil Range, Books, Cameras, Bread Mixers, Mantle Lamps, Sporting Rifles, and a host of other big valuable prizes too numerous to mention here.

WE WILL SEND YOU THE BIG COMPLETE ILLUSTRATED PRIZE LIST

Address your solutions to 302

THE CONTEST EDITOR, RURAL CANADA CONTINENTAL BLDG., TORONTO



# The Work of the B. C. Goat Breeder's Association for 1917.

The above association having been fortunate enough to secure financial recognition from the government of the province to the extent of a grant of \$250, the question was how to spend it to the best advantage. Owing to the fact that the directors live in different parts of the province and the cost of meeting together would be too high, the business of the association has to be done by correspondence, which is, of course, a poor substitute. However, we have at last decided on the following expenditure, as in the best interest of the members: One hundred dollars or so will be reserved for refunds of transportation on pure-bred stock; i. e., bona fide members buying and shipping pure-bred goats will be refunded the transportation charges thereon which, however, must not exceed \$10 for any one animal. The sum allotted for this is not nearly as large as we would have liked, but it is expected that little will be spent on bucks this year, at any rate, as these should be taken care of by the government scheme for the supplying of pure-bred sires. Fifty dollars will be spent in issuing a booklet or leaflets to interest the layman; \$50 on exhibits at fairs, and \$50 on making a collection of lantern slides, cuts for illustrations, etc.

The association will also buy a tattoo ear marker, which will mark the goat indelibly for identification and other purposes. This marker will be loaned to members at a charge of 10c per goat marked, until paid for. A record will be kept by the secretary of all members' goats, and letters and numbers will be allotted to them. It is also suggested that the marker be used to indicate the percentage of pure blood in goats, marking in the other ear with 78 for seven-eighths, 3132 for thirty-one thirty seconds, etc.

Later it is hoped to establish a record of merit based on milk yield, and for this we will probably have to rely on the affidavits of members, as the business would not bear the expense of testers to travel the province, as the Dominion government cow testers do.

In connection with the exhibits at the Vancouver Exhibition in August, the arrangements for same were left in the hands of a committee of the Burnaby district members, Messrs. Wilson, Tuplin and Holland, together with Mr. Mowat and Mr. Barker, assisted by Mr. French, who represents the association on the Vancouver Exhibition Board. Over 50 entries were made, and the exhibit proved a great boost for the milk goat. Mr. Wilson had charge during the week and was assisted by several ladies and gentlemen in milking and caring for the goats, selling milk and cheese, distributing literature and answering questions. The Vancouver Exhibition Association offered \$125 in prizes, and it is hoped they will be made to offer more next year, because this goat exhibit was one of the drawing cards at the fair this year. In this connection the thanks and appreciation of the goat men are due to the exhibition directors, and the manager, Mr. H. S. Rolston, for their sympathetic attitude towards the industry and their willing assistance in every way.

Following is a list of prize winners in the goat classes at Vancouver Exhibition:

Matured bucks—D. Mowat, McKay,

first and second prizes; A. Black, Collingwood East, third prize.

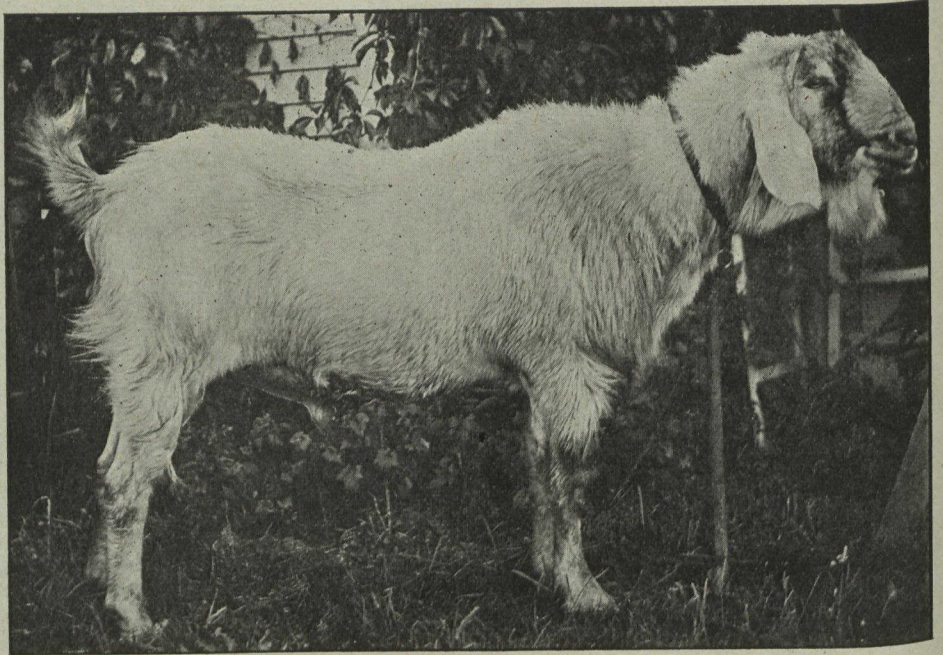
Bucks 8 to 18 months—D. Mowat, first prize; H. W. Barker, second prize.

Bucks up to 8 months—H. W. Barker, first and second prizes; D. Mowat, third prize.

Diploma for best buck—D. Mowat, McKay, B. C.

Matured does—J. R. Wilson, Edmonds, first prize; A. Black, Collingwood East, second prize; D. Mowat, McKay, third prize.

Does 8 to 18 month.—A. French, Vancouver, first prize; H. W. Barker, second prize; A. Black, Collingwood East, third prize.



Mr. D. Mowat's newly-imported Mature Buck, Harborough Volunteer, N. N. 834.

## NEW BLOOD FOR THE NUBIANS.

A fairly frequent complaint among goat breeders who want to take up the Nubian breed is the scarcity of stock in the country and the difficulty of getting new blood lines, and at a time like the present, when everything is unsettled and importations of stock are difficult and often impossible, the enterprise of Mr. D. Mowat of McKay, B. C., is all the more commendable. Some time ago Mr. Mowat entered into correspondence with the leading breeders of Anglo-Nubians in England, and ultimately placed an order for a pure-bred buck and doe from the famous herd of Sir Humphrey de Trafford. These animals were the highest priced in the herd, and are, of course, registered in the British Goat Society; they are claimed to be the best in England, if not in the world. In spite of enemy submarines, they have now reached Quebec in good condition and will be held there for a month in quarantine. While waiting at Liverpool for shipment the doe gave birth to two kids, a buck and a doe, also pure bred, and sired by Sedgemere Viking, N. N. 556, another of Sir H. de Trafford's herd.

The mature buck is Harborough Volunteer, N. N. 834, is hornless, light fawn in color and was born August 7, 1914, by Sad-

berge Berserker out of Sadberge Scaup. In 1916 this buck was shown at the Royal Show at Manchester, at Richmond and at Hexham, taking first each time.

The doe is Sadberge Plover, A. N. 654, hornless, brown in color, and was born March 22, 1913, by Coxhill Noodle out of Sadberge Stonechat.

Nubian men will welcome the importation of these animals, which, it is hoped, will leave their impress on the goat stock of this country.

## HOW THE B. C. GOVERNMENT HELPS THE GOAT MAN.

For years past the Live Stock Branch of the Department of Agriculture has issued a small directory of breeders of both milk and Angora goats in British Columbia and adjoining States, and occasionally on the request of interested parties efforts have been made with the object of importing both kinds of stock. With the growing interest in goats, however—especially milk goats—it was felt that something more must be done, and in the Fall of 1916 a circular was sent to all known parties interested in goats, to the secretaries of the Farmers' Institutes, and to the press, in an



# How to fire charges of Giant Stumping Powder

**T**HE following suggestions regarding the most efficient methods of firing charges in stump blasting or other agricultural work with Giant Stumping Powder are given to readers of Fruit and Farm Magazine by the Giant Powder Co. of Canada, Ltd., Vancouver:

There are two effective methods of firing charges in blasting for all purposes. One by the use of fuse and caps, and the other by the use of electricity. Each of them has advantages and each is suited to certain conditions.

## Fuse and Cap Method of Firing

This is the method generally used, except in special conditions referred to hereafter. When there are comparatively few charges to fire and when the charges are more than twenty feet apart, the cap and fuse method is the best to use. Even when a considerable amount of blasting is to be done, the cap and fuse method is often adopted because of its simplicity and the small amount of apparatus required. With this method the only supplies needed in addition to the explosive itself are the fuse, blasting caps and a supply of matches.

## Method of Firing With Electricity

The electric method should always be used when it is necessary to fire several charges simultaneously. When the charges are close together the electrical method increases the efficiency of each charge. It is the cheaper method when there are many hundreds of blasts to fire and when the holes are more than three feet deep. In firing with electricity one must have an electric blasting machine, a leading wire and electric exploders.

When you are using the electric method instead of the fuse method of firing, the powder is set off by electric exploders instead of regular caps. Exploders are copper caps, like blasting caps, but with two insulated copper wires fixed in them so that a current from the electric blasting machine will explode them. They should be put into the sticks of powder exactly the same as blasting caps and fuse, except that there is no danger of setting fire to the powder from the wires as there is from the fuse, and the wires may be looped about the sticks, or bent as you wish, so long as the insulation is not broken.

The wires should be tied to the sticks the same as fuse, to prevent the caps from pulling out of the powder; but another good plan is to punch a hole straight through the centre of the stick to be primed, to double the wires six or eight inches from the cap end, pass the doubled end through the stick and loop them over one end. Then the cap can be inserted in a slanting hole made elsewhere in the side of the stick, and the primed stick can be lifted by the wires without pulling loose the explosive cap you have fixed.

Full directions for operating blasting machine will accompany it. The leading wire must be duplex, or if single you must double it. Be careful to make connections by wrapping the wires together tight, and for some distance. Don't loop them together.

All the wires mentioned are included among

regular blasting supplies, and may be bought with powder.

Giant Stumping Powder and Giant Powders 40%, 50% and 60% may be obtained everywhere in Western Canada. Your local dealer probably has them in stock. If you do not know where to get them, write direct to Giant Powder Co. of Canada, Ltd., at Vancouver, and they will see that your requirements are supplied promptly.

The Company will be glad to send to any reader on request a copy of its valuable book, described below. This book, in addition to giving full information on the best methods of stump blasting, also tells how to blast boulders and make roads and ditches, with Giant Powders, and how to prepare the beds for trees with Giant Stumping Powder.



## “Does the work cheaper, better”

is what W. H. Heideman writes. “A ton of ordinary dynamite had been used with very poor results,” he said, “and finally I got Giant Stumping Powder to test out. It gave entire satisfaction and did the best all-around work.”

Hundreds of land clearers in every part of British Columbia always tell their dealers or institutes to order Giant Stumping Powder for them. They have found that Giant, being made especially for use in this section, always gives better results than powders made to meet general conditions.

## Get our stump book free

It contains many illustrations showing you how to save explosives in loading stumps. It explains how you can get the stumps out cleaner and easier with Giant Stumping Powder. It also tells how to do other kinds of farm work with explosives. Mail the coupon and this valuable book will be sent free.

## Free Book Coupon

GIANT POWDER CO. Ltd.  
Vancouver, B.C.

Send me your book, “Better Farming with Giant Stumping Powder.” I am interested in the subjects which I have marked X:

- |                          |                    |
|--------------------------|--------------------|
| <input type="checkbox"/> | STUMP BLASTING     |
| <input type="checkbox"/> | BOULDER BLASTING   |
| <input type="checkbox"/> | ROAD MAKING        |
| <input type="checkbox"/> | TREE BED BLASTING  |
| <input type="checkbox"/> | DITCH BLASTING     |
| <input type="checkbox"/> | MINING — QUARRYING |

Name \_\_\_\_\_

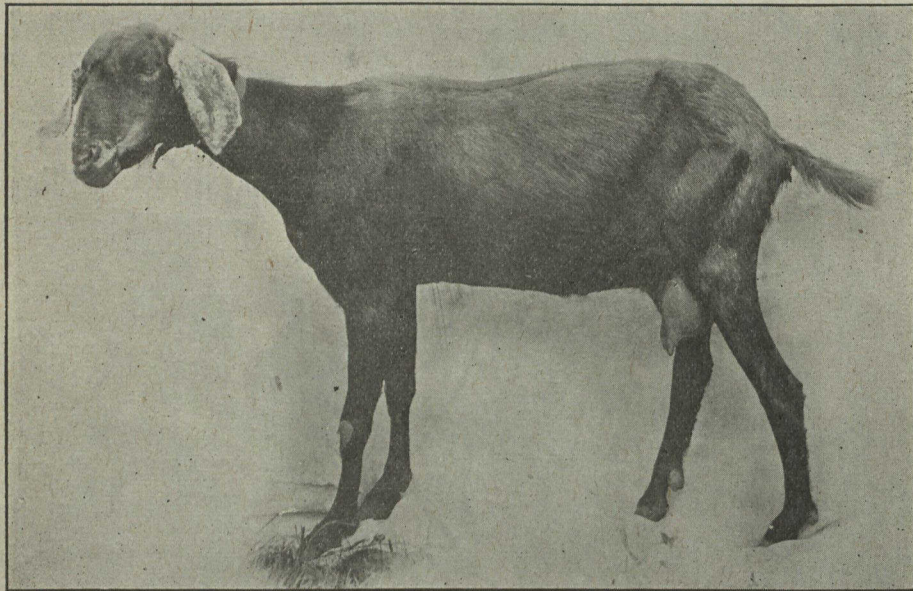
Address \_\_\_\_\_

# GIANT STUMPING POWDER



endeavor to find out what support would be available for the formation of an association of goat breeders. The response was very gratifying indeed, and on February 3, 1917, there was incorporated the B. C. Goat Breeders' Association—the first of its kind in Canada. This association was formed under the B. C. Agricultural Act, with the approval of the Department of

agriculture, Mr. W. E. Scott, kindly agreed to extend the department's scheme for the supplying of pure-bred sires to cover bucks, and sent a circular to all the Farmers' Institutes in the province notifying this. Under this scheme the Live Stock Branch of the department, upon receiving a properly signed requisition from a Farmers' Institute, will, if possible, buy



Mr. D. Mowat's fine Doe, Saddurge Plover, A. N. 654.

Agriculture of the province, and has now over 130 members. Application was formally made to the government for a grant to carry on the work of the association, and the request was very favorably considered, but owing to the financial stringency and the necessity for the strictest economy it was only possible to allow the association the sum of \$250. This, however, is considered quite a satisfactory amount to start with, and it is hoped to inaugurate useful work for the goat industry which will justify larger grants in the future.

In addition to the above, the deputy min-

a pure-bred buck, either Nubian, Saanen, Toggenburg or Angora, as requested, and ship it to the party wanting it. All transportation charges are paid by the Live Stock Branch, and the buyer is charged only the cost of the animal, which is payable in two installments—one on delivery and the other a year later, no interest being charged unless payments are overdue. This scheme has proved of immense benefit to the farmers in securing live stock of all kinds, and it is hoped that it will prove equally beneficial in the building-up of a large and profitable goat industry.

## HORTICULTURE.

### CODLING MOTH TRAP

A codling moth trap has been devised by E. H. Siegler, of the Bureau of Entomology, United States Department of Agriculture, to be used as a substitute for what is known as the "banding" method for destroying the codling moth. The banding method, in which a folded strip of burlap is wrapped around the tree trunk, demands a considerable amount of labor, and the new trap is designed to minimize this.

The trap affords an attractive place for the larvae to spin their cocoons, and it prevents the escape of the moth after they emerge from these. The trap, which consists of a burlap band covered by a strip of wire screen, is made as follows:

Strips of burlap 6 inches wide are folded into three thicknesses. The loose bark from the lower branches and trunk of the tree is removed and a strip of this burlap folded once around the trunk. It is held in place by large tacks, which should be driven in in such a way that the edge projects about one-fourth of an inch beyond the burlap. The burlap is then covered by black-painted wire screen with 12 meshes to the inch. This is cut into strips 6 inches wide and the edges of each strip are folded twice, allowing one-fourth of an inch to each fold. The strip of screen should be long enough to allow for an overlap of 3 to 4 inches when placed around the trunk of the tree. The wire screen is placed over the burlap band and tacked to the tree in such a way that both the upper and lower edges fit snugly against the bark.



## Synopsis of Coal Mining Regulations

COAL mining rights of the Dominion, in Manitoba, Saskatchewan and Alberta, the Yukon Territory, the North-West Territories and in a portion of the Province of British Columbia, may be leased for a term of 21 years, renewable for a further term of 21 years at an annual rental of \$1 an acre. Not more than 2,560 acres will be leased to one applicant.

Application for a lease may be made by the applicant in person to the Agent or Sub-Agent of the district in which the rights applied for are situated.

In surveyed territory the land must be described by sections, or legal subdivisions of sections, and in unsurveyed territory the tract applied for shall be staked out by the applicant himself.

Each application must be accompanied by a fee of \$5 which will be refunded if the rights applied for are not available, but not otherwise. A royalty shall be paid on the merchantable output of the mine at the rate of five cents per ton.

The person operating the mine shall furnish the Agent with sworn returns accounting for the full quantity of merchantable coal mined and pay the royalty thereon. If the coal mining rights are not being operated, such returns shall be furnished at least once a year.

The lease shall include the coal mining rights only, rescinded by Chap. 27 of 4-5 George V. assented to 13th June, 1914.

For full information application should be made to the Secretary of the Department of the Interior, Ottawa, or to any Agent or Sub-Agent of Dominion Lands.

W. W. CORY,

Deputy Minister of the Interior.

N.B.—Unauthorized publication of this advertisement will not be paid for.—83675.

The Dominion Telegraph and Wireless Institute is now in a position to accept pupils for a thorough course in Wireless Commercial and Railway Telegraphy at a reasonable rate. The most up-to-date Marconi equipment installed. Our instructors are masters in their profession. Our college is thorough in every respect. Young men and women take advantage of this great opportunity.

318 STANDARD BANK BUILDING.  
510 Hastings St. W. Vancouver, B. C.  
J. E. HUGHES, Manager.



The projecting tacks used to fasten the burlap to the tree prevent the wire pressing against the cloth. To make sure that no moths may escape through openings along the edges of the trap or along the flap, a thin coating of pitch tar may be used. This material, when heated, may be applied readily with a brush.

The traps may be placed on the tree at any time during the winter or in the spring not later than one month after the petals have dropped. As long as no openings occur in them they will require no further attention. The codling moth larvae, having completed its feeding in the fruit, seeks a place to spin its cocoon, and for this purpose generally crawls up or down a tree trunk. Meeting the trap, it enters through one of the openings in the mesh of the wire screen and spins its cocoon beneath the burlap band. When it emerges as a moth its larger size makes it unable to escape through the opening in the screen by which it entered the trap.

It must be clearly understood, however, that this trap is not a substitute for spraying, but merely an additional precaution. Nevertheless, some larvae will invariably escape, and the off-spring of these are largely responsible for the damage to the fruit crop. By the use of the codling moth trap, in addition to thorough spraying, the majority of the unpoisoned larvae may be captured and injury by later broods will be materially reduced.

THE  
**CLARKE & STUART  
CO., LIMITED**

COMMERCIAL STATIONERS  
TYPEWRITER SUPPLIES  
PRINTERS AND BOOKBINDERS  
SPECIAL BLANK BOOKS  
LOOSE LEAF DEVICES  
LAW FORMS

School Equipment

—and—

Educational Stationery

including Desks, Maps, Globes, Blackboards, Paint Boxes,  
Exercises, Scribblers, Kindergarten Material, Etc.

320 SEYMOUR STREET, CORNER CORDOVA.  
(Opposite C. P. R. Depot) Vancouver, B. C.



SIX TIMES THE  
LIGHT

ONE-THIRD THE  
COST

Six times the light from one-third the oil-sounds like a big claim, but we can prove it. It is a fact that a single Moore Light gas burner will produce six times as much light as the biggest Rochester base-burner kerosene lamp, and will do this for over sixty hours on one gallon of gasoline, while the kerosene lamp will burn only twenty hours on a gallon of kerosene. The coal oil lamp consumes three times as much oil as a Moore Light burner and only gives one-sixth the light. Now, you want the comfort and convenience of a better light without extra expense. A Moore gas plant will surely bring this. It will light three rooms brilliantly for what it now costs you to light one poorly. Trouble and bother disappear as soon as you discard the kerosene lamp and put in a gas light plant. Do you know a woman who washes and fills six kerosene lamps four times a week handles 1248 lamps a year? This takes her at least two hours a week—yes, and this means it wastes two whole weeks a year for her which are saved with a Moore gas plant. The danger from the use of coal oil lamps is so great that we find in a recent issue of "Cassier's Magazine," Mr. Washington Devereux, Inspector of the Philadelphia Fire Underwriters, relates that the Grocers Exchange of London, England, has offered a prize of \$600, which for the past seven years has gone begging. It is to go to the inventor of the best constructed safety wick lamp in which coal oil can be burned, the chief merit of which must be absolute safety. The reason for this prize is the appalling number of dangerous accidents and fires caused by the upsetting of coal oil lamps. The use of gas systems such as Moore Light is not in any way hazardous, and the notion that any other form has less risks is dispelled in the fact that the Underwriters accept the Moore Light.

Ask for Catalogue

**R. M. MOORE & CO., LTD.**

Vancouver, B. C.

A 'Moore' Lighting System  
for Your House Costs Less  
Than a Kitchen  
Range.

RECOGNIZED AS THE  
WORLD'S BEST  
LIGHT.

**SMALL FRUITS**

Did you forget to cut out and burn the blackberry and raspberry canes that have fruited? Better now than never!

It's late to bag grapes, but paper bags slipped over choice clusters may save them from the birds.

Potted strawberry plants may be set early this month. Nurserymen sell them. Keep off all runners, hoe and cultivate them till the ground freezes, then mulch—and next June you should have a moderate crop of good berries. But, remember, potted plants are rather expensive, and are merely a makeshift for the spring-set bed.

**CANADIAN  
EXPLOSIVES  
LIMITED**

**Head Western Office:**  
Victoria, B. C.

**District Offices:**  
Vancouver, B. C. Pr. Rupert, E. C.  
Edmonton, Al.

EVERYTHING IN THE  
EXPLOSIVE LINE

**Have YOU Tried  
Our  
Low Freezing  
Stumping Powder**

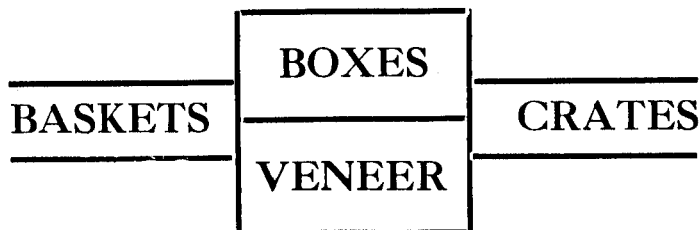
CORRESPONDENCE SOLICITED.  
**Write for Pamphlet**

**THE ORCHARD**

Good is an orchard, very good  
In the yellowing time of fruit.  
Very good in the grass to lie  
And see the network against the sky,  
A living lace of blue and green  
And boughs that let the gold between.

**British Columbia  
Manufacturing Company, Ltd.**

Manufacturers of



If you wish to eliminate that sawdust nuisance  
use our Standard Rotary Cut Berry Crates.

No order too large, no order too small to receive our prompt and careful attention. Write for Prices.

**B. C. Manufacturing Co., Ltd.**  
NEW WESTMINSTER, B. C.

Cheer up! Storms make trees take deeper root.

The orchard editor is a firm believer in bolster springs on wagons that haul fruit.

Never shake off apples if you can help it. They can hardly strike so that they'll not be the worse for it.

Some folks wait till frost gives them a good big hunch before they begin to think of picking apples.

Dead-ripe peaches at picking time may mean mush at delivering time. For shipment pick them when they are still a little hard.

The box makers have to hurry for dear life to get out the orders of the "last minute" orchardist. Send in your order early. Have pity on the box maker—and a little bit on yourself.

Do you know what the timber in your woodlot is worth? Thousands of trees are sold every year for a fraction of their real

value. If you are in doubt, write to the Government Department of Forestry.

A first class orchardist must always be on the alert. Trees are harder to raise than children! Eternal vigilance must be his motto, or fungi and frost reap the profit and he has the experience.

**FOR SALE**

Marshall Strawberry,  
Magoon,  
Everbearing Progressive,  
**\$1.00 for 100**  
All this year's buds.

**D. H. NELSON**  
Upland Fruit Farm,  
Abbotsford, B. C.

**PACIFIC BOX**

COMPANY LIMITED

Phones S. 8890-8891. North End Cambie St. Bridge

VANCOUVER, B. C.

Manufacturers of  
Pails, Kits, Tubs  
and Buckets.

Berry Baskets  
and Crates.  
All Kinds of Fruit  
Boxes.

**DAIRY NOTES**

Too little attention is paid to the subject of scientific hand milking. A poor milker may easily do enough harm in a herd of cows in one year to equal in loss the amount of his wages. In other words, it would pay to hand him his year's salary in a lump sum and "buy him off" instead of allowing him to milk poorly ten or twelve cows each night and morning. Such a milker, if he is rough, cross, noisy, unclean, irregular or imperfect in his milking, may quickly or gradually dry off the cows.

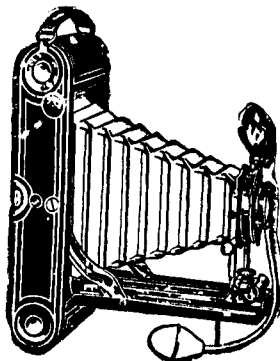
We know of one case in which a beginner, in two months, completely dried off the milk secretion in the cow upon which he was allowed to practise. In another case a new milker by his roughness and harshness so reduced the milk flow that the owner had to fire him in self-defence. It probably is a fact that in every herd where the milk is not weighed night and morning and close tally kept, one or another of the milkers is doing indifferent or disastrous work. In Great Britain, girls who are taking up farm work are learning to milk by practising upon dummy cows until they become sufficiently expert safely to tackle the living animal. It would be well were our boys and would-be hired hands put through such a course of training to make them proficient without spoiling or injuring a cow or two in the process.

Seeking a cause for the many mysterious cases of intermittent garget experienced in some dairies, it must be suspected that the milker often is to blame. We think that incomplete milking is a possible cause, but one that is little suspected. The way a milker feels at milking time will in many instances determine the amount of milk he obtains. If he quickly extracts it all, it will be well for the cow and for the employer. If he is in a hurry, indifferent, tired or feeling sick, and does not strip the cow clean, slight, unexplained garget may result. If such work continues, the cow will soon show a serious shrink in milk, prove profitless or dry off entirely and have to be discarded.

It would be a good plan for every dairyman, especially in herds where slight cases of garget are prevalent, to have an expert strip the cows ten minutes after the milkers have finished. By this means some very rich milk will be obtained for us on the farmer's table and at the same time a check will be kept on the work of each milker, and some cases of garget possibly prevented. Knowing that the cows are going to be stripped the milker will, if conscientious and anxious to please, milk just as well and completely as he knows how, and so all concerned will be benefited. If he is the other sort of worker he will be detected and discharged before he has done permanent damage.

Fast milking pays. The man who can make the milk fairly boil in the pail and raise a lot of foam, usually is getting the maximum flow of milk from each cow; while the slow milker, no matter how particular and faithful he may be, often fails to get all that the cow would let down to the fast milking expert. A change of milkers may have a good or bad effect. In one experiment, two equally proficient milkers changed cows and at once there was an increase in milk yield from each lot of cows. A change of milkers, however, more commonly results in a decrease in milk production, and this sometimes is so noticeable that the accustomed milker has to resume his work with affected cows.

**"THE KODAK HOUSE"**



—keeps "open house" for the Amateur Photographer. It is always ready with photographic advice and help.

Also ready to do **Developing, Printing and Finishing** of your "Snapshots."

We **Enlarge**, too, and get excellent results.

Supplies a-plenty, too—Kodaks, Films, Printing Papers, Printing Frames, Tripods, Developers, everything you can think of in the photographic line.

Mail Orders Solicited. Write Us. **"THE KODAK HOUSE"**

**BISHOP & CHRISTIE**  
421 Granville Street  
Vancouver, B. C.

TO THE  
**FRUIT GROWER**  
AND  
**FRUIT PACKER**

WHY NOT HAVE A  
Specially Designed  
Highly Colored Label

and familiarize your own brand of goods?

The cost is little compared to the advantage such an outlay gives. If on box, your brand is advertising itself from the time your goods leave your packing house until reaching the consumer, if on can it enables the wholesaler and retailer to make such a display of your goods as to command attention.

We make these kinds of labels.

**B.C. PRINTING & LITHO.**  
LIMITED

Smythe and Homer Streets  
VANCOUVER, B. C.

GET IT AT



PHONE SEYMOUR 8000

**"Pride of Vancouver"**  
**FLOUR**

Introduces "Good Baking" Into Your Home

OUR OTHER "PRIDE OF VANCOUVER" PRODUCTS

ARE EQUALLY AS GOOD—TRY THEM—

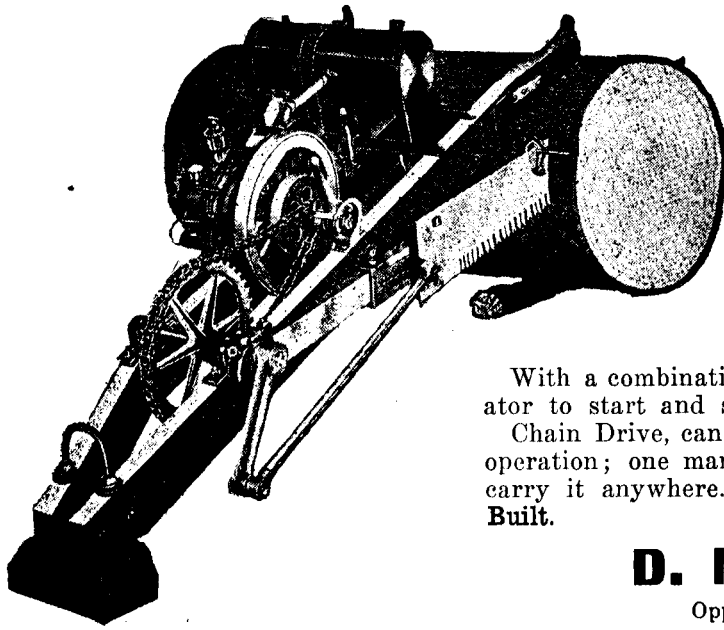
**ROLLED OATS**      **EVAPORATED MILK**  
**COCOA** and **FANCY BISCUITS**

**Woodward Department Stores, Limited**

**VANCOUVER, B. C.**

WRITE FOR A COPY OF THE "G. I. A. W. NEWS."





**Get  
Next  
to This!**

**TWENTY  
CORDS  
IN TEN  
HOURS!**

**Wee-MacGregor**  
LIGHT WEIGHT  
**PORTABLE DRAG SAW**  
4 H. P. ENGINE

**IT IS THE ONLY MACHINE**

With a combination Free Engine and Safety Clutch. This allows the operator to start and stop his saw without stopping his engine.

Chain Drive, can be used in any position. Bad weather does not hinder operation; one man operates it and moves in on the log; two men can carry it anywhere. **Simplest, strongest, Lightest and Fastest Drag Saw Built.**

Send for full information and prices to

**D. MacGREGOR,** 104 MAIN STREET.  
VANCOUVER, B. C.

Opposite Grand Trunk Pacific Passenger Entrance

## Among Our Advertisers

### A Ramble Through The Vancouver Exhibition

The Pacific Box Company, Ltd., had a fine display of pails, kits, tubs and buckets, a new line which they are manufacturing with great success.

Messrs. Hamilton-Carhart Cotton Mills Ltd., of the eighth floor, World building, had a novel booth fitted up with Carhartoscope pictures showing overalls being used by all branches of trades, including from those worn by the mechanic to the latest creations for the fair sex, and offered prizes of overalls to those guessing the number of times Carhart's sign appeared in the pictures.

The Sprott-Shaw Vancouver Business Institute, Ltd., booth was prettily decorated and showed an enlarged photograph, taking in the professors and pupils of the entire college, together with certificates and testimonials, while the president and principal and members of the staff were present to give any information on the courses of instruction.

Messrs. Begg Motor Company, Ltd., had a very comprehensive showing of various makes of automobiles and trucks, which was the centre of very great attraction. Included in the showing were the following: Cadillac, Hudson, Chalmers, Dodge Bros., Chevrolet, and Republic trucks, all of which this company has the agency for. The name of the Begg Motor Company, Ltd., is a household word in British Columbia, they having garages and workshops at Georgia Street West, Vancouver; Victoria and New Westminster. The decoration scheme carried out on their booth was very handsome, and a large number of the staff of salesmen were in attendance to give demonstrations.

The Brackman-Kerr Milling Company Ltd., had a booth where they showed their products, viz., the well-known B. & K. Rolled Oats, B. & K. Extra Cream Rolled Oats, B. & K. Wheat Flakes and B. & K. Rolled Wheat. Also that fine product of Canadian grain, "Purity Flour," which is

being distributed and consumed by the bread eaters of this province in greatly increasing quantities.

The Pacific Stove & Furnace Company, 856 Granville Street, had a fine showing of "Enterprise" ranges and furnaces, and to all appearances were kept remarkably busy answering enquiries and handing out literature descriptive of these popular products.

Messrs. Langley & Hazlett, Ltd., 525 Seymour Street, Vancouver, had a separate booth erected in the Exhibition Grounds, where they demonstrated the famous Delco Lighting System, the booth being lit by the Delco plant, while it also demonstrated how its power was also capable of working an ordinary sewing machine and a De Lavel cream separator. This exhibit was the centre of great attraction, and we feel sure will bring many orders from the farming community for such a brilliant, convenient, safe and economical light.

Messrs. Brand & Company, florists and seedsmen, 723 Robson Street, Vancouver, had a beautiful showing of choice plants and blooms, and secured second prize for their wreath, second for their cross, first for bride's bouquet, and first for bridesmaid's bouquet.

The Success Business College, corner of Tenth Avenue and Main Street, Vancouver, had a handsomely decorated booth, presided over by E. Scott Eaton, B.A., principal, and his staff, where they advertised the merits of their college by means of literature and a display of photographs of their successful pupils.

Messrs. Wood, Vallance & Leggatt, Ltd., had a good display of stoves and ranges, making a specialty of the "Moffat," for which they claim to a superlative degree an economic usefulness, and where pamphlets descriptive of these goods were distributed to visitors.

Messrs. Ritchie, florists and seedsmen, 840 Granville Street, Vancouver, had a

non-competitive display of cut blooms, which for quality and profusion of color made a fine showing.

The J. Leckie Company, Ltd., at their booth showed boots for the rancher, logger, lumberman, prospector, laborer, man-about-town, and their sons. Leckie's shoes certainly carry the quality for making and endurance and well carry out this firm's slogan, "Made in the West for Western Conditions."

Messrs. Brown Bros. & Co. had a very fine showing of blooms and plants and were successful in securing first prize for cross and wreaths, and second for bride's bouquet and second for bridesmaid's bouquet, whilst their Union Jack won first place.

**EMPRESS MANUFACTURING CO., LTD.,  
MAKES SPLENDID SHOWING OF  
PURE FRUITS PRODUCTS  
AT THE VANCOUVER  
EXHIBITION.**

The exhibit of the Empress Manufacturing Company portrayed some of the most popular of the delicacies for which the Empress Company are justly famous from the Pacific to the Atlantic, and included Empress jams and marmalades of fresh fruit and pure sugar only, and manufactured for the most part of products grown in the famous Vancouver Island and Fraser Valley districts, and then shipped direct to the factory, thus saving the crushing and spoiling of fruit packed and shipped wholesale from a long distance. Also included in this very fine exhibit were Empress Extracts, dessert jellies, coffee, tea, baking powder, spices and pickles.

The Empress Manufacturing Company lay particular stress on the twin subjects, "Freshness" and "Purity," in connection with Empress brands. Not only are such virtues evidenced in the preparation of these high-class products, but throughout the whole range of manufactures these twin points are insisted upon and achieved in the Empress factories.

# Evolution of Agriculture

By L. S. Klinck, Dean of Agriculture University of British Columbia.

## American Agriculture

The middle of the last century witnessed the beginning of a phenomenal agricultural development in the United States. New settlers poured into the prairie states of the Middle West. Here they found lands low in price, easily brought under cultivation and fertile in the extreme. In order to facilitate the breaking of these broad acres and bring them quickly and cheaply under cultivation, existing tillage implements were improved, and many new ones were invented. An army of inventors also set to work during this period to develop and perfect harvesting machinery. After years of patient experimentation, they succeeded in evolving a machine which enabled the grower materially to increase the per capita production of wheat at a decidedly lower cost per bushel. The invention of the roller process of flour-making resulted in the rapid opening up of the great spring wheat states, and Minneapolis became the centre of the flour milling industry. To render possible the marketing of the immense quantities of grain produced on these virgin soils, transportation facilities were greatly improved. The elevator system of storage was introduced, and as the export trade increased by leaps and bounds an attempt was made to standardize grains so as to facilitate delivery and sale.

The wonderful impetus given to crop production was accompanied by a corresponding activity in the live-stock industry.

The result of this new interest in agriculture was that an increasingly insistent demand was made for the establishment of agricultural colleges and experiment stations for the conducting of teaching and research work in all matters pertaining to soils, crops, horticulture and live-stock.

### Agricultural Education.

When the first agricultural colleges were established, the majority of farmers laughed at the idea of attempting to teach boys how to farm by sending them to college. They persisted in calling the experimental farm in connection with the college a "Model" farm, and always spelled it with a capital "M." They regarded it as an extravagant public institution to be visited as a novelty, but not to be consulted in times of difficulty. Of the many adverse criticisms directed against these institutions one of the most persistent was that they did not pay dividends on the capital invested. These critics forgot, or else never knew, that colleges of agriculture are not established for the purpose of making money directly; but they are, or should be, concerned primarily with research, teaching and extension.

Nor was the idea of agricultural education received more favorably by the university authorities than by the farming population in general. The attitude of university men coincided with that of the conservative ruralist who pithily expressed his idea of the would-be agriculturist

in the epithet 'Book-farmer.' The farm boy who could not be dissuaded from gaining the best scientific training in agriculture available, found, upon entering the University, that he was generally ignored and rarely more than tolerated. Even those of his fellow students who possessed no educational qualifications or natural attainments superior to his own, and who not infrequently came from the same rural school, now considered themselves on a higher social and intellectual plane because they were preparing themselves for one of the so-called learned professions.

Fortunately, a radical change in viewpoint is taking place among educationists as well as among farmers, and we are coming to recognize the fact that technical education and the older literary conception of what constituted an education are not mutually antagonistic. The one no longer constitutes a challenge to the other. Each has elements of strength. Each has demonstrated its fitness for preparing men for more efficient service. But the most important point to remember is that it is possible to conserve and articulate the best in each system into a still more effective system, and that, what is possibly more important still after right educational relationships have been established and maintained, is to make ample provision for the extension of this more highly perfected system as changing conditions warrant.

The growth and development of agricul-

# Clothing Satisfaction

We are able to fit any size or shape because we have all sizes and models in stock. We fit you as well as the tailor because our suits are made by master craftsmen and finished by our own tailors. You get the effect of custom-made clothes at half the price.

If you are thinking of a new suit, we'll be glad to see you. We did our thinking long ago when we bought suits that could not be obtained today in the same quality at double the price we paid. You benefit.

Suits, \$15, \$18, \$20, \$25, \$30, \$35, \$40

## MEN'S HATS

We have just received a large shipment of Stetson Hats in the new Fall styles. Let us show you how a new snappy hat will add to your appearance.

Stetsons, \$5.00 and \$6.00      Borsalinos, \$5.00 and \$6.00      Walthausen's, \$3.00 and \$4.00.

## Bright, New Neckwear.

Neckties from New York in the latest ideas for smart dressers.  
Prices, 50c, 75c, 85c, \$1.00 and \$1.50.

# Wm. DICK, Limited

33 and 47-49 Hastings Street West

Vancouver, B. C.

tural education in Canada during the past decade is nothing short of phenomenal. From one agricultural college in 1904, we now have seven, not including Prince of Wales College, Charlottetown, where agriculture has been taught for a number of years.

Today the entrance requirements are much more difficult. Four colleges now require matriculation, or its equivalent, of all students who wish to proceed to a degree, and in at least four of the colleges a four-year course is offered instead of a three-year one as previously obtained.

With regard to the courses, and without going into detail, I may say that the impression still prevails in some quarters that agriculture is a 'one-man' subject. Many people evidently are not aware that in the larger agricultural colleges more than one hundred courses are offered. Cornell University offered three courses in agriculture in 1890, 37 in 1900; 169 in 1910 and 234 in 1914. Naturally the division of agricultural thought and work has been carried further in the agricultural colleges than elsewhere. The curriculum is being divided into subjects and groups of subjects to an extent which, perhaps even ten years ago, would have been thought impracticable. This dividing and sub-dividing will, if I mistake not, continue, because specialization is absolutely essential to progress.

Of course specialization carried to such a degree calls for co-ordination of effort on the part of the different investigators, otherwise the largest benefits from the researches of each cannot accrue.

You will have observed that I am taking it for granted that we all appreciate the fact that the subjects to which I have just referred are directly dependent upon the

## Every Farmer Needs Bale Ties

We are manufacturing Crosshead Bale-Ties and Single-Loop Bale-Ties. Every farmer should use them; they save time and labor.



"OUR STANDARD 9 1-2 14 FT. GAUGE CROSSHEAD DIMENSION"

Cross-head Bale-Ties, sold in bundles of 250, all lengths and gauges, manufactured from a very superior quality of American Bessemer steel wire.

We also manufacture Single-Loop Bale-Ties; put up 250 in bundle and sold by weight. This tie costs but very little, if any, above what you would pay for wire in the coil. They are easily handled from the bundle, and every tie has a perfect loop, and the wire is of the same high quality as used in our Cross-Head Tie. They can be used on any kind of press, for baling any fibrous material, or bundling work.

These Ties can be secured through any of the regular jobbers.

### Morrison Steel and Wire Co., Ltd.

831 POWELL ST., VANCOUVER, B. C.

## Business Preparedness

During the past three years over 30,000 men have left British Columbia for "Overseas." With the revival of business now taking place it is impossible for business men to secure trained office help.

### "Do Your Bit"

By training yourself to take the place in the office of a man "Overseas."

**A NEW TERM OPENS EVERY MONDAY**

Tuition for Cash and on Credit

Write us for free information **NOW.**

### Success Business College, Ltd.

E. Scott Eaton, B.A., Principal

Corner Tenth and Main

Vancouver, B. C.



sciences of geology, chemistry, physics, biology and bacteriology. Without a working knowledge of the principles underlying these sciences, and without a fairly good grounding in mathematics, economics and English, no student possesses the necessary educational equipment to enable him to profit by the instruction offered in the four-year course.

Back of successful extension work, however, and underlying all effective teaching, there must exist that basic division of all permanently successful university work—research. Without scientific investigation it would be impossible long to continue either teaching or extension work without their degenerating into mere channels for the dissemination of information gained only as the result of practical experience. Practically all our present knowledge in matters pertaining to agriculture has been evolved, either as the outcome of the slowly-accumulated experience of practical men, or as the direct result of original investigation. It is only when we combine science with practice that we lay the sure foundation for successful research.

I cannot refrain from speaking strongly on this question in its relation to agriculture, not only because of its importance, but because it is so generally misunderstood by the very people who have profited most by it. I grant you that it is not spectacular, that it calls for time, money and the most highly trained men; but let me emphasize this also, that the more progress we make the more essential it becomes that we have fundamental knowledge; and that the men who have contributed largely to that knowledge are men who have labored in the fields of pure science, and who little dreamed that the application of the principles they discovered would ever make any contribution to the advancement of scientific agriculture. Progress can only be made by investigating the uncertainties, not the certainties.

This brings me to my last point in our consideration of the evolution of agricultural education—training for leadership. More and more we are coming to realize that leadership is the determining factor in rural progress. I take it, therefore, that it is one of the functions of the college of agriculture to train the necessary leaders. In order successfully to do this, the courses offered must be cultural as well as scientific and practical. The leaders so urgently needed cannot best be developed as the result of spending four years in the university in the study of agriculture and the cognate sciences alone. Agriculture and agricultural science must be stressed; but the essential elements in a liberal education cannot safely be ignored. The student who spends four years in acquiring a liberal education, and in developing skill in imparting the facts learned, is the one who should be best equipped to render the most acceptable service to the community.

Many public men, whose knowledge of rural people is more general than specific, have not yet learned that country people will no longer respond to untrained leaders. Men and women who dwell in the country demand that the graduate of the agricultural college have not only a sound, practical and scientific knowledge of matters pertaining to his specialty, but they are also coming to insist upon a measure of culture, a capacity for imparting knowledge and some aptitude and training for leadership which heretofore they have not sufficiently valued.

## Farmers OF BRITISH COLUMBIA

We are open to buy Hay, Grain, Oats, Potatoes, Onions, Fruits, Honey and all farm produce in carload lots or less.

We have for sale sacks of all descriptions in large and small quantities, also twine.

We have to offer splendid storage facilities at the Torry Storage Company, 1230 Hamilton Street, Vancouver, with a capacity of 100 carloads. Enquiries solicited.

**J. L. Torry & Co.**

606 YORKSHIRE BUILDING.

VANCOUVER, B. C.

### Conclusion.

I have dwelt much more fully with agricultural education than its relative importance warrants. Other phases of the evolution of agriculture must, perforce, suffer accordingly; but to the comprehending mind what vast fields are opened up by the mention of such far-reaching words as 'conservation,' 'reclamation,' 'organization,' 'co-operation' and 'breeding.' Even after their scope has been restricted to their bearing on the evolution of agriculture, I am sure you will breathe more freely when I state that I shall not attempt here to outline their contribution to the subject under consideration.

Agriculture is still in the process of evolution. Many of the operations in connection with its practice are, as they were in the days of Hartlib, "mysteries." To quote once more from Mitchell, "They are, however, lively mysteries, mysteries that pique and tempt and reward endeavor. They un-

fold with an appetizing delay. If our plummet lines do not reach the bottom, it is only because they are too short; but they are growing longer. Every year a new secret is laid bare, which, in the first flush of triumph seems a crowning development, whereas it presently appears that we have only opened a new door upon some further labyrinth."

*A Breeder's Card this size  
will cost only \$1.25 per  
month. Advertise the stock  
you may wish to sell.*

The world-famous Carhartt Overall Factory, is getting out something special for Farmers. To be sure that we can send you this, send us your name and address to

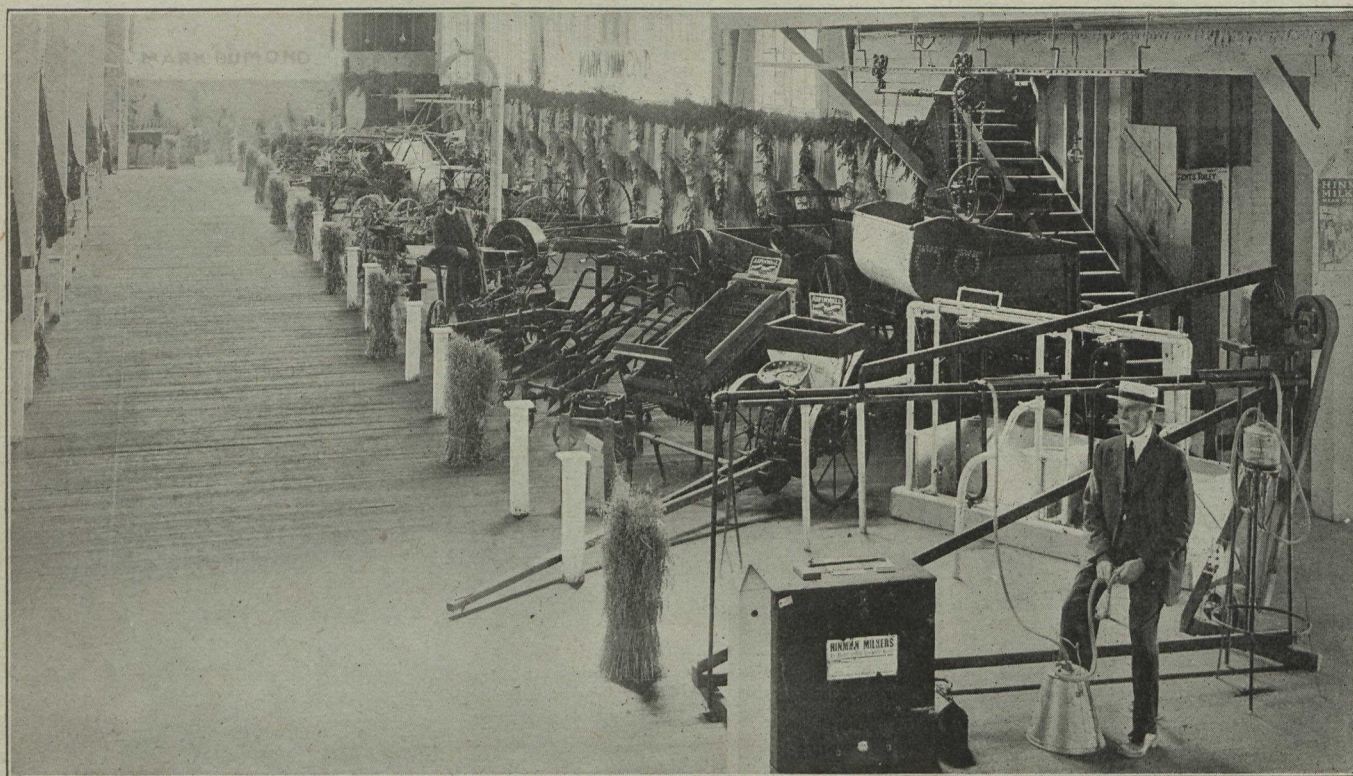
## Hamilton - Carhartt Cotton Mills, Ltd.

VANCOUVER, B. C.

Entire Eighth Floor, World, Building, Vancouver, B. C.



## Mark Dumond's Display of Farm Machinery and Implements at Vancouver Exhibition---Finest Ever Exhibited on Pacific Coast



Mark Dumond's Display, Vancouver Exhibition, 1917.

Never has a finer showing of farm machinery and implements been made in British Columbia than that shown at the Vancouver Exhibition this year by Messrs. Mark Dumond, 1048 Main Street Vancouver, included in which were tractors and tractor ploughs made by the International Harvester Company, McCormick and Deering binders, disc harrows, seed drills, Eureka seeders and Oliver ploughs.

A demonstration was given on the Exhibition Grounds of the capabilities of the

tractor plough manufactured by the International Harvester Company, and it was amply illustrated what a powerful machine it is, notwithstanding the fact that the ground on which the trial took place was practically hardpan, containing very large boulders, the ground over which the plough traveled was thrown up leaving nice, straight and even furrows.

After the demonstration by the professional mechanic a farmer present on the ground took the seat, and notwithstanding

that it was his first time to drive a tractor he did splendid work, thus demonstrating how simple a machine it is to operate.

There is no doubt that when this tractor becomes better known to our B. C. farmers, or at least those holding large tracts of land, the demand will be increasing, seeing what a saving they create, both in time and labor.

It is quite feasible that this machine be run through the night by the aid of powerful head lamps.

## Fattening Pigs

Finish Them With the Self-Feeder and Save Grain—Fat Must be Put on Rapidly.

There is no advantage in skimping the pig when it comes time to fatten him. During the growing period of his life, pastures with little grain were in order, for scale and constitution were the main objects to be obtained. The last few weeks before butchering the idea is to lay on a good covering of fat, to increase the proportion of high-priced lard, and to add tenderness and palatability to the meat. A fat hog sells to much better advantage on the market for these very reasons.

To add this fat rapidly and most economically, we must feed an abundance of grain. The self-feeder is simply a device to keep before the pigs a constant supply of feed, in order that they may eat of such feeds in such quantities as they desire.

### Results Obtained With a Self-Feeder.

A brief resume of results obtained by experiments with over 275 hogs, part of them self-fed and the balance hand-fed in the best possible manner, shows:

First, that in comparison with the hand-fed pigs, the self-fed pigs ate grain 19 per cent more rapidly;

Second, that they gained weight 28 per cent more rapidly;

And last, that they consumed only 92 per cent as much grain in gaining 100 pounds.

This shows three very definite advantages in the use of the self-feeder. Pigs fed in this manner will eat more grain per day than under any other method of feeding. This maximum consumption is not wasteful of grain; in fact it saves grain,

for an increase of 19 per cent in the rate of eating caused an increase of 28 per cent in the rate of gaining. The object in feeding is to put on fat as rapidly and with as little grain as possible. A method which will increase the rate of gaining 28 per cent and at the same time decrease by 8 per cent the grain required to produce a unit of gain is certainly worthy of consideration.

### How to Use Self-Feeder.

Fill part of the self-feeder with corn or similar carbonaceous feed and the other part with protein supplement; also take care to see that it is kept filled. Induce well-grown shoats to eat when and what they choose, and save grain, save labor, and get your hogs to market at the earliest possible date.



# Teaching Farming at the University

An Outline of the Experimental Work Being Done at Point Grey

(By Prof. Clement.)

The College of Agriculture is an integral part of the Provincial University. Its class rooms and laboratories are located on the same campus as are those of the other faculties of the university. During the coming year lectures in agriculture will be given in the temporary quarters occupied by the university at the corner of Tenth Avenue and Willow Street, Vancouver. Laboratory work will be given in the fields, gardens and live stock stables at the permanent site, Point Grey.

For the past three years land-clearing operations and field experimental work have been proceeding at the permanent site, Point Grey. One hundred acres are now under crop.

A substantial two-story horticultural storage barn has just been completed, and plans are being arranged for the erection of additional buildings and for the purchase of live stock and general farm equipment.

Two distinct lines of study are offered, as follows:

(1) A four-year course leading to the degree of B. S. A.

(2) A series of short courses.

Before entering upon the course leading to the degree of B. S. A. students in agriculture are required to have junior matriculation standing or its equivalent. This degree is granted only after the successful completion of four years of lecture and laboratory work. The course is planned for students who wish to obtain a practical and scientific knowledge of agriculture, either as a basis for demonstration and teaching or as an aid to success in farm management.

The first two years of work are devoted to acquiring a knowledge of the basic sciences upon which agriculture rests, in addition to the student's knowledge of mathematics and language, and in laying a foundation for more advanced studies in practical agriculture. The third and fourth years are devoted almost wholly to courses in applied agriculture.

Except under special circumstances, students will not be eligible for registration who have not attained the age of seventeen. Specialization begins at the commencement of the third year. Students who have not had at least one full season's practical farm experience will be required to obtain this preliminary training before registering for the third year.

The short courses are planned for those men and women who are unable to take advantage of the longer course, but who desire to extend their knowledge of agriculture in one or more of those branches in which they are particularly interested. The work throughout is intensely practical. Lectures are reduced to a minimum. Illustrative material and periods devoted to demonstration and judging work are strong features of the courses. No entrance examination is required, nor are students asked to write an examination at the conclusion of the course.

The first short course to be offered this fall will be given in Horticulture, and will extend from November 20th to November 30th, inclusive. The time in this course will be devoted entirely to Commercial Fruit Growing, Vegetable Gardening and related subjects. If interest warrants it a special course of one week will be offered in Amateur Vegetable Gardening, Landscape Gardening and Floriculture.

The second course will be a combined one in Agronomy and Animal Husbandry and will be arranged to meet the needs of the general farmer. Under Agronomy, soils and their management, field crops and their cultural requirements will be studied. Under Animal Husbandry, special attention will be given to the judging of all classes of live stock and to their care, feeding, breeding and management.

In addition to the above, special courses will be arranged for returned men who are desirous of taking up farming, and a two weeks' course in Poultry Husbandry and Apiculture will be announced if negotiations now under way result in satisfactory arrangements being made.

For the past two years a course on "The Scientific Basis of Agriculture" has been

given as an elective to junior and senior students in Arts. The first short course to be given under the auspices of the university was offered last February and proved a decided success. During the past six months the members of the faculty of agriculture have been assisting the Provincial Department of Agriculture in numerous institutes and short courses in different parts of the province. They have also rendered valuable assistance to the Department of Education in connection with the Summer Schools for Teachers. With this foundation laid at the university and at different important centres in the province, the faculty of agriculture is looking forward to a steadily growing interest in all matters pertaining to the advancement of agriculture in the province of British Columbia.

## Chas. P. Coles Co., Ltd. HAY AND GRAIN DEALERS

Exporters and importers of all kinds of grain. Let us know what you have and we will make you a bid.

402 Pender Street West

VANCOUVER, B. C.

Phone Seymour 3242



British Columbia Distributors

CADILLAC  
HUDSON  
CHALMERS  
DODGE Bros.  
CHEVROLET

REPUBLIC TRUCKS  
3-4 ton  
1 ton  
1 1-2 ton  
2 ton  
3 1-2 ton

Descriptive catalogues, prices and further information on application.

**Begg Motor Company Limited**

Vancouver

Victoria

New Westminster

## BRITISH COLUMBIA FRUIT and FARM MAGAZINE

A Monthly Journal Devoted to the Interests  
of the Man on the Land

Subscription: In advance, \$1.00; in arrears,  
\$1.50; single copies, 15c.

Copy for advertisements must be in hand by  
the 15th of the month preceding publi-  
cation.

All letters and communications should be  
addressed to, and remittances made in  
favor of

FRUIT AND FARM CO., LTD.  
615 Yorkshire Bldg. Vancouver, B. C.  
Seymour 2018

Vol. X. SEPTEMBER No. 9

### EDITORIAL

#### The Useful Goat.

Until recently the goat in this country was regarded as more ornamental than useful—something for the children to play with, but with no niche to fill in the economic life of the country.

But in two or three years it has come into its own—so much so that at the recent Vancouver exhibition a building was devoted to a goat exhibit. One of the breeders assured us he could average three quarts a day from his does, and so excellent was the milk and so superior was it regarded by his customers that he had no difficulty in selling all his herd produced, at the door, for 25 cents a quart.

He estimates that these goats do not cost him a dollar apiece per month to rear, while their milk is peculiarly nutritious.

#### A Marketing Problem.

Bulletins issued by the Department of Agriculture at Ottawa indicate that the exhortation to produce has not fallen upon deaf ears and that in some lines of produce the acreage and yield promises to be exceptional. This is particularly true of potatoes, which this year will run into an enormous acreage, without taking into consideration the intensive cultivation of backyards, gardens and vacant plots, which will, in the aggregate, mount into many thousands of acres.

This fact will add further anxiety to the marketing problem this year, the task of the grower being to determine how far the extra demand occasioned by the war will offset the big increase in the yield. Added to this is the fact that, so far as this province is concerned, dry weather in the interior has materially reduced the prospects of even an average yield. Commissioner Abbott in his current market reports counsels farmers to hold for a high price, and predicts that the

crop will not be sufficiently bountiful to affect a high figure for this season's yield.

It is well in this connection to remember that the food controller may take action to commandeer both this and the apple crop. It would seem to be the duty of the nation, if it urges its citizens to increase the product of the soil, to take steps to see that the very abundance thus created is not made an instrument in the hands of the middleman to "bear" the profits of the grower.

We think it very probable that an announcement on this matter may be soon expected from Mr. Hanna.

#### The Irrigation Problem.

In another column in this issue an Okanagan farmer states the situation with respect to irrigation in that valley. It is a very grave condition which he discusses, and unfortunately one for which there seems to be no immediate available remedy.

The government, in this instance, finds itself in much the same situation that it has been placed in with respect to roads in the case of other settlers. In various parts of this province settlers have been brought in and settled on lands exploited by clever real estate operators. After a year or two the primitive roads provided by the land company have fallen into disrepair and the government has been compelled to build roads, bridges, school houses, etc., in districts where the settlement did not warrant large expenditures.

In the dry districts the situation is somewhat similar. Here land companies constructed reservoirs and flumes, sold the land, guaranteed ample water, and, after their holdings had all been sold or the boom had collapsed, they left the district behind them with a large-sized problem. Frost and poor workmanship played havoc with the flumes where the needs of the district did not outrun their capacity. The government hesitates about incurring the large expense which a rebuilding or extension of the sys-

## FALL VELVETS BY POST AT LOW PRICES

SEND FOR FREE SAMPLES

### VELVET CORDS.

This is the best Old Country Velvet Cord, and one that we know gives excellent service. May be had in grey, saxe, green, fawn, old rose, brown, Copenhagen, purple, navy, black and white. 27 inches wide. . . . . 95c  
Wide Cord, per yard . . . . . 85c  
Narrow Cord, per yard . . . . . 85c

### PLAIN VELVETEENS.

This is a strong, hard-wearing Velveteen; the best English weave. Comes in navy, saxe, Copenhagen, nigger brown, golden, bottle green, Russian green, amethyst, taupe grey, sky and black. 23 inches wide. Per yard . . . . . 85c

### CHIFFON FINISH VELVETEEN.

This is the best Old Country Velveteen. We guarantee the colors to be fast. They will not fade. This price by post is less than ordinary velveteens sell for. Eight good shades. 44 inches wide. Very special at, yard . . . . . \$3.05

### CHIFFON SILK VELVET

All pure silk and of very beautiful quality; black only. 40 inches wide. Per yard . . . . . \$5.50

Samples of these Velvets and Velveteens sent anywhere postpaid free.

When ordering, please enclose enough extra to cover postage. Should you send too much the difference will be returned with the order.

## SABA BROS., LTD.

Silk Specialists,

652 Granville Street.

Vancouver, B. C.

tem would entail, and the farmers dare not undertake such a large problem. But without relief of some kind, as our correspondent says, hardships will be created which will cause an exodus from the country. We hope the government will take vigorous steps this fall to insure that next year the farmers of the Okanagan valley may be spared the losses of this summer because of inadequate water supply.

## CUTHBERTSON'S

### WHEN YOU GO FOR A TRIP

Equip yourself with good baggage. It is but a small percentage of the outlay of a trip.

A good trunk or grip can be travelled thousands of miles with comparatively small depreciation. The difference in price between the good article and the inferior is small considering the service. We have Grips and Suit Cases all sizes and prices, and cordially invite your inspection.

T. B. Cuthbertson & Co. Ltd.  
Men's Furnishers and Hatters  
2 Stores Vancouver, B. C.



## ALL SOLDIERS DON'T WANT TO BE FARMERS

Should Portion Natural Resources of Fishing, Mining, Lumbering, Etc., Be Reserved for Our Boys?

By Rusticus.

"Back to the land" is an old cry. It was heard before the Great War, before the South African War, is heard now, and doubtless ever shall be. It is a hardy annual political cry, of all politicians, and today is being hitched onto the future of the soldiers who will have fought the great fight and will have to face stern realities of civilian occupation in peaceful times. To go "back to the land" will appeal to those with hopes and ambitions for a life on a farm or ranch with the success that breeds contentment. From the mouths of public men and the columns of the press throughout the wide Dominion the great endeavor seems to be to advance a scheme to make soldiers into farmers by means of land grants and governmental advice and monetary aid. Yet many farmers who are close students of current events and sentiment feel that, while the adoption of a soldiers' land settlement scheme in this or other provinces might prove a success and incidentally a boon to the agricultural sections and the country generally, they want to know what will happen if, as is not impossible, only a small number of the thousands of returned soldiers desire to go onto the land.

### After South Africa.

Contributing his opinions to a returned soldiers' magazine, Mr. Murdock McIntyre, of Merritt, who has had wide experience in mining and for years has conducted a ranch, warns against what happened after the South African War, when "the soldier received a few paltry dollars for his scrip and the speculator got the land."

Why not, he suggests, have the various provinces set apart sections or percentages of their natural resources—fishing, mining, lumbering, farming, etc., for the use of our boys when the war is over? They could choose the occupation they wished to follow and have the benefit of expert advice of practical men and financial assistance by the government. Whether in farming, fishing, mining, lumbering or other spheres of activity, they could live and thrive in colonies and communities, co-operate with each other in their labor, disseminate individual knowledge, and, under a competent manager, progress until they became independent of outside assistance. By such a linking up of the brain and brawn of men back from the war with the natural resources, those to whom the nation's fullest gratitude and generosity are due will be helped to benefit directly from the products of the land for the protection of which they fought at the risk of life and limb.

### Scheme Must Be Broad.

Discussing the possibilities of land settlement for the soldier after the war, a prominent Fraser Valley farmer said that, while the whole agricultural community in the province hoped, and would greatly desire to see idle land farmed by soldiers to the extent that politicians and some public officials seemed to expect, still these advisors failed to realize that "it is not every man who is or can be a farmer." He believes that any civilian reoccupation scheme, to be successful, must be broadly drafted to

embrace more than "farmers in the making." When they enlisted, the boys came from the farms, forests and fisheries, banks and benches, mills, banks and stores—from all avocations. To these classes of occupations only some will return; many after their great war experiences, it is generally conceded, will seek—instead of inside or sedentary employment—such free, health-giving occupations as farming, fishing, lumbering and mining.

Questioned as to his views on the question, another well-known man says: "It will be up to the governments of the provinces of Canada, and thus British Columbia, too, to shoulder its great after-the-war responsibility to the country's fighters by providing them with the munitions of resources and opportunity to fight the battle of life. And, if a soldier doesn't happen to want to be a farmer, he shouldn't be denied aid in other directions. The development of the agricultural industry by soldiers' land settlement schemes operating successfully, this man thinks, would in itself be large, but if it were augmented by similar schemes to cover other leading industries, agricultural development would be greater still.

## WIRING SCREEN DOORS.

It is a very simple matter to put screen wire on that is stretched perfectly tight and smooth, instead of baggy as commonly seen. Lay the door on the floor and attach the wire to one end. Then nail or block the door to the floor half way between the ends. Then raise each end of the door about an inch and slip a board under it; this will cause the door to bend slightly.

Now stretch the wire tightly with the hands and nail it on the other end while the door is held to the floor in the middle. The wire will stand up in the middle, but the instant the blocks are removed from the ends the wire will be drawn tight and smooth.

# Good For Man And Beast



Kendall's Spavin Cure has now been refined for human use. Its penetrating power quickly relieves swellings, sprains, bruises, and all forms of lameness. It is just what you need around the house. Write for many letters from users to prove its effectiveness.

T. J. Smith, Spencedale, Ont., says— "Have used Kendall's for many years in my stable and house and it never has failed us yet."

## Kendall's Spavin Cure

For Horses —And Refined for Man.

—has been used by horse-men, veterinarians, and farmers for over 35 years. Its worth has been proved, for spavin, splint, curb, ring-bone and the many other hurts that come to horses.

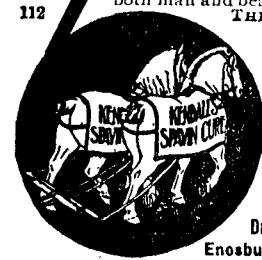
ONION LAKE, SASK., April 22nd, 1915.

"Kendall's Spavin Cure is about the best all-round liniment for both man and beast that I know."

THE HUDSON'S BAY COMPANY.

Get Kendall's Spavin Cure at any druggist's. For horses \$1. bottle—6 for \$5. Refined for man 50c.—6 for \$2.50. "Treatise on the Horse" free from druggist or write to

Dr. B. J. KENDALL CO. Enosburg Falls, Vt. U.S.A.



## It's Wonderful!

—the way calves take to it and thrive upon it.

### Fresh, Sweet Flavor

relished by calves—thoroughly cooked under 60 pounds steam pressure.

Economical, yes; it cuts the cost of feeding in half because it takes the place of milk.

Vancouver Milling & Grain Co., Ltd. Vancouver, Calgary, New Westminster, Victoria.

Dealers Sell It



# Alexandra Ranch, Tranquille, Kamloops

## Makes Splendid Record at Vancouver Exhibition

Mr. D. W. Strachan, the genial manager of the Alexandra Ranch, Kamloops, must feel proud of the splendid results obtained by his exhibits at the Vancouver Exhibition this year, both in live stock, fruits and corn.

In the Holstein classes he obtained 12 firsts, 3 seconds, 1 third and two championships. In the Berkshire pigs, first in aged boar, first and second in sows under

The sire himself, famous as a prize winner, comes of the great prize winning stock of the east.

His daughters all are an exceptionally promising bunch and have made several exceptionally high records.

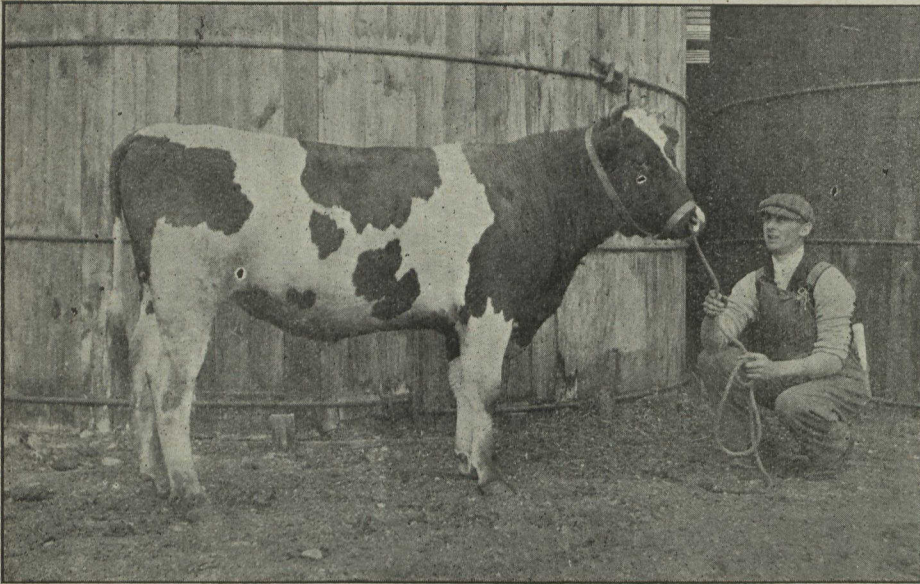
Rag Apple Ononis Cornucopia at 1 year 11 months and 28 days: Butter, 9.08; milk, 216.10.

A granddaughter of Pontiac Korndyke and Aaggie Cornucopia Johanna Lad jr.

Her sire carries 75 per cent of the blood of Pontiac Korndyke.

Margie Newman: Butter, 7 days, 32.79 pounds; milk, 7 days, 895.50 pounds; 30 days record butter, 131.19 pounds; 30 days record milk, 3555.10 pounds. Milk one day was the largest on record to that date.

Thus reads the pedigree of this young gentleman and the farmers of the Kamloops district no doubt feel pleased with such good stock at their command.



Alexander Rag Apple Pieterije



Mr. D. W. Strachan, Manager  
Tranquille Ranch, Tranquille.

one year old, first in herd boar and two sows, second in boar under six months old, second in sow under six months old; also champion sow of exhibition. While in the fruits and vegetables classes he carried off first prize for corn for ensilage, which stood over 12 feet high. In the fruit section he secured first prize for Winter Banana apples, McIntosh Red, Maiden's Blush and Flemish Beauty pears.

In the Holstein class Alexandra Rag Apple Pieterije, a bull, 18 months old, won first prize and championship. A son of Aaggie Cornucopia Newman, a proven son of Aaggie Cornucopia Johanna Lad jr., and from the great 32-pound cow Margie Newman, the dam who made requirements at less than two years old, combines in the closest degree the blood of Rag Apple Korndyke and Aaggie Cornucopia Lad jr.

The sire Aaggie Cornucopia Newman, sire of Glassa Cornucopia Newman, won first prize and reserve championship as a two-year-old at the Dominion Exhibition, Ottawa. The one-day milk record of his dam is the largest ever made, while her seven and thirty-day records have been equalled by but one other cow.



Asjubah Aaggie Pietertje

Holstein-Friesian Cow, property of Alexandra Ranch, Tranquille. Won many prizes in show ring. Holds an official record as a three-year-old. Has beautiful conformation and a strong and regular breeder.



Berkshire swine is another line that is being developed at the Alexandra ranch. The Berkshire is one of the oldest breeds of hogs and has stood the test of many years. They are very quick maturers, easily fattened, hardy and prolific. Their fine grained flesh and excellent shape make them very desirable for the block. With these good qualities, they are the pork par excellence for the producer, the butcher or consumer.

and investigate the advancement which has been made. In two years the herd has been built up to such an extent by this sire that it would be hardly recognizable as the same.

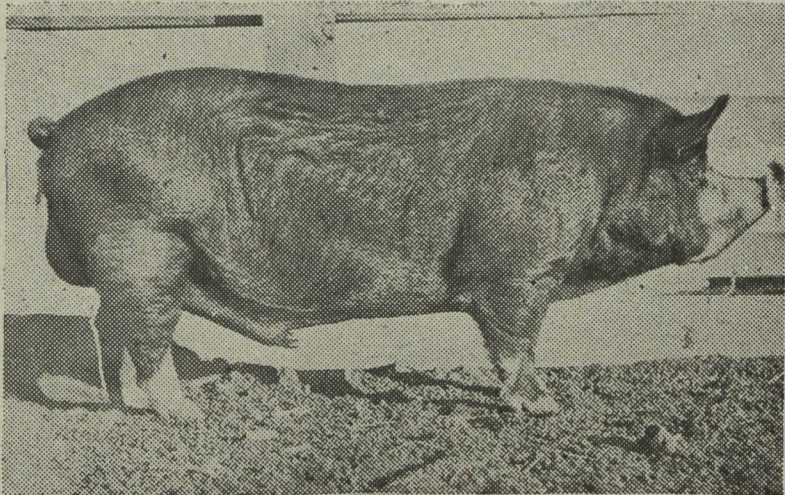
**Sheep Breeding.**

In the sheep branch, the Cotswold breed, which was the choice of the former owner, was found to be the best, and the flock which was started by Mr. Fortune was purchased and added to by the present

sanatorium and must survive or fall by its own effort. Inquiries by mail should be addressed to Mr. D. W. Strachan, the manager, at Tranquille postoffice, who will be pleased to supply all information in his power.



Colony Birdie Ormsby 2nd



Strathmore Augustus  
Berkshire Sire, property of Alexandra Ranch, Tranquille, B. C.

The farmer who has the establishment of a piggery in mind could not do better than commence with the Berkshire. As a business proposition they cannot be surpassed. The sire, whose photograph we show, has never been beaten in the show ring. It shows the fine hardy type of animal that it is, and the possibilities of profit from such animals.

The farmer who is interested in this stock should endeavor to visit the ranch

management of the ranch. The value of this animal can easily be recognized when it is mentioned that the yield per fleece this year averaged over thirteen pounds each. The breeding of Cotswolds is being carried on and there will be some fine animals for sale.

In connection with the Alexandra ranch, it is well to point out that it is not run nor assisted by the provincial government. The ranch is operated strictly apart from the



**Many Times Better Than Hand Milking**

CARP, ONT.,  
Jan. 5, 1917

Dear Sirs:—

My experience with the Empire Milking Machine has been satisfaction in every detail. The cows as well as the men seem to realize that it is many times better than hand milking, and as soon as they become accustomed to the machine the milk flow increases. With one double unit one man milks my ten cows in twenty minutes. If I could not get another "Empire" I would not sell my machine at any price.

E. H. GRAHAM.

**EMPIRE Mechanical Milkers**

suit the cows—save the men—swell the profits. With help so scarce they are invaluable.

For Illustrated Booklet and full information address Dept. 4.

THE EMPIRE CREAM SEPARATOR CO.  
of Canada, Limited.

C. L. Merritt, B. C. Distributor,  
Dominion Bldg., Vancouver, B. C.

"Keys to Good Health and Long Life"



**KENNEDY'S STOMACH BITTERS**

Blood Enriching  
Strength Imparting

Gives to weakened, run-down people the very support and strength needed.

**ASK YOUR DRUGGIST**

If he cannot supply you, send ONE DOLLAR, and a large bottle will be sent post paid.

Write for a copy of "How to Eat and What to Eat." Sent to any address in Canada FREE.

**DRUGGIST SUNDRIES CO., LTD.**

1160 Homer Street  
VANCOUVER, B. C.



## URGES MORE SHEEP BREEDING.

Mr. Alex. Horn, inspector Textile Manufacturers' Safety Association, Toronto, writes this paper his impression after a recent visit to the Coast.

"The impression made upon the mind of the visitor from Ontario who views the vastness of the prairies, and the great stretches of mountainsides for the first time, is the realization of the wonderful possibilities of this Canada of ours.

"And then as one notices that but a small percentage of this excellent grain growing land is really under cultivation, and that thousands and tens of thousands of acres of verdant pasturage in valley and hillside is never cropped by a single sheep; the second impression which is forced upon the mind is oh! the awful waste.

"What a pity that the world is coming to the brink of famine and that there are not men enough to till the fertile soil and feed the hungry and starving nations.

"Wool is also so scarce that before the present year closes it is feared that many mills will be idle. We do not grow enough wool to clothe our own Canadian people—not more than 14,200,000 pounds annually, or enough to clothe one Canadian in every four. The state of Montana alone raises over 16,000,000 pounds. Where is the wool to come from if there is another year of war? Wholesale stocks of goods are almost depleted—the retailers' shelves of woollens are almost bare. Owing to the high prices the general public have not been buying for two years. The old garments have been made to do service and are now almost worn out. Wools are now held at famine prices. Fleeces have been selling as high as \$5 and \$6 and choice ones have brought more than this figure.

"No gold mine ever offered a richer reward to the gold-seeker than the wool growing will surely pay to the one who is now in the business or who gets into it at once. Not a single lamb of either sex or old ewe capable of producing a fleece of wool should be shipped or slaughtered until the crisis is passed.

"Our Allies and the Mother Country are depending upon our resources, and we have them here almost inexhaustible, but they will not avail only so far as they are utilized."

## TWENTY PER CENT DIVIDEND AGAIN

Annual Meeting of Hudson's Bay Company Held in London—Canadian Directors Are Re-elected.

A Montreal dispatch of August 15 says: The annual meeting of the shareholders of the Hudson's Bay Company is being held in London today. Last year at the meeting of the shareholders it was announced that the company would pay a dividend of 20 per cent on its capital of five million dollars, the distribution thus amounting to a million dollars which was paid out on January 1 and July 1. It is believed here that a declaration of a similar character will be made today and that a similar distribution will be made in the year to come.

The Hudson's Bay Company has made large distributions for a number of years, as follows: 30 per cent in 1908, 25 per cent in 1909, 40 per cent in 1910, 1911, 1912, 50 per cent in 1913, 40 per cent in 1914, nothing in 1915, and 20 per cent in 1916.

# FARMERS Sacks and Twine

We have just received a large shipment of new standard grain sacks, and can supply all your requirements at reasonable price. We also have a large supply of twine available.

### Hay and Grain

Let us hear from you in regard to quantities and grade you have for sale.

### Fly Knocker

Are you getting maximum amount of milk from your cows and work from your horses. Neither can do justice to you if bothered by flies. Conkey's Fly Knocker will relieve them.

**THE BRACKMAN-KER MILLING CO., LTD.**

Vancouver.

Sir Augustus Nanton and Sir William Mackenzie, the two Canadian directors of the company, retire today and are eligible for re-election. There is no doubt that they will both be re-elected. Since the last meeting one of the directors passed away, namely, Sir Richard Burbidge, Bart. His

place on the board has been taken by Frederic Scott Oliver of the London firm of Debenhams, Limited. The choice of Mr. Oliver is to be confirmed by the shareholders today. The assets of the company are valued at over \$100,000,000 by disinterested persons.

## "Perfect" Plates---

### Strength

THESE plates are made with a base of the very best imported English vulcanite, the finest material procurable for this purpose, because of its resiliency and strength as well as its sanitary qualities. The very fine grain of this vulcanite and the high polish which it receives makes it non-porous and, therefore, impervious to the saliva and the acids which are taken into the mouth with the foods.

### Lightness

The lightness and strength permit of the making of these plates so thin that the enunciation of the speech is not interfered with.

### Perfect Fitting

The plates are fitted perfectly to your mouth and the teeth are chosen with skill and intelligence after a careful study of your jaws and the conformation of your face. That is why these **Perfect Plates** are guaranteed to be really perfect and to give you constant, perfect service for years.

### Appearance and Efficiency

"Perfect Plates" look as natural as your own teeth did. They grind the food as efficiently. They are made and fitted so perfectly that the pressure of biting and chewing is evenly distributed and the food is comfortably masticated. They are made by an expert and to perfectly fit each individual.

### Prompt Service

In making a special bid for your dental work I wish to assure you that every facility is here for taking care of you in the promptest manner. Out-of-town patients will be given especial consideration as to the arrangement for appointments so that time will not be unnecessarily spent in the city on account of this. If appointments are made by mail or wire ahead of the visit I shall make arrangements to have the work done as far as possible continuously until completed.

## Dr. Lowe, Dentist

108 HASTINGS WEST

VANCOUVER, B. C.

OPPOSITE WOODWARD'S



## Messrs. Tupper and Steele, Ltd., of Vancouver, Made Fine Showing of Tractors and Trucks at the Exhibition.



To anyone interested in rapid hauling and delivery service Messrs. Tupper & Steele's booth was a great attraction, as the above illustration shows.

The Tupper & Steele truck enables an enlarging of the delivery or hauling field, a quicker and surer service and an increase in business owing to the larger trade zone which it creates. This truck not only makes possible these claims, but on account of its extremely low cost, guarantees the service at approximately one-half the expense of any standard high priced one-ton truck or horsedrawn vehicle.

Economy in first cost does not necessarily mean a purchase made at a low figure. A low cost might be obtained at a

sacrifice in materials, but the component parts or units of the Tupper & Steel truck are all of standard truck dimensions and consist of: Timken roller bearings and solid rear tires, heavy rear wheels, 2 1-4 by 1 3-4 inches steel rear axle, 10-leaf springs and substantial 4-inch cold rolled channel steel truck frame. There are no better materials used in any truck and therefore claim economy in the first cost.

Aside from the regular hauling and delivery bodies, oil tank, dump and other special bodies are made for this truck.

Your old car can be converted into an up-to-date truck at a considerable saving.

The Tupper & Steel tractor will replace from three to six horses and from two to

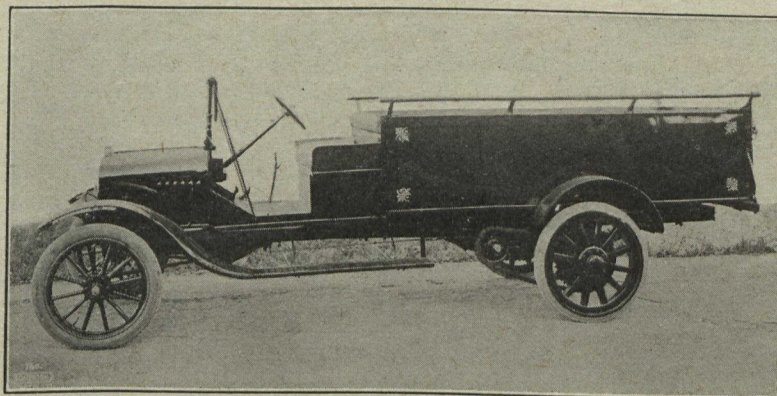
five men, and its cost of operation as shown by actual use is not more than the maintenance cost of one horse.

This tractor works 24 hours per day and is not subject to broken legs, heaves, colic, spavin or the like. On short haul work this tractor makes from four to five trips to the horse's one and on long haul work it completely outdistances the horse.

Besides these tractors, they had a fine showing of the following: One, one and a half and two-ton truck attachments, auto tops, delivery bodies, funeral cars and ambulances, wagon hearses converted and seat covers and trimmings.

### THE TRUCK THAT IS ESPECIALLY DESIGNED FOR THE FARMER AND FRUIT GROWER.

## The Tupper & Steele One Ton Ford Truck



Cut your haulage costs. All large business concerns are rapidly replacing the horse with motor-driven vehicles. WHY? To reduce their operating costs. Are you just as anxious to **reduce your operating expenses?** If you are our **Trucks, Tractors and Trailers** will help you. The illustration above is of a Ford car equipped with our One-Ton Attachment. This attachment can be put on any Ford Car. Utilize your own car by having an Attachment put on.

We also build Auto Tops and Delivery Bodies, and undertake all kinds of Motor Car Work.

## Tupper & Steele, Limited

PHONES: Bay. 138 and 139.

VANCOUVER, B. C.

1667-9 Third Avenue W.



# Beekeeping in British Columbia

By Williams Hugh

## VANCOUVER EXHIBITION, 1917

The 1917 Vancouver fair has come and gone, hard and incessant work brought it into being and fruition; its limpid glory remained with us one week, and now it has passed into history. As it recedes into its place, along side of past exhibitions, it will stand pre-eminently above all the others, being distinguished by its perfect organization, the excellence of its exhibits, and the unanimity of all, in their effort to make the whole thoroughly representative and worthy of the province.

The apianian exhibits, according to the press and the opinion of those who ought to know, was the best that has ever been staged in this province. The Prime Minister said it was excellent, the Minister of Agriculture called it a fine exhibit and Mr. Deputy Minister W. E. Scott told everyone he was particularly pleased with the honey show. Alderman Miller, President of the Exhibition, was enthusiastic over the efforts of the beekeepers, and there was every reason for all the encomiums showered upon the display of honey and the kindred products.

### Okanagan Exhibit.

Mr. L. Harris, of Vernon, foul brood inspector of the Okanagan district, set out the products of his apiary. The whole display was a glimpse into the fairyland of the honey bee and showed the master hand of a clever apiculturalist. Dainty individual portions of comb honey were artistically displayed on dishes covered with colored paper, showing up the beauty of the delicately cut portions set out. Golden hued clover in specimen jars, looking more beautiful than pillars of solid gold, the sunlight glistening through the luscious liquid, spread its softening gleams over perfectly formed sections of clover honey, adding a touch of beauty to the whole display.

Mr. W. J. Sheppard, foul brood inspector of Kootenay, brought jars of mountain honey, a display of wax made from wax cappings showing the pure delicacy and texture of the refined product, uniformity of the coloring, all of which was greatly admired. Several appliances were donated by Mr. Sheppard to the experimental apiary at Hastings Park. Mr. F. D. Todd, foul brood inspector for Lower Mainland, displayed jars of honey from his Lynn Valley apiary.

The whole of the exhibits entered were above the normal and the winners were in most cases those who had not won many prizes before, excepting our hardy annual John Brooks, who has exhibited continuously during the past six years, usually taking first prizes, but the redoubtable John came up smiling with a second prize in the 50-pound class. He is determined not to be outclassed or squeezed out; in common language, he is a "sport."

Everyone was pleased to see the blue ribbon (gold medal given by Hudson's Bay Company) for 1917 go to Mr. C. Chinnery of South Vancouver, because it was won on merit, and his display was excellent. This exhibit, while not showing so much density as another exhibit in another class, received full credit for all qualities, excepting one point, the density was 82.0. There were eight entries, the winner being six points ahead of the second, the fourth being one point behind the third, then three tied, so

those who lost can comfort themselves with the fact that they were all three points from the second prize.

If work and outlay was a contributing factor in winning the \$25 prize in the 500-pound class, no one will begrudge Bevan Hugh the prize, but the uninitiated will understand the severe tests all exhibits were subjected to when I say that the winner in density scored one point more than the winner of third place. The following is the record: First, 81.8; second, 80.1; third, 80.7, the last losing one point on flavor, aroma and brightness.

### Judging.

This year will mark high in the knotty question of judging. Science having come to our aid, there will be no turning back to the old methods. Thanks to the exhibition management, the Beekeepers' Association was handed the privilege of recommending judges for the apianian exhibit, and the following well-known men kindly consented to act: Mr. S. Dawson, Dominion government analyst, and Mr. E. S. Knowlton, druggist, of Vancouver. The wonderful invention of a Frenchman, the refractometer, used in the analysis of foods by the Dominion government chemists, was used in testing the density of the sugar content of honey in all the exhibits. It registers to a fraction, and has proved B. C. honey equal to the best on the North American continent. The average water content of American honey, according to the average of 99 pure samples analyzed in the Washington Bureau of Chemistry is 17.59 per cent. The returns given by our judges show B. C. honey in the majority of exhibits examined to be several points higher.

### Okanagan Beekeepers About to Organize Association.

Mr. D. E. McDonald, of Rutland, B. C., with Mr. L. Harris, foul brood inspector, are willing to assist in forming an association of beekeepers for the Okanagan district on the same lines as the Kootenay

and the Beekeepers' Association of B. C. Will interested friends write to Mr. L. Harris at Vernon, B. C., Mr. McDonald or the editor.

Prime Minister Brewster writes appreciating the work of the beekeepers: "I have been interested in this exhibit and in the instruction your association is able to give through the assistance of the Vancouver Exhibition Association and the Department of Agriculture.

"Rest assured of my warmest interest in your good work and of my best wishes for your success.

(Signed) "H. C. BREWSTER."

### Honey and Apianian Products Awards

#### Granted, in Class R.

Section 1—Extracted honey, 10 jars: First, J. H. Holmes; second, J. Reagh; third, Duncan McIntyre; fourth, C. Cooke.

Section 2—Amber honey, 10 jars: First, A. Smith; second, W. H. Turnbull; third, J. Reagh; fourth, C. Sprott.

Section 3—Bulk honey comb in glass: First, J. Reagh; second, William Hugh; third, Mrs. Turnbull; fourth, J. Brooks.

Section 6—Bees wax: First, W. H. Turnbull; second, Bevan Hugh; third, C. Sprott.

Section 8—Honey extracted in jars, 50 pounds: First, Charles Chinery; second, J. Brooks; third, J. Reagh.

Section 10—Best display of apianian products containing not less than 500 pounds: First, Bevan Hugh; second, J. Reagh; third, W. H. Turnbull.

Section 9—Best exhibit of bees: First, Bevan Hugh; second, J. Brooks.

Section 4—12 sections of comb honey: First, A. Smith; second, J. Reagh; third, D. McIntyre.

Section 11—Best three sections: First, Mrs. Stone; second, A. Smith.

Notes on the Exhibition are reserved for September issue. W. H.

### ITALIAN QUEENS

Now is the time to requeen.  
Young vigorous queens from good stock; well marked.  
Satisfaction guaranteed.  
Untested \$1.00. Tested \$1.25.

W. RANT South Hill Apiary  
45th and Sherbrook St., South Vancouver

## We Pay Cash

For all kinds of honey (packed in five-gallon cans), and beeswax in small or large quantities. It will pay you to send in samples and get our prices before marketing elsewhere. We are the largest honey buyers on the Coast. References, Bank of Montreal or Kelly-Douglas, Limited. Write us for further particulars.

**KELLY CONFECTION COMPANY**  
Limited

1106 MAINLAND STREET, VANCOUVER, B. C.



**WINTERING BEES**

(By L. Harris, Provincial Apiarist for Okanagan District, B. C.)

Mr. Chairman, Ladies and Gentlemen—The few remarks I have to make are based on my own experience and conditions existing in the Okanagan district. They may or may not agree or apply to existing conditions prevailing on the coast; so that I am not going to ask you to accept them, only as suggestions. I believe that most of you here will agree that the wintering troubles are the greatest difficulty with which the beekeeping industry has to contend.

Foul brood is bad but a far greater per cent of colonies are lost in winter than are lost by foul brood. Now, to get uniform and satisfactory success there must be a right principle or foundation somewhere on which to build.

I believe that you will agree that there has been a good deal of guessing as to what the right conditions really are. We want to give up speculating and get down to something more definite. We must sooner or later get on to something at least resembling scientific lines if the industry is going to make satisfactory progress. Then we will know why some of our colonies die while others survive, as all have been equally well prepared and put under identically the same conditions as far as can be seen. And after they have been nicely tucked up we hope that all will be well and that they will survive, but the trouble is that they do not all survive, and we are at our wits' end to know what we have not done or what we ought to have done to have saved them.

We have thought that if a colony in the fall is well provided with food, bees and protection that it ought to survive the severest winter; and a very reasonable argument, yet many of them do not live through an ordinary winter our preparation and trouble have all been wasted and we very naturally are disappointed, not to say discouraged.

A good deal has been written about outside cases for winter protection, and I suppose everybody would admit that protection ought to be a good provision. I myself firmly believe in abundant protection, yet not because, but in spite of, this protection many colonies are lost.

I have come to the conclusion that the best winter case that was ever constructed will not save a colony if other conditions are not present. And what are these other conditions? It is a simple matter of the age of the bees, old bees or young bees, late in the fall. Old bees often will live through the winter, but as soon as they become active and begin to raise brood their vitality gives out and they die by the thousand. They have come to the end of their natural existence and we find upon opening the hive two or three inches of dead bees on the floor board, with the result that what few bees might have lived are suffocated. This is the end of what we imagined to be one of our best colonies at the time it was put into winter quarters.

Now, look at a colony which kept breeding all through August, September and perhaps into the first week in October, with perhaps only half the number of bees in the fall as there were in the hive we have been considering and we find by comparison few dead bees on the floor, the longer being several weeks younger will live longer into the spring. They will be full of energy and instead of dwindling away as old bees always do, often leaving the bit of brood they had commenced to perish, the

younger ones will forge ahead and will bring their first batch of brood to maturity and be ready for anything that comes along weeks before those colonies having old bees which are struggling along for perhaps months between life and death to make headway, and if they do pull through the season has so advanced that they are often of very little use as far as strong honey goes.

It often happens that a strong colony will consume the stores on the side of the hive where they have been clustering early in the winter and very little honey will be available immediately in or around the cluster; then comes a period of very cold weather. There may be ample stores on the opposite side, or even a couple of combs away, but as soon as a bee attempts to cross over to reach the stores they become chilled, drop to the bottom of the hive and die. Then sometimes the whole cluster will make an attempt to cross over to reach the stores, with the result that we sometimes see clusters of bees during very cold weather in and around the entrance, and a great noise will be heard. This is due to their attempt to raise the temperature in order to reach the stores, but it spells disaster to the colony, and if they do not die they become so weak that the season is so advanced before they are strong enough to store any surplus.

I have had opportunity of examining hundreds of colonies during this spring and summer of 1917 and the best colonies I have seen anywhere were wintered on their summer stands, without the least protection whatever, all exposed to the four winds and to a temperature of 26 below zero. Yet they survived and have given very satisfactory results; so that it is certain that protection alone will not save a colony. Neither will numbers alone nor food with numbers and protection combined, not if the bees are too old when put into winter quarter. The fact that we can and do winter very small colonies every winter which are provided with young queens, hence young bees, abundant stores, ample protection, contraction of the brood nest to a space the bees can actually occupy, and slow upward ventilation, is a pretty good proof the principle outlined is the correct solution of our wintering troubles.

Some districts are so situated that the desired conditions will be natural, while in others artificial means will have to be used to bring about the desired results.

(Continued)

**BEEKEEPING EXPERIMENTS IN THE KOOTENAYS, B. C., SEASON 1917.**

(W. J. Sheppard, Provincial Apiarist for Kootenays and Boundary)

**A Good System of Swarm Control and Proper Treatment of Swarm Greatly Increases the Honey Yield.**

This is the second season that the method of swarm control, known in America as the Demaree plan, has been tried in the Kootenays. It has secured many adherents as it has been found that it can be depended on, in this territory, to reduce swarming to a minimum, and to considerably increase the amount of honey obtained. Briefly the Demaree system is as follows: Just before the colony is ready to swarm put all the brood, except one frame, in a second storey, over a queen excluder, leaving the queen below with the one frame of brood, and preferably empty combs, failing which frames containing full

**THE C. P. R. GIVES YOU TWENTY YEARS TO PAY**

An immense area of the most fertile land in Western Canada for sale at low prices and easy terms ranging from \$11 to \$30 for farm lands with ample rainfall—irrigated lands up to \$30. One-tenth down, balance if you wish within twenty years. In certain areas, land for sale without settlement conditions. In irrigation districts, loan for farm buildings, etc. up to \$2000, also repayable in twenty years—interest only 6 per cent. Here is your opportunity to increase your farm holdings by getting adjoining land, or to secure your friends as neighbors. For literature and particulars apply to Allan Cameron, General Superintendent of Lands, Department of Natural Resources, 931 First Street East, Calgary, Alta.

**We Are Headquarters**

FOR

**Fruit Wrapping Papers**

**DUPLEX FRUIT WRAPS**

Medium weight, glazed on one side

**SULPHITE FRUIT WRAPS**

Lightweight, strong, durable and Transparent

Either quality can be supplied in any of the regular standard sizes

We also carry WHITE BOX LINING in all standard sizes

**LAYER PAPER**

**CORRUGATED STRAW PAPER**

We carry stock of all these lines, and can execute orders promptly.

Mail orders receive special attention.

**Smith, Davidson & Wright, Ltd.**

Paper Dealers

VANCOUVER, B. C.

sheets of foundation. Cut out all queen cells in the second storey about the tenth day afterwards. The brood frames above as soon the brood hatches out will be used by the bees for storing honey. In my small apiary of from six to eight colonies, which is run on experimental lines, several variations of this method have been tried. I have found that when only one frame of brood was left below the queen would sometimes be neglected by the bees, and be subsequently missing, so have come to the conclusion that the safest plan is to leave two frames containing brood. I have also tried putting a set of empty combs (if this is done shallow frames are best) in a second storey, with a wire screen above, and the remainder of the brood in a third storey, with an upper entrance. While this plan works very well, as one of the queen cells can be left in the top storey, and a young queen subsequently get mated and be laying there, my experience is that less honey is obtained by this method than when the brood is put in the second storey, and the honey supers placed directly above this, all queen cells being destroyed. I have not had any swarms during the two years these experiments have been tried.

Another system, that is somewhat a reversal of the Demaree plan, has also been tried with success this season by an experienced beekeeper in the Kootenays, and seems in some respects to be an improvement on it. It is worked as follows: About the end of May, or as soon as the bees cover nine or ten frames, find the queen and place her in a second storey of empty combs, with two frames of brood, in the centre, over a queen excluder. The bees will then build queen cells below, all but one of which must be destroyed about the tenth day afterwards. After the young queen below is mated and laying the old queen above can be removed. If she is provided with two or three frames of brood and put in a fresh hive this will make a good nucleus. By this system, if it is carefully followed, it is practically impossible for the bees to swarm, the old queen being above the excluder. A powerful colony is built up in readiness for the honey flow, and a young queen is assured to each hive every year. After the old queen is removed from the second storey queen cells will probably be built there. These must, of course, be found and destroyed about the tenth day.

There will probably always be beekeepers who prefer to let their bees swarm. In this case if much increase is desired, as well as honey, the old plan of hiving the swarm in a new hive on the old stand and dividing up the brood combs into several nuclei, with a queen cell to each, is an excellent mode of procedure, and hard to beat. If only moderate increase is wanted the following has been found to be a good method. After a swarm issues put it at first in a new hive containing two frames of built-out comb. In a short time the queen can be easily found, as she is sure to be on one of the two combs, when she should be caged. Go through the old hive and cut out all the queen cells but one. Take out two or three frames of brood and put them into a new hive on a fresh stand, so as to make a nucleus, to which the old

queen can be given. The bees of the swarm can then be returned to the old hive without much fear of any subsequent swarming taking place. By this system a young queen is assured to each hive every year.

#### Production of Sections.

Considerable difficulty has hitherto been experienced by beekeepers in the Kootenays in the production of sections and experiments have made this season to try and solve the problem. What is known in the States as the Townsend system was tried, by which comb and extracted honey are both produced in the same super. By this method the sections are so arranged that they are placed in the centre of a shallow super with a shallow extracting frame of built out comb on each side, the idea being that the latter act as a bait to the bees and brings them up quickly into the super. It was found, however, that this plan was not entirely satisfactory, so it was decided to try alternating shallow extracting frames with each row of sections. This seemed to act like magic, the sections being built out and filled in quick time, and I feel sure that if this method is followed the merest tyro at beekeeping will have no difficulty in the future in producing sections, even with the short honey flows that we usually experience. A hanging frame to take four sections has been devised and the separators hang on each side so that all are very easy of removal. Super foundation can be used in the shallow extracting frames and they do not require to be wired.

#### A Permanently Packed Hive-Case.

Wintering problems have not been lost sight of and a simple form of hive-case has been designed which can be kept permanently packed and therefore always in use. It is so arranged that it can be used for almost any type of single-wall hive-body. With the ordinary ten-frame body therein there is a three-inch space all round the four sides, and also underneath the floor. Excelsior, planer shavings, or other suitable packing material permanently fills the three-inch space below the floor and as far up as the top of the brood chamber. When packing for winter all that is then necessary is to place sacks, or other material, over the tops of the frames and the job is done. If one of the new wire queen excluders is left on underneath the packing this will provide a clear passageway over the frames all the winter and this precaution will doubtless save many a colony from being lost. With the packing cases as generally used there is the trouble of packing in the fall, and unpacking in the spring, and storage room has to be found for the cases, and also for the packing material, all the remainder of the sea-

## NOTICE HIDES WANTED

We wish to call farmers' attention to the fact that we are now in a position to purchase HIDES for the Fraser River Tannery, which we have secured and enlarged.

We will pay highest market prices for calf and light cow hides.

Ship to **LECKIE TANNERY**

New Westminster, B. C.

And notify **J. LECKIE CO., LTD., Vancouver, B. C.**

son. It is surprising how quickly the bees build up here in the spring with an addition of three inches of packing round the sides of a single-wall hive, and on the other hand it keeps the hive much cooler during the hot weather and tends to check swarming.

## The ESQUIMALT & NANAIMO RAILWAY CO.

Vancouver Island, B.C.

The Company has in its Land Grant many thousands of acres of excellent land eminently suited for Fruit growing and Mixed Farming.

A beautiful, healthy climate—fine soil, and a great and rapidly increasing demand for butter, milk and cream (fine creameries in each district)—a cash market for poultry and eggs, large profits from mixed farming and vegetable products.

A complete modern educational system—free, undenominational—primary and high schools on the beautiful Island of Vancouver.

Descriptive pamphlets and full information on application to

**L. H. SOLLY**

Land Agent, E. & N. Ry.

VICTORIA, B. C.



# Potato Storage

Use of Pits, Dugouts and Masonry Storage Houses for Holding the Main Crop.

The storage of potatoes of the main crop can be accomplished most satisfactorily throughout much of British Columbia in the dugout pit or potato cellar in some of its various forms of construction. In general, no attempt is made to store potatoes of the early crop, since usually they are sold for immediate consumption.

While the dugout storage house is in most general use, concrete or masonry houses with frame superstructures are, perhaps, most satisfactory in cold climates. In some sections, especially where drainage is poor, insulated frame structures built entirely above ground must be depended upon.

### Purposes of Storage.

The primary purpose of storage, it is pointed out, are to protect the tubers from extremes of heat and cold and from light. Account also must be taken of conditions of humidity and ventilation and of the size of the storage pile.

The temperature should be the highest at which potatoes can be maintained firm and ungerminated, and which will at the same time hold fungous diseases in check. Experiments of the department with artificially refrigerated storage indicate that 36 degrees F. is sufficiently low for all practical purposes and that in the earlier portion of the storage season a temperature of 40 degrees F. is just as satisfactory as a lower one except where powdery dry rot infection occurs.

All natural light should be excluded from potato storage houses, because when the tubers are exposed to even modified light they are soon injured for food purposes. A practical rule in regard to humidity, the bulletin already mentioned says, is to maintain sufficient moisture in the air to prevent the wilting of the tubers and at the same time to keep the humidity content low enough to prevent the deposit of moisture on the surface of the tubers.

If potatoes are piled in too large piles they may become overheated and deteriorate. Six feet is a good maximum depth to which to pile tubers in bins, and the area covered by each pile also should be limited. A good plan is to insert ventilated division walls at intervals through the pile or bin. These may be made by nailing relatively narrow boards on both sides of 2 by 4 uprights, one-inch spaces being left between the boards. General ventilation for the whole storage house usually is accomplished through ventilating shafts in the roof.

### Methods of Storage.

The possible ways to store potatoes, says the bulletin, are pits or earth-covered piles, in dugout pits or potato storage cellars, in insulated wooden structures, in substantial masonry or concrete houses, and in artificially refrigerated storage houses. The latter two methods are the most expensive. Pitting is the most primitive method of storage, but if properly done on well-drained locations is satisfactory in so far as the preservation of the potatoes is concerned. The chief drawback to pitting is

that the potatoes are not always easily accessible in the winter.

### Potato Storage Cellars.

The dugout pit or potato storage cellar is probably more widely used than any other type of storage space. Fitted with water-tight roof, it is especially popular in the central portions of the United States. In the arid and semi-arid sections a type with sod or dirt roof is in most general use. As a rule, the excavation for the cheaper structures of the dugout pit or cellar type when erected on level or nearly level land does not exceed three feet. The soil removed from such an excavation, particularly if the dugout is of any considerable size, is ample for banking the side and end walls and also for the roof. The cost of construction may be greatly modified, according to the character of the location.

In the cheaper dugouts, where the soil is of such a nature as to remain intact, it is allowed to form the side and end walls, the roof being supported on plates resting on the soil and held together by boards or joists. This form of construction involves a deeper excavation and a constant element of risk from a cave-in. In the more expensive and substantial structures the side and end walls are built of concrete.

### Insulated Frame Structures.

Insulated frame potato storage houses are not used very extensively. As a rule they are better adapted to southern than to northern climatic conditions. The construction feature of such houses is the thorough insulation of their walls, cellars, doors and windows. This type of storage house is not to be recommended for northern locations, nor is it advocated for the south, except where poor drainage conditions will not permit the use of the dugout or cellar style of house. It is not recommended, because it cannot be so economically constructed, nor does it furnish as good a type of storage as the properly ventilated cellar storage house.

### The Arostook Type of Storage House.

The Arostook type of storage house, with concrete or masonry basement walls and wooden superstructure, seems to be dis-

## Liming the Land

—

**LIME** is a cure for sour land;

**LIME** is a corrective for improper condition of the soil;

**LIME** aids production of plant foods;

**LIME** benefits all crops;

**LIME** is a disease preventive.

Lime for these purposes must be pure.

Our **LIME** is 99.5% pure.

We manufacture Quick (burnt) Lime, Hydrated Lime and Crushed Lime Rock.

Write us for pamphlets on "Lime for Agricultural Use," and the "Liming of Lands."

**PACIFIC LIME CO.,**  
Limited

512 Pacific Bldg. Vancouver, B. C.  
Works: Blubber Bay, B. C.

tinatively a product of Maine, and so far as has been observed is not found to any extent outside of that state. It is an extensively constructed house and is almost always located on a sidehill or knoll in order that advantage may be taken of a ground-level entrance. That such houses have proved satisfactory to the potato grower in Maine is evident from the fact that practically no other style of potato storage house is in use in that state.

### The Artificially Refrigerated Storage House

The artificially refrigerated potato storage house is as yet hardly in existence. The present use of this type of storage house is confined practically to the holding of northern-grown seed potatoes in cold storage for second-crop planting in the south.

## Canadian Northern Railway

### TRANSCONTINENTAL




#### LEAVE VANCOUVER

9:00 A.M. SUNDAY..... WEDNESDAY..... FRIDAY, 9:00 A.M.  
SCENIC ROUTE BETWEEN VANCOUVER AND TORONTO, SHORT LINE TO EDMONTON AND PRAIRIE POINTS, NEW AND MODERN EQUIPMENT, ELECTRIC LIGHTED STANDARD AND TOURIST SLEEPING, DINING AND COMPARTMENT OBSERVATION CARS.

#### DAILY LOCAL SERVICE

7:00 p.m. Leave.....VANCOUVER.....	Arrive a.m. 11:00	
9:45 p.m. Arrive .....	Chilliwack .....	Arrive a.m. 8:15
11:00 p.m. Arrive.....	Hope.....	Leave a.m. 7:00

Full particulars may be obtained from any Canadian Northern Agent,  
DISTRICT PASSENGER OFFICE 605 HASTINGS ST. WEST  
Telephone Sey. 2482.

# Gardening for the Home

By H. M. Eddie, F.R.H.S., Manager Growing Department B. C. Nurseries

The Vancouver Exhibition this year has shown that year after year a livelier interest is being taken in the matter of growing all kinds of garden produce for exhibition, and likewise an improved standard of quality all round on former years. The above institution and the various shows held in and around Vancouver and throughout the province are doing a great work in stimulating an interest in horticulture and encouraging the home gardener to put forth his best efforts to raise vegetables, fruit and flowers of the very highest quality.

One of the chief ends of a show of any kind is that it be educative, and one had only to keep one's ears open when quietly inspecting the exhibits at the fair to find out that their end at least was attained. More than once I heard the remark, "Now, this is a better variety than I have got. I must grow this one another year," and down goes the name in a notebook. Another will express surprise at the fine quality of an exhibit and give voice to his intentions to give a little more time and attention to his another year.

That the Exhibition is educative to the exhibitors themselves is also apparent. I have judged in this section for several years and it is perfectly apparent to me that the standard of quality is year after year being raised, and the preparation of the various exhibits for the show table is being better understood. In this latter phase there is still room for improvement, and I would advise would-be prize winners to study the winning exhibits from this and every standpoint and try and find out in what way they could be improved. Some exhibitors sinned in overdressing their produce and others in not dressing at all. Vegetable exhibits, unless otherwise stipulated, should be staged in a fit state for cook to handle, clean and neatly trimmed, but not skinned as some exhibits of certain vegetables were. In most cases quality carries more points than mere size, especially in roots such as carrots, beets and turnips for table use.

In the matter of exhibiting fruit the custom of polishing divers kinds ought to be discouraged. Most apples have a beautiful "bloom" on the outside of their skins which serves a useful purpose in nature and ought to be scrupulously preserved on exhibition specimens.

What is meant by "bloom" is most easily demonstrated on the black varieties of plums and is that waxy coating on the outside which is so easily spoiled by handling or rubbing. Specimens of fruit intended for exhibition should be handled as much as possible by the stalk, and may even be clipped from the tree with a pair of scissors rather than plucked.

The magnificent displays of roses, sweet peas and dahlias, flowers which take "some growing," show that the high cost of living has not crowded out the taste for the aesthetic from the garden, while annuals, biennials and perennials appear to be as much in favor as ever; indeed in looking around one finds that the wild land has in most cases been taken in to help feed the family, while the space devoted to flowers remains the same.

There is much work to be done in the vegetable garden in September; tomatoes are ripening up and must be given attention in the way of keeping cut out superfluous growths and exposing the fruit as much as possible to the sun. After this

time the fruit is apt to dwindle in size unless the plants are well supplied with water and some liquid fertilizer. It is a good plan to plunge a sack of chicken manure in a barrel of water, allow to stand for a few days and use the liquid diluted to the color of weak tea once or twice per week.

Pole beans should be gathered every two or three days as they become fit and the

Those of you who have grown beans specially for drying will likely find that the crop is pretty well matured by now and fit for harvesting. Pull the plants by the roots and leave in the sun and wind for a few days until the tops rustle sharply when moved, when they can be stored in the barn to be threshed out later, but better still, thresh them out immediately. Some

**RENNIE'S SEEDS**

THE BEST OF THE PATCH

Our Vancouver store is located at 872 Granville street, right in the heart of Vancouver's busiest retail section. Send for our Fall Bulb Catalogue. Do it TODAY.

**WM. RENNIE CO. LIMITED**

TORONTO. MONTREAL. VANCOUVER.

CATALOGS FREE

surplus put away in crocks in salt for winter use. A much larger crop of green beans will be obtained in this way, and if seed is required for another year a few hills ought to be left entirely to produce seed. Dwarf kidney beans will be over now, the early sowings at least, but it is just possible that some of the pods may have been missed when picking the green ones and will now have become mature. Pick those when they have become quite dry, expose the beans to the sun for a day or two and store away somewhere for seed or for dry beans in winter.

tramp out the seeds with the feet but quicker and better work will be done by beating them with a long handled manure fork. When any quantity is to be threshed the separating of the seed afterwards is quite a chore. First lift all the tops you can with the fork, and put to one side as bedding for chickens, pigs or cattle; then put the remainder through a sieve with a mesh large enough to let the beans through throwing what is retained in the sieve amongst the bedding. Next put what passed through the first sieve through a second one with a mesh small enough to retain the



beans but let the dust and as much as possible of the chaff through; there will still be quite a proportion of chaff and rubbish left with the beans and this is got rid of by winnowing. Select a dry, windy day and perform this operation by placing a quantity of the mass on a sack, let two persons get hold of opposite ends of the sack and hold it at right angles to the direction the wind is blowing; by a concerted movement of the two holders of the sacks the beans are thrown a short distance up in the air, the wind will blow the light chaff away and if the sack is skilfully handled the beans will land thereon, do this twice or thrice and you will find that your beans will be cleaned as well as any machinery. Looks like a complicated job but is very easily performed. Peas can be handled the same way as beans.

This has been a splendid year for onions, the dry summer appears to have eliminated the troublesome disease mildew, and the bulbs are ripening up splendidly. Those still inclined to grow after the middle of the month had better have their necks given a half twist round and the top bent over to help ripen them. Before the end of the month they had better all be pulled, tied in bunches and hung up on a fence to dry previous to being stored in a frostproof place.

In the fruit garden prune out the old canes of raspberries, thin the young ones to the proper quantity but do not tip the canes left until spring.

Clean off the strawberry beds and see that the everbearers do not suffer for want of water. The latter are the last word in strawberries, are in fact the most valuable acquisition to the fruit garden in recent years and should be in every garden.

I have left little space for the flower garden. This is the month when most of the half-hardy bedding plants are propagated and some useful hints may be got by turning up back numbers of Fruit and Farm for this month. H. M. EDDIE.

### Save the Fruit Crop.

We said this last year—we say it again. This is a year for thrift and service. We must feed not only our own people, but also millions in Europe. The frightful waste of fruit is a national reproach. Help stop this unpardonable extravagance. The fruit we waste would feed Belgium.

Our government urges preserving as a home duty. Preserved fruits are energizing and nourishing. They vary your menus. They reduce the cost of your table.

Canada's canning and preserving industries are models for the world. Their products are pure, appetizing and wholesome. What is Canada and British Columbia doing?

If you preserve at home, put up more fruit than ever before. Get jars and glasses, bottles and crocks ready to save the fruit crop. The housewife who practices thrift places herself in the ranks of those who serve their country.

You can show your thrift in no more convincing way than by combatting the ten-served fruits from your grocer or preserve dency to squander British Columbia's won-at home, you perform a service to your own derful fruit crop. Whether you buy pre-family and to the nation.

### PHYTOPHILINE, THE GREAT NON-POISONOUS INSECTICIDE AND PLANT TONIC

for anything, any time. Does not burn nor stain. Improves growth of foliage. Grade 1, for practically all insect pests; Grade 3, for red spider, mealy bug, mildew and rust, and for farm use on animals, etc. Cans, postpaid, 50c. Double sizes, 85c, \$1.55 and \$2.80. Cash with order. Agents wanted. **Phytophiline Distributors, 1455 Eighth Ave. W., Vancouver, B. C.**

## Home Storage

Prepare Now to Store Next Winter's Food Supply—Guard Against Decay, Insects and Rodents.

In order that householders may utilize spare time during the summer to put their cellars in shape for the winter storage of the surplus vegetables which will be grown on the home gardens that have been planted this year, or that they may make plans for other methods of natural storage.

#### Home Storage of Vegetables.

To those persons fortunate enough to possess land for the growing of vegetables sufficient in quantity for the needs of the family, storage is an economic necessity. Likewise it is an economic necessity to grow vegetables to store. A half-acre garden should produce far more vegetables than the average family can consume during the maturing period of the crops. Only a small portion of the garden should be planted to those vegetables which must be used as soon as they reach maturity. The remainder should be devoted to crops that are to be canned, dried or stored. It is comparatively easy to keep by storing such vegetables as potatoes, beets, carrots, parsnips, salsify, turnips, cabbage, celery, onions, sweet potatoes, dry beans and dry Lima beans. Some of the crops may be stored in the cellar under the dwelling, in pits or banks, or in caves or outdoor cellars. Others can be kept in any dry place, such as the pantry or attic.

#### The Storage Room in the Basement.

Many houses are heated by a furnace in the cellar. The pipes are, as a rule, carried under the joists, thus warming the cellar to some extent. For this reason it is best to partition off a small room in one corner of the cellar to serve as a storage room for potatoes, beets, carrots, parsnips, salsify and turnips. If possible, this room should have at least one window for the purpose of regulating the temperature. The floor should not be concreted, as the natural earth makes better conditions for the keeping of vegetables. Bins may be constructed for the various products, or they may be stored in boxes, baskets or barrels. This room will also serve as a storage place for fresh fruits and canned goods. The vegetables to be stored should be harvested when the ground is dry, allowed to lie on the surface long enough for the moisture to dry off before placing them in storage. The tops should be removed from beets, turnips, carrots and salsify before placing them in storage.

#### Outdoor Pits or Banks.

Outdoor pits or banks are very generally used for keeping potatoes, beets, carrots, turnips, parsnips, cabbage and salsify. Select a well-drained location and make a shallow excavation, some six or eight inches deep, and of suitable size. This is lined with straw, leaves or similar material, and the vegetables placed in a conical pile on the material. The vegetables are then covered with straw or similar materials, and finally with earth to a depth of several inches. The depth of the earth covering is determined by the severity of the winters in the particular locality. It is well to cover the pits with straw, corn fodder, or manure during severe weather. Such pits keep the above vegetables very well but have the objection that it is hard to get the material out in cold weather, and where the pit is once opened it is desirable to remove the entire contents. For this reason several small pits rather than one large one should be constructed, so that the entire contents may be removed at one time. Instead of storing each crop in a pit by itself, it is better to place several vegetables of similar keeping quality and requirements in the same pit, so that it will only be necessary to open one pit to get a supply of all of them. In storing several crops in the same pit, it is a good plan to separate them with straw, leaves or other material. The vegetables from the small pit may be placed in the basement storage room where they can be easily secured as needed for the table.

#### Cabbage.

Cabbage may be stored in a special kind of bank or pit. The excavation is made long and narrow and about the same depth as for the other vegetables. The cabbages are pulled and placed in rows in the pit with the heads down and roots up. The whole is covered with dirt—no straw or litter need be used. These pits are made as long as desired, as it is possible to remove portions of the stored product without disturbing the remainder. Cabbage need not be covered as deeply as potatoes, as slight freezing does not injure the cabbage. The heads of cabbage are sometimes stored in banks or pits in a manner similar to potatoes, turnips, etc. This method is

Continued on page 34

FOR  
A  
SUCCESSFUL  
GARDEN

# BRAND'S SEEDS

723 ROBSON ST.

VANCOUVER, B. C.

CATALOGUE  
AND GUIDE  
FREE OF  
CHARGE

# POULTRY SECTION

## PRESERVE EGGS NOW.

The indications are that eggs will be dear next winter—dearer than they were last winter; so those who want eggs had better put some down now while they are comparatively cheap. Do not use oats, bran, salt, or such mediums; moreover, the patent preservatives usually advertised as being so simple and effective had better be adopted with caution. Better use something that has been tried and found satisfactory.

According to Dr. Frank T. Shutt, Dominion chemist, lime water is one of the best preservatives, and we quote the following from his Exhibition Circular No. 42:

The method of preparation is simply to slake one pound good quick lime with a small quantity of water and then stir the milk of lime so formed into 5 gallons of water. After the mixture has been kept well stirred for a few hours, it is allowed to settle. The supernatant liquid, which is now "saturated" limewater, is drawn off and poured over the eggs, previously placed in a crock or water-tight barrel.

As exposure to the air tends to precipitate the lime (as carbonate), and thus to weaken the solution, the vessel containing the eggs should be kept covered. The air may be excluded by a covering of sweet oil or by sacking upon which a paste of lime is spread. If, after a time there is any noticeable precipitation of the lime, the lime-water should be drawn or siphoned off and replaced with a further quantity newly prepared.

### General Precautions Necessary to Take.

It is essential that attention be paid to the following points:

1. That perfectly fresh eggs only be used.
2. That the eggs should throughout the whole period of preservation be completely immersed.

Although not necessary to the preservation of the eggs in a sound condition, a temperature of 40 to 45 degrees F. will no doubt materially assist towards retaining good flavor or rather in arresting that "stale" flavor so often characteristic of packed eggs.

Respecting the addition of salt, it must be stated that our experiments—conducted now throughout fifteen seasons—do not show any benefit to be derived therefrom; indeed, salt frequently imparts a limey flavor to the egg, probably by introducing an interchange of the fluids within and without the egg. Our advice is: Do not add any salt to the limewater.

## CAN YOUR HENS FOR WINTER USE.

"Canned chicken" may be made at home in your own kitchen out of the old hens that ought to be killed anyway.

The method of operation for what is known as "Straight Pack" by the trade is very simple and is given in detail as follows by Dr. Robert Barnes, chief of the Meat and Canned Foods Division, Health of Animals Branch, Department of Agriculture, Ottawa.

Clean and cut up the chicken.

Sort out the fleshy portions, such as the legs, thighs and breast.

## WHAT IS THE CRITICAL GROWING PERIOD OF THE YOUNG CHICK'S LIFE?

"From the age of four to six weeks up to three months old," the experienced poultryman will answer. Then is the time to feed them with the greatest care, so that they will fetch top market prices or become prolific layers.

## Royal Standard Growing Food

is placed on the market to meet the demand of SOMETHING BETTER. That it is better, the laboratory test show, when placed side by side with other brands, both American and Canadian. ROYAL STANDARD GROWING FOOD is composed of only first quality, plump, ripe grain, containing the proper elements for making bone, flesh and feathers. A trial order will convince you that it is the cleanest, most easily digested, MONEY-MAKING food on the market.

## Vancouver Milling & Grain Co., Limited

Vancouver

New Westminster

Nanaimo

Victoria

Break off the protruding portions of the bones in each piece.

Pack these fleshy portions in a gem jar or other container, as closely as possible.

Add salt and pepper (about a teaspoonful of salt and 1-8 teaspoonful of pepper).

Fill to within 3-4 inch of overflowing with the liquid that comes from the balance of the chicken, process for preparing which is given below.

Place in boiler or other vessel containing warm water and gradually bring to a boil.

For pint jars boil 2 1-4 hours.

For quart jars boil 3 1-2 hours.

### For the Balance of the Chicken.

Place in kettle and boil till the meat will strip free from the bones.

Strip off all meat and pack in jar.

Pour thereon the balance of the liquid in the kettle that has not been used in the first jar. If there is not enough liquid to fill the second jar, add water. Place in boiler, as above, and boil as follows:

For pint jars, 1 3-4 hours.

For quart jars, 2 1-4 hours.

If desired, the whole of the chicken may be prepared the same as the last part.

In all cases take care not to expose the gem jars to a sudden change of temperature. Also, after the jars have cooled off, examine the tops to see that the covers are air-tight.

During the cooking of the product, place the glass tops on the sealers, but do not fasten them. Any steam or gas which may be generated will escape. As soon, however, as the process is finished, fasten the tops securely.

While describing the method of canning, something should be said about the poultry to be canned.

What is preferred are good, plump fowls with a fair proportion of chickens, the bones of the latter giving a firmer jelly

and lessening the danger of a soupy or slushy product. As a precaution against this condition, where the pack is straight fowl, gelatine may be, and often is used.

So much has been said and written about the proper methods of starving, bleeding and plucking poultry for market that it is useless to go over them again. One can only emphasize the necessity of exactness in carrying-out the accepted principles in connection with these points, which are just as applicable to poultry to be canned as they are to those intended for the market.

There is another point which is important, although possibly its carrying-out may detract from the appearance and affect the sale to an inexperienced buyer, namely, that all poultry intended for food, canned or otherwise, after being properly starved, bled and plucked, should be left undrawn and kept in a suitable temperature for a day or two in order that the chemical changes which follow the killing of the bird may have an opportunity to take place.

## ARE YOU SAVED?

Acts, xvi.: 30-31.

### THE GOSPEL DEPOT.

151 Broadway East.  
VANCOUVER, B. C.

151 Broadway E., Vancouver, B.C.

Splendid Gospel Literature.  
Send for Catalogue.



# WOMEN'S SECTION

## British Columbia Women's Institutes

Motto—"FOR HOME AND COUNTRY"

### LANGLEY FORT NEWS.

A meeting of the directors and flower show committee of the Langley Fort Women's Institute was held at the home of Mrs. R. Rennie on Monday, August 6. Full arrangements were made for the management of the flower show and picnic to be held in the town hall and grounds on Wednesday, August 22. Mrs. Kent was elected a director to fill the vacancy caused by the resignation of Mrs. Taylor who has gone on a lengthy visit to the prairie provinces.

The monthly meeting of the Langley Fort Women's Institute was held in the town hall on Tuesday, August 14. Mrs. Coulter, president, was in the chair. There was a very good attendance.

There was quite a pleasant surprise when Dr. McBurney gave an instructive address on "Sanitation," as we had given up all hopes of having our busy doctor with us. Mrs. Haldi also gave a very amusing reading on a "Scotch Courting." Refreshments were served by Mrs. Coulter and Mrs. Rennie.

### SURREY'S W. INSTITUTE.

The regular monthly meeting of the Surrey Women's Institute was held August 7 at the home of Mrs. E. T. Wade, one of the oldest residents of Surrey. The meeting was held on the lawn in the shade of the maple trees that had been planted by the Wade family. After the usual business the president, Mrs. Whiteley, called upon the members for three-minute addresses. This was responded to by a number of the ladies giving short readings, and an amusing recitation was given by Mrs. E. Lonie, after which a very sumptuous lunch was served by Mrs. Wade, her daughters and granddaughters, assisted by Mrs. Williams.

A vote of thanks was moved by Mrs. Malleyneux to Mrs. Wade for the use of her home and grounds to the institute. This was heartily responded to by all present. The meeting then adjourned, to meet again at Cloverdale, September 4, when a paper will be given by Mrs. Crosby on "Feeding Hens for Winter Egg Laying."

### COBBLE HILL.

The Women's Institute gathering at Mrs. Oldham's residence, "Balgonie," was well attended and greatly enjoyed. Reports of Red Cross work showed contributions of \$109 in cash, as well as the regular subscriptions to the prisoners of war, Belgian Relief and Y. M. C. A. camp funds. Mrs. Oldham's recitations were appreciated, as was the tea served under the trees.

### SOME COOKING HINTS

When stewing fruit, housewives should remember that if the sugar is added just before the fruit is taken from the fire, it will take less to sweeten it than if it had been added earlier. Lemonade and other

beverages may be sweetened more economically with syrup than with sugar, because it dissolves more completely and is not wasted by settling at the bottom of the glass. Make it by adding a cupful of sugar to a cupful of water, stirring until the sugar is dissolved and then boiling slowly for ten minutes without stirring. Cool the syrup and put it in a bottle or jar until wanted.

#### Quick Cucumber Pickles.

Take small cucumbers, wipe clean and put in a small crock. Allow one quart coarse salt to a pail of water. Boil the salt and water until the salt is dissolved, skim and pour at once on the cucumbers. Cover tightly and let stand for 24 hours, then drain. Boil as much vinegar as will cover the cucumbers and skim well. Put the cucumbers in glass jars and pour the boiling vinegar over. Put a piece of alum the size of a bean in each and seal. They will be ready to use in two or three days. Add peppers and whole spice if liked.

#### Good Recipe for Apple Dumplings.

Make a rich biscuit dough and divide into portions about the size of a biscuit. Roll out to about a quarter of an inch in thickness and place in the centre of each a pared and sliced apple, with a tablespoonful of sugar and a dash of cinnamon. Moisten edges of crust with cold water and pinch together over apple. When finished place all in a baking dish, being careful not to have them touch. Half cover with boiling water, to which has been added three-fourths of a cup of sugar and a tablespoonful of butter. Bake for three-quarters of an hour in a moderate oven. Baste frequently. Serve with the sauce in which they were baked and cream. See if the family doesn't ask for more.

#### Meat Pies.

A good, everyday meat pie can be made from any left-over bits of meat, chopped or cut fine and well seasoned with pepper, salt and a little sage or onion. This is bak-

The New Fall  
Suits and  
Coatings  
Are Now in Stock

WRITE  
FOR  
SAMPLES

*Gordon S. Spedale*  
LIMITED

575 GRANVILLE STREET  
VANCOUVER

1211 DOUGLAS ST., VICTORIA.

ed between two crusts the same as a fruit pie. It is a good way to use up scraps, and makes a good lunch dish. Most children like this cold in their dinner basket.

#### FRUIT PASTES

Fruit Pulp is Boiled Down, Flavored and Dried—Useful for Desserts and Garnishings.

Fruit pastes, as they are called, consist of boiled-down fruit pulp with sugar added

You've seen those nice, neat, practical and most ladylike 2-piece garments so many of our fruit-pickers and packers are wearing—

THEY ARE

*Carhartt's*

designed after the models used by our sister-workers overseas—with just a little style added. For

Working, Motoring, Camping

Get the

**CARHARTT**

If your dealer hasn't got it, write direct to the factory—

**Hamilton-Carhartt Cotton Mills, Ltd.**

Entire Eighth Floor World Building.

Vancouver, B. C.

Get our Folder showing the different styles.

according to the acidity of the fruit, and are improved in flavor if several varieties of fruit are mixed. After the fruit paste is made (see recipes), it can be colored red, yellow or green with harmless vegetable colors. The coloring is stirred into the boiling mass after removing from the fire. Different flavors also can be added at this stage if desired. The paste is poured up in a half-inch layer on flat dishes, marble or glass slabs, which are first rubbed with a cloth dipped in a good salad oil. The dishes are then exposed to draft for a couple of days, after which the paste is cut into figures. If the paste is well boiled down it is dried more easily. (Many small forms useful for cutting the paste can be had on the market.) The paste can also be cut with a common knife or with a fluted vegetable knife, or it can be again cut into round cakes, the centre of which is again cut with a smaller circular cutter; there will thus be both rings and small round cakes. The cut paste is placed on paper, sprinkled with crystallized sugar or common granulated sugar. Then it stands again a couple of days exposed to draft, is dipped in crystallized sugar, and packed in a tin or wooden box lined with parchment paper and with layers of the same paper placed between the layers of paste.

The paste can be kept thus and served as dessert, and as garnishing on creams and custards, frozen creams, large cakes, etc.

#### Apricot Paste.

One pound powdered sugar to one pound fruit pulp. Rub the fruit pulp through a puree strainer and weigh it. Add the sugar, put it over a slow fire, and cook until very thick, so that when a spoon has been passed through it the mass does not run together immediately. Then pour the paste upon flat dishes which have been rubbed with oil and allow it to dry. Cut and pack in layers as directed above.

In the same manner raspberry, strawberry and currant pastes are made.

#### Quince Paste.

Three-fourths pound powdered sugar for each pound of fruit pulp. Wipe the fruit, cut into quarters, remove flower and core, and cook in water until very tender. After rubbing the pulp through a sieve, weigh it and add the required amount of sugar. It is then cooked until very thick. Scalded and chopped nut kernels may be added. The pulp remaining after the juice has been extracted for quince jelly may be used also.

#### Apple Paste.

One-half pound powdered sugar to one pound pulp as rubbed through a sieve. For this product apples that are of lower grade than is required for some other purposes can be used. Cut the apples into quarters. Remove flower, stem and core. Put fruit into cold water until it is ready to be cooked. Boil tender under cover and over a very low fire in order not to scorch. Rub the tender apples through a coarse sieve, weigh, and put into the kettle to be cooked with the sugar under constant stirring until it is rather firm. It can be varied in taste by the aid of different additions, as, for instance, vanilla, peppermint or orange flavor, or cooked with either finely cut citron, finely cut lemon peel or blanched and cut nut kernels. The paste is poured out, dried, and kept as the others.

Other fruit pastes can be made of cherries, plums and other fruits.

It is often advisable to make several different pastes. When nearly dry (before cutting) place different colored or different flavored layers on top of each other as in a layer cake. With a sharp knife cut in



Little  
Miss  
**MAIDEN**  
CANADA  
Registered

*"Help Yourself!"*—

There are times in the warmer season when you don't feel like drinking cocoa. At such times learn to make the most of your cocoa, bring it down from the shelf and make it pay for itself by icing your cakes with it.

Perfection Cocoa is the best and most easily adapted to such purposes. These warmer days, try your hand at it.

**COWAN'S COCOA**  
"Perfection Brand"

A-48

one-half inch strips through all layers and dry.

#### MAPLE NUT PUDDING.

Stir together 1 1/2 cup of brown sugar, 6 tablespoons flour, 1/2 cup cold water. Add 2 cups boiling water and boil 10 minutes. Remove from fire and stir in the stiffly whites of two eggs. Add 1/2 cup chopped walnuts. Turn into mould, serve with cream.

#### QUEEN'S PUDDING.

1 cup cake cut in cubes, 1 pint of milk, 1/2 cup sugar, 2 eggs, 1 teaspoon vanilla, jelly or jam. Mix milk, sugar and egg as for custard, pour over cake which has been placed in buttered baking dish. Bake in moderate oven until slightly brown. Make meringue of whites of eggs, spread over pudding a layer of jam, then meringue and brown in oven. Serve cold.

#### BROKEN CHINA.

China may be mended so that the join is scarcely perceptible in the following way: Take a little of the best carriage varnish and apply it carefully with a camel hair brush to the broken edges. When thoroughly dry the china will stand usage and washing again.

#### Home Storage

Continued from page 31

open to the same objection as when it is used for potatoes—it is hard to get at the material when it is needed. Another method of storing cabbage consists in setting the whole plant in trenches side by side with the roots down and as close together as they can be placed. Dirt is thrown over the roots and against the stalks to the depth of several inches. A low fence is built around the storage place, and rails, scantling or other supports laid across the top. About two feet of straw or other material is then piled on top of the storage pit.

#### Celery.

Celery may be stored in a modified type of outside pit or in the row where it is grown. When stored in a pit or trench, the plants are taken up and set side by side in a shallow pit as close together as it is feasible to pack them and wide boards set up along the outside of the pit. Dirt is banked against these boards, and the top covered over with corn fodder or similar material. When celery is kept in the row where it is grown, the earth is banked up around the plants as the weather gets



cold. When freezing weather occurs, the dirt should be brought to the tops of the plants and the ridge covered with coarse manure, straw or fodder, held in place by means of stakes or boards.

#### Outdoor Caves or Cellars.

Outdoor caves or cellars are superior to banks or pits in many respects. They require no more labor to store the vegetables than an indoor cellar, yet give a uniform and low temperature during the entire year. They possess practically all the advantages of the bank or pit, yet may be entered at any time during the winter for the removal of any portion of the stored product without endangering the keeping quality of the material that remains. These storage cellars are usually made partially under ground, although in the southern portion of the country they are usually entirely above ground. In sections where severe freezing occurs it is well to have the cellar partially under ground. In order to avoid steps down to the level of the floor, with the consequent extra labor in storing and removing the vegetables, a sidehill location is desirable for the cellar. An excavation is made into the hill of the approximate size of the cellar. The dirt from this excavation may be used for covering the roof and for banking against the sides of the structure. A frame should be erected by setting posts in rows in the bottom of the pit near the dirt walls, sawing these off at a uniform height, placing plates on top of the posts, and erecting rafters on these plates. The whole should be boarded up on the outside of the posts, with the exception of a space for a door in one end. The whole structure, except the door, is

covered with dirt and sod. The thickness of the covering will be determined by the location. The colder the climate, the thicker the covering. The dirt covering may be supplemented by a layer of manure, straw, corn fodder, etc., in winter time. Outdoor cellars are usually left with dirt floors, as a certain amount of moisture is desirable. These cellars may also be made of concrete, brick, stone or other material. Such cellars are to be found in many sections of the country and provide almost ideal storage facilities for potatoes, beets, turnips, carrots, parsnips, salsify and celery.

#### Irish Potatoes.

Irish potatoes can be stored in pits, roof cellars or above-ground, frostproof storage warehouses. Small quantities, or even carload lots of potatoes are often placed in pits in the field when other storage facilities are not available. Immature potatoes cannot be successfully stored for any considerable period even in the best of storages, and should never be pitted or buried. Well-matured tubers of either early or late sorts, if sound and in a dormant condition upon the advent of freezing weather in the autumn, may be kept until required for table use or for planting by pitting, storing in potato cellars, of which there are many designs, or in above-ground, frostproof buildings.

#### Sweet Potatoes.

Sweet potatoes should be thoroughly matured before harvesting, dug while the ground is dry, carefully handled, and thoroughly cured by holding them at a temperature of 80 to 85 degrees Fahrenheit for a week or 10 days after harvesting. After

this they should be stored in a place where the temperature remains in the neighborhood of 55 degrees Fahrenheit. Such a location is usually near the furnace in a cellar or near the furnace chimney on the second floor of the house. There is little merit in wrapping them in paper or burying them in sand. Sweet potatoes are stored in outdoor pits or banks, but this method is not to be recommended except where no other facilities are available. Sweet potatoes stored in pits are not as good in quality as those stored in houses. For further information on storing sweet potatoes write for Farmers' Bulletin 548.

#### Onions.

Onions should be well matured before harvesting, and should be allowed to become thoroughly dry before being stored. They may be put up in baskets, crates or bags and placed in a cool, dry place. The attic is better than the unheated cellar for storing onions. Temperatures slightly below the freezing point do not injure them, provided they are not moved or handled while frozen.

#### Beans, Peas and Other Dried Products.

Such vegetables as may be kept in the dry state should be grown to as great an extent as possible. Various kinds of beans, including lima beans, should be allowed to dry on the vines. Lima beans should be gathered as they mature, and placed in a warm, dry place until dry enough to shell. Navy beans and kidney beans are usually harvested when a maximum number of pods are mature and before the ripest pods which they are threshed or shelled.



**S**UCCESS is the embracing of all OPPORTUNITIES AS THEY PRESENT THEMSELVES, AND USING THEM TO ATTAIN YOUR HIGHEST IDEALS. ❁ ❁ ❁ ❁

¶ We are the most successful Printers in British Columbia and offer you the opportunity of securing the highest and best in the Printing Industry —EMBRACE THE OPPORTUNITY. ❁ ❁ ❁

WARD, ELLWOOD & COMPANY  
PRINTERS

318 Homer Street - - Vancouver, B. C.

PHONE SEYMOUR 1515



## This Suit of Men's Wear Serge is Exceptional Value for \$25.00

—as illustrated—it is Norfolk style and comes in navy blue, black, dove grey, nigger brown and bottle green, with large convertible collar, yoke, and box pleats back and front, finished with belt, novelty pockets and button trimming. Lined throughout with satin. Skirt is made in belted style with pockets to match coat; sizes for misses and women. Special value ..... **\$25.00**



## This Smart, Useful Coat for \$19.75 only

—it's fashioned on the most popular lines of the season. Designed by military in appearance, it has a large collar, four novelty pockets, cuffs to sleeves. The material is a splendid quality Donegal tweed, and will give warmth, comfort and satisfactory wear for misses and women. Price ..... **\$19.75**

## Girls' School Dresses for \$5.98 only

—Smart little dresses of men's-wear serge in navy color, fashioned in three very popular styles for school wear. The first is a dressy little sailor dress with separate skirt. Another little dress has attached skirt and trimming of smart silk braid and ornament on sleeves; the third is a Billie Burke dress, always a great favorite. Choice in sizes to fit girls of 6 to 14 years. Price ..... **\$5.98**



## This Underskirt is the Best of Value at \$2.75

—just the correct weight and style for Fall and Winter wear. The material is a good strong moire of medium weight, with smart accordeon pleated flounce. It is a well made underskirt and fits perfectly. The color range includes grey, paddy, cerise, rose, black, navy and saxe. Special value. Price ..... **\$2.75**

## All-Wool Sweater with Cap to match \$9.75

—warm, comfortable, and dressy looking garments, with roll collar, and sash. Comes in all sizes in colors black, grey, cardinal and maroon. It is decidedly good value at this price ..... **\$9.75**



# Hudson's Bay Company

VANCOUVER, B. C.