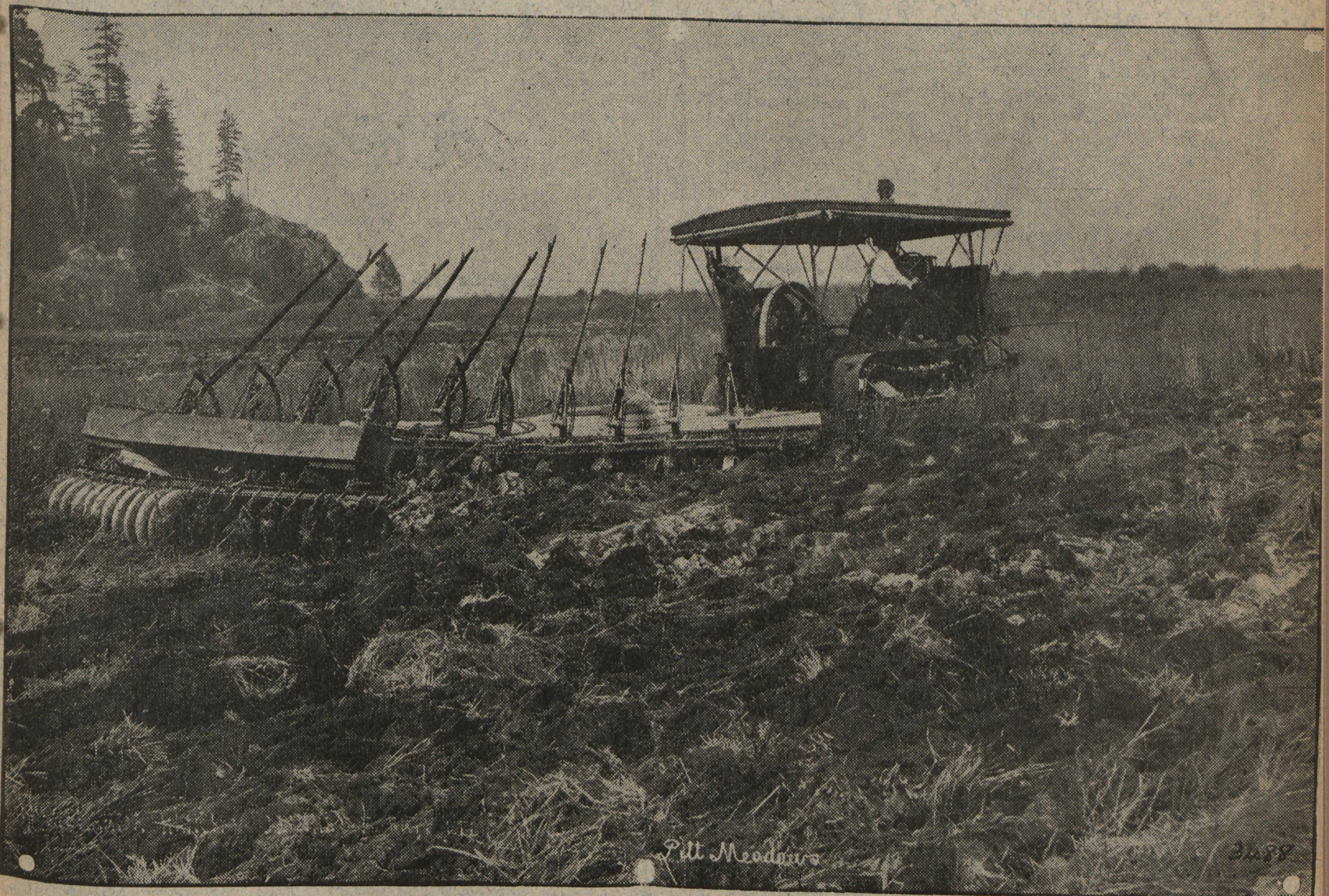


BRITISH COLUMBIA
FRUIT AND FARM
MAGAZINE

Vol. VII, No. 3

MARCH, 1916



Pitt Meadows

BREAKING BRITISH COLUMBIA BLACK LOAM.

Compliments of Vancouver World

Modern farming methods are practiced by the farmers of British Columbia more than is thought by the average city dweller.

Be Ready for Spring Rains with a Pair of Leckies

There'll be lots of rain, of course, and rain means wet feet UNLESS you have on a good stout pair of LECKIE'S BOOTS made on purpose to keep your feet warm, dry and comfortable.

LECKIE BOOTS

are meant by their manufacturers to be honest, solid, reliable boots AND THE STANDARD IS KEPT UP. Just you wear a pair of LECKIE'S and see if this isn't so. Name stamped on every pair.

The leather in Leckie's Boots is purchased in the World's best leather markets. Only skillful and expert workmen make up these shoes. Each pair is thoroughly inspected before leaving the factory. Each pair is guaranteed as to quality.

At All Dealers

ELECTRICITY ON THE FARM

The progressive Canadian farmer always eager to adopt improved methods of cultivation and production, has now turned his attention to the use of electricity on the farm.

It has been found that electric power can be applied economically to more than one hundred farm and household purposes. Electric current can be used to operate cream separators, milking machines, butter churns, bottle washers, water pumps, washing machines, vacuum cleaners, horse groomers, grain shredders, ensilage cutters, feed grinds, thrashing machines, hay balers, and for refrigerating.

Electric motors are easily installed, they cost little to operate and are always available for instantaneous service and they also affect insurance rates favorably.

For further particulars see the agent of the company at the station nearest to your farm.

B.C. Electric

New Westminster

Chilliwack

Abbotsford



Are You Aware

that our government with its wise regulation of an additional duty on imported fruit is shutting out the American apples completely? Are you aware, too, that with the removal of this unfair competition fruit-growing now will become a real profitable business? Now is the time to plant and prepare without hesitation to meet the increased demand for good fruit at right prices.

We offer a complete assortment of

FRUIT & ORNAMENTAL TREES

SMALL FRUITS, ROSES, EVERGREENS, CLIMBERS.

In Fact, Everything Hardy, That Is Desirable for the Garden in Strictly First-Class Quality.

Layritz Nurseries

CAREY ROAD.

VICTORIA, B. C.

TABLE OF CONTENTS FOR MARCH

	Page
Seed Production in B. C.	853
By H. O. English	
Blasting in the Orchard	854
Editorial	856
Beekeeping Section	858
How to Grow Strawberries	860
Spray Calendar	861
Gardening for the Home	862
By H. M. Eddie	
Poultry Section	868
Farmer's Institutes	872
Women's Institutes	874
Market Conditions, etc.	878
By S. J. Fee	

Fruit and Farm Magazine

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

Vol. VII.—No. 3

Vancouver, British Columbia

\$1.00 per year
in Advance

Seed Production in British Columbia

By H. O. English, Soil and Crop Instructor for B. C.—Address Delivered Before the Annual Convention of B. C. Dairymen's Association, 1916.

The subject of Seed Production in B. C. should need very little explanation in a meeting of Live Stock men. I have chosen to speak on this subject for that very reason. I am here advocating that you as dairymen lend your support to this movement, and I want you to understand that I am not asking any favor from you, but want to point but how important it is that you should co-operate in the inauguration of a practice, new to British Columbia, which will have a beneficial effect on all the agriculture of the province.

The need for this move on our part is threefold. First, let us consider the amount of seed which is brought into the province annually from outside sources. In 1915 over 10,000 bushels of oats and wheat were imported by this government alone. In addition to this, there were thousands of pounds of alfalfa, mangels, corn, etc., brought in as seed. This would be quite satisfactory from the standpoint of all concerned, but for two things. The first of these is that no matter how carefully this seed may be inspected, weed seeds creep in. The imported seed is the chief mode of entry of weed seeds and crop diseases. This is how most of the weed enemies of the farmer have already found entrance, and every year new pests arrive by the same gateway. The other argument which militates against the importation of seed is that of economy. British Columbia is so located as to be isolated commercially from the common sources of good seed, i.e., the prairie provinces and the United States. Seed is naturally rather more expensive than feed, and when one adds to this already high price the transportation charges and one or two middleman commissions, the selling price of the registered seed is so high as to prohibit its general use by the average farmer.

In consequence we have the small farmer saying "Well, I only want an acre or so of this for chicken feed, or to mix with the ration for my milch cows, so anything will do." He sows what grain he may have, weed seeds and all, with the natural result—the weeds mature first—the weed seeds fall before the grain is ripe, and thus seed the previously virgin soil down to a pest which it may take years of hard labor to eradicate.

The second argument in support of seed production in B. C. is quite as forcible. We bring pure registered seed into the province at considerable expense to the department. The farmer buys this seed at a price that seems to him unreasonably high. He sows the seed, but does not take any extra pains to preserve the high standard of purity or excellence. Inside of two years the identity of the seed is lost, and the good

work begun when the seed was brought in is undone, and a large part of the benefit which might have been derived is lost.

You, gentlemen, are either dairymen, or are interested in dairying. Naturally, in the past, when you wanted a new sire or a new female to build up your herd, you went outside the province to obtain it. Even yet you have occasionally to go a considerable distance to find good foundation stock. But the quality of the home grown dairy stock is improving, and now-a-days, if your neighbor has a good animal of the type and qualifications for which you are looking, in fact has an animal whose ancestry and record you are familiar with—you do not go back east or south to buy on somebody else's recommendation what you can buy subject to your own inspection from your neighbor. I doubt if any of you will admit that the breeders of any other province are producing or can produce anything better than our own breeders are producing right at home. Why then should we send off east, south or in any other direction for seed grain, corn, etc., when we can produce all we require right at home here just as good, if not a great deal better, quality. If you are producing good dairy stock you are doing so after making a careful study of the business. If you cannot at present grow seed that will satisfy all the wishes of a seed expert, study the question a little and it will not be long before you will be able to do so.

No argument should be necessary to persuade you that you ought to use good pure seed. You can ill afford to grow anything poorly on this high priced B. C. land. When you seed an acre of land down to anything, you need to get the very largest returns possible from it in the way of feed to pay the interest on the money invested. It is accordingly self evident that you cannot afford to use poor seed.

Having decided that it is advisable to devote some attention to the production of registered seed, not only in B. C., but on our own farms, the question arises as to how this is to be accomplished. The general procedure is very simple.

If you intend to grow wheat, oats, barley, corn or grass, the first step for you is to determine what variety is best suited to your district. Having determined this, secure sufficient Registered Seed of this variety to seed at least a quarter acre of land.

Select a plot of land relatively fertile and adapted to the culture of the crop chosen, free from weeds, and sow your Registered Seed. It is well to select this plot from a field that has been in roots or clover the previous year as there is less

likelihood of trouble through the presence of weed seeds.

The care and treatment of this plot is the most important part of the business of seed production.

1st. The hand pulling of all noxious weeds is absolutely necessary.

2nd. All plants which are off type should be removed.

3rd. A clean border should be maintained so that no other variety or weed may flourish in close proximity to it.

Finally, you should, when the plot is fully matured, select by hand from the standing crop enough heads, ears, etc., so that when they are threshed out you will have sufficient to plant a similar plot the following year.

The seed which is secured from the crop remaining on the plot is known as Elite Stock Seed. This should be carefully threshed and stored. This is the highest grade of seed on the market at the present day. But to register this seed you must follow the rules and regulations laid down by the Canadian Seed Growers' Association, i.e., you must apply for membership in the association early in the year. You will not be granted membership until you have proven to the C. S. G. inspector that you can and will produce good seed according to their rules. The C. S. G. appoints inspectors who score your plots while growing, and who also inspect the threshed seed. It is upon these two inspections that the C. S. G. base the registration of seed grain.

In the first place, one must be a member. In the second one's field plot and harvested product must pass inspection.

Those who go into seed production as a commercial proposition seldom dispose of their Elite Stock Seed. They retain this and plant it in what is known as a multiplying field. In this way they increase the quantity of seed without lessening the selling price very much. You will hear a lot about first, second, and third generation seed, which merely means that it is just this long since the original seed was grown on a hand selected plot.

You will see from the foregoing that it takes one year before a member can dispose of his seed as Registered Seed. Consequently, this year we are offering prizes for provincial competitions in seed production. These provincial seed production competitions will be open to all institute members who wish to begin the production of seed. To enter such a competition all that is necessary for you to do is to follow the outline I have given you, and send your applications in to the Soil and Crop Division before June 1st, 1916.

In this connection also we are holding Provincial Seed Fairs each year. The ob-

Blasting in the Orchard

ject of such fairs is to stimulate an interest in the production of better seed, and to show us just where we may go for good seed. This year the feature of the seed fairs has been the large exhibit of potatoes, and the total lack of registered seeds. Next year, and even more so the following years, we will feature Registered Seeds.

The Provincial Department of Agriculture has decided that we cannot continue this annual distribution of seeds indefinitely. Accordingly, to take the place off this annual government seed distribution, we are this year going to enroll all those members of the Canadian Seed Growers' Association who are resident in B. C. in a Provincial Seed Growers' Directory. In this directory will be included the varieties grown by each member, and the quantity of seed each will have for sale. The names of the prize winners in the different classes at the Provincial Seed Fair will be included. This directory will be published and mailed to all members of farmers' institutes, and to any other citizen of B. C. who shall desire to secure one. In this way, prospective purchasers may buy direct from the nearest grower, thus reducing transportation charges, etc. I might state that it is our intention, as time goes on, to devote more and more space in the Provincial Demonstration Plots to the production of Elite Seed for distribution as foundation stock to the members of the institute district and districts surrounding that in which the plot is located.

You will notice that I have not devoted any time to the problem of seed potato production. This has not been an oversight on my part. I might talk for an hour on this phase of the question, but I decided that dairymen were not so deeply interested in potato production as in the production of other crops. If any one desires information along this line, however, he should refer to the C. S. G. bulletin, in which Mr. Newman deals very fully with the question of seed potatoes production, when to change seed and when not to do so, and the registration of new varieties.

THE PACIFIST.

(John Kendrick Bangs in the New York Times.)

The Pacifist would raise no beans,
Or other garden fruits,
Because he'd learned from magazines
They sprouted little SHOOTs.

He'd have no grass upon his place
Because it reached his ears
That grass first showed its verdant face
In countless little SPEARS.

And flowers, too, the man eschewed—
It seemed so very sad
That every bud and blossom rude
A hidden PISTIL had.

For pigs he left his fellow-man
Though mankind he adored,
For some one told him that the PEN
Was mightier than the SWORD.

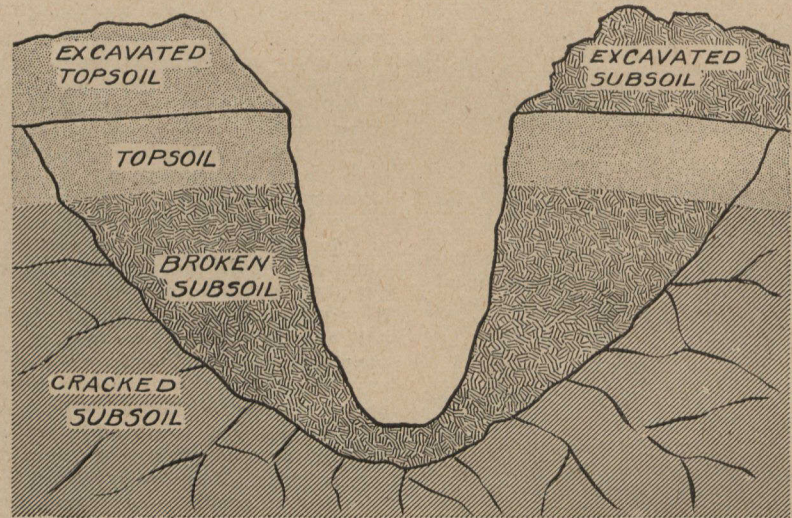
Despite the fact that the cost of raw materials has gone up 15 per cent and the duty has been increased by 7½ to the finished article, Phytophiline, the well-known non-poisonous insecticide will be sold this season at the same price as last.

The idea of using explosives in planting new orchards and rejuvenating old ones is not a new one. Nearly a quarter of a century ago, near La Mesa, California, ground was blasted for tree planting, because the orchardist found the work of planting with the spade in the resistant soil too difficult. His experiment was a success. The trees lived, thrived and bore exceptional apple yields for many years. Other farmers and orchardists in different sections of the country also thought of the same scheme for preparing a home for the tree roots. There are records of such plantings eleven, sixteen and twenty years before the idea really began to spread. Now, millions of fruit, nut and shade trees have been planted in blasted ground, long enough to prove the great advantage of the method. America's leading orchardists and nurserymen now plant exclusively in blasted ground.

Up to a few years ago, the method followed by most orchardists was to dig a hole seldom as much as two feet in diameter and 18 inches deep, then plant the tree in top soil or a mixture of top soil and subsoil. Under this system the loss the first year ran from 25 per cent to 50 per cent, depending on soil and weather conditions.

Then tree planting with explosives was taken up by a few orchardists who realized the shortcomings of the ordinary methods, and the necessity of cutting down first year losses, and speeding fruition.

The first objections to the new method were largely financial. The cost of explosives, blasting cap, fuse and labor ran from 8c to 15c per hole, whereas trees could be planted with a spade for 3c to 5c per hole. The trouble with this comparison is that the work performed is not the same hence the cost should not be compared.



The best practice is to shovel out the loose soil and expose the pot-hole. This is easily done in the freshly blasted holes.

What Blasting in Orchards Accomplishes.

1. It mellowes the ground to a depth of five or six feet and throughout a circular area ten to twenty feet in diameter, making it easy to dig the hole and plant the tree correctly.
2. It creates a porous, water-absorbing condition in the subsoil that makes the tree drought-proof, stopping the big, first year loss.
3. It makes root growth easy and makes tons per acre of new plant food available, hence speeds up the growth of the tree and makes it fruit one or two years earlier.
4. It creates drainage and prevents stagnation of water on surface.
5. In old orchards that were planted by the old methods and have ceased to bear well, it is of great value in rejuvenating the old trees, causing them to yield heavily.
6. It destroys fungus, nematode, and other orchard soil diseases, hence makes it possible to plant new orchards where old ones have been removed without waiting several years to rest the land and get rid of the diseases.
7. At a cost little or no more than of old-style planting, it causes at least a year's earlier return on the investment in new orchards, and greatly increased returns thereafter as compared with spade-set orchards.

The question involved is, how soon does the planter want a return from his investment and how large a return? The only way to compare costs is to consider the profit sought and which is the cheaper way to get it.

In the first place, the purpose of blasting is not to supplant the spade. It is possible to dig the hole with explosives, just as a hole may be excavated for a fence post. But the real object of blasting is to mellow the subsoil and make root growth and spade digging easy.

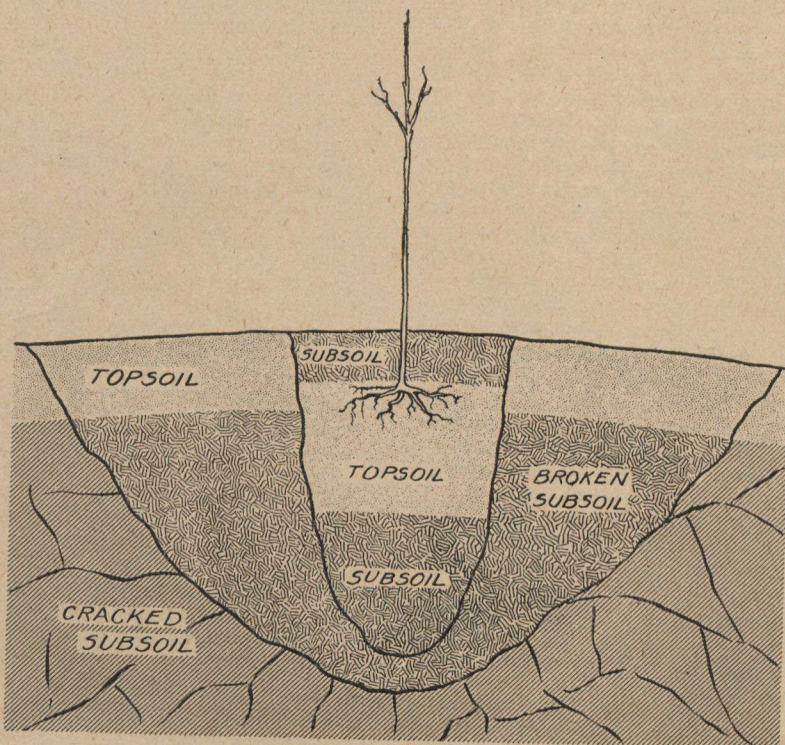
The places to set the trees or other plants being selected and marked by a stake, or better, if the field is large, by furrows ploughed to indicate the exact lines for the trees, and crossed at the proper interval by other furrow to indicate the spacing in the rows. Sometimes a heavy cord or light wire stretched across the field will materially assist in laying out the orchard.

Blasting for tree planting is best done in the fall because it is easier to catch the subsoil in a dry condition, but blasting in the spring for spring planting, although the subsoil is apt to be wet or damp, is nevertheless much better than planting in dug holes. It should be done as many days ahead of planting as possible, to get the effect of air and sunlight in the hole.

The exact nature and depth of the subsoil should be known in order that the explosive may be used to the very best advantage. The only way to know this it to go down and see. Do not stop at the surface but go down four or more feet. Using a good soil auger is the best and easiest way to test out a subsoil, but if one cannot be had, dig a hole. Another way is to blast out a test hole and examine each layer of the soil. This is not so good as the other methods as the blast so disturbs the subsoil that it is hard to tell just what the original condition was.

If the holes are blasted in advance of the time of setting the trees they are left without further attention until planting time, unless it is desirable to add some manure or fertilizer to be diffused through the soil. This is a good practice, especially on poor soil. In the soil is sour, sticky clay, a few pounds of lime scattered in the hole will materially assist in flocculating the clay and keeping it permanently granulated and sweet.

When the trees are to be planted shovel out the hole and locate the cavity that is usually sprung at the bottom of the hole.



As much of the hole as possible should be filled with rich top soil. Pack this enough to prevent settling and set the roots like they were in the nursery.

A small auger is quite satisfactory for making a small number of holes, but is too slow and expensive if there is much work to be done. However, for holes deeper than three feet, one can be used very satisfactorily to deepen the drilled holes. In some cases holes can be made with a heavy crowbar. Some soils are so hard, being in reality soft rock, that a rock drill is required to make the holes.

The charge is prepared by cutting off a piece of fuse as long as the hole is deep, and crimping a cap on one end by means of a cap crimper. The cap with the fuse attached is inserted into the explosive used, and securely tied.

Start the charge into the bore hole and press it gently to the bottom with a wooden tamping stick. Pour in four or five inches of loose dirt and tamp it gently, then pour in more dirt, preferably slightly moist as it packs better, and tamp firmly. When the explosive is covered with several inches of lightly packed soil the rest of the tamping should be made as hard as is possible, using the stick in one hand. The hole should be tamped full.

The next operation is to light the fuse and retire to a sufficient distance to avoid any loose material that may be thrown out. If the loading is properly done and at a sufficient depth there is usually only a thud and a cracking at the surface and no soil is thrown into the air.

Fill this with tamped soil to firm the base to prevent subsequent settling of the tree; fill the hole to the level it is desired to set the tree being careful to keep the soil well tamped. Set the tree with the roots as near their original position as possible and pack them with the top soil that has been shoveled out of the hole.

When no attention is paid to settling or firming the soil in the bottom of the hole, trouble often results from the tree settling too deep after the first heavy rains, but this trouble has never been observed when the holes were properly examined and the described precautions observed in setting the tree.

Just before packing the soil around the trees be sure that they are in line with the rest of the row.

When trees are set as much as thirty or more feet apart it is an excellent practice to place blasts midway between the rows after the trees have been growing several years. These will open up the subsoil between the trees that was but slightly disturbed by the original blasts and will induce more vigorous root growths, and consequently better trees will be the result.

This method of resetting applies not only to orchard trees, such as the apple and peach, but to nut trees, shade trees, berries, vines, roses and all classes of ornamental and commercial trees and shrubs.



Victoria, Nelson, Vancouver.

Manufacturers of

LOW FREEZING
STUMPING POWDER

LOW FREEZING
AMMONIA POWDER

VERY LOW FREEZING
GELATINE POWDER

Correspondence invited.

CANADIAN EXPLOSIVES LIMITED

Head Western Office:
Victoria, B. C.

District Offices:
Vancouver, B. C. Pr. Rupert, B. C.
Nelson, B. C. Edmonton, Al'ta.

EVERYTHING IN THE
EXPLOSIVE LINE

Have YOU Tried
Our
Low Freezing
Stumping Powder

CORRESPONDENCE SOLICITED

Write for Pamphlet

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. VII. MARCH No. 3.

EDITORIAL

SAVING THE APPLE INDUSTRY.

The announcement in the budget speech delivered by Sir Thomas White that the government had raised the duty on apples to 90 cents a barrel was hailed with delight by fruit-growers throughout the Dominion and by all other persons who had the best interests of Canadian producers and consumers at heart.

Our purpose is not to deal so much with advantages from the standpoint of the consumer, although these are several and of sufficient importance to justify the tax, but to point out that in placing this import duty on apples the benefit that will accrue to the fruit-growers of the Dominion, and especially those in British Columbia. The three neighboring States of the Union, Oregon, Washington and Idaho, have overplanted eleven times what they can market. These states, according to the best authorities, have been marketing apples in British Columbia below the cost of production. Naturally these conditions have not been conducive to the development of the fruit-growing industry of British Columbia and should they continue will eventually mean the ruination of the industry and a blow to the whole province.

The B. C. Fruit-Growers' Association at its last convention passed a strong resolution asking for protection; the Royal Commission on Agriculture requested the same thing, while the Provincial Legislature also asked the Federal Government for protection.

Shrewd observers realized that the enormously increased production in the Western States, with the disastrous marketing conditions that would follow, created a serious menace to the life of the industry in British Columbia. It was further recognized that fruit-growing in British Columbia was a sound and logical industry that should be encouraged and given every reasonable opportunity to withstand foreign encroachments, especially as there are enough apples grown in Nova Scotia, Ontario and British Columbia to supply the entire Dominion. A large amount of capital is invested in the industry in the Dominion and especially in B. C., and it was the opinion that if our own settlers were allowed to drift into bankruptcy it would have a deterrent effect on prospective settlers in a new country as Canada. It was pointed out that a million dollars is spent annually in Canada for foreign apples. How much bet-

ter would it be if this amount were expended with Canadian producers.

Now that the Government has practically shut off all fear of disastrous foreign competition these menacing conditions against which the apple growers of the Province have been fighting so strongly will be removed. The fruit-growers will benefit enormously while the consumer will benefit in that the consumer of fruit is a large producer of commodities needed by fruit-growers. Likewise the consumer will be protected, for if the Canadian apple industry was seriously crippled the consumer would later suffer from short supplies and high prices. It is generally believed that the present era of over-production in the United States will be followed by a long period of general neglect or destruction of apples, resulting in short crops and high prices. The local producer cannot in any event charge exorbitant prices. General competition and the fear of a removal of the duty will attend to that part of the problem. The foreign shipper, as has been well pointed out by the British Columbia fruit-growers, has no interest in the Canadian consumer and in any case would only use Canada as a dumping ground for his over supply as it is claimed by growers is now done by Seattle houses in the case of Vancouver.

As we grow more apples in Canada now than are consumed in the home market there is not much likelihood of the increased duty creating a shortage and high prices. The industry, with the encouragement of the tax, will be greatly stimulated and we venture the opinion the crops will be largely augmented.

On the general principle of protection, and Canada in all its legislation shows that it endorses protection to a certain degree, a duty that will save a national industry from ruin or at the best unfair competition, and that will serve to increase natural production is something worthy of endorsement. No doubt, for the time being there will be some disturbance in the business of the importers in wholesale row, but we do not anticipate that this will be lasting but will quickly adjust itself. It may temporarily work a hardship on importers, but we believe that they too, would rather deal exclusively in home products than with foreign shippers and the attendant uncertainty of price and supply. Whatever increased price there may be to the consumer, if any, will be more than offset by the accumulative advantage to the consumer both directly and indirectly.

A WORD TO OUR READERS.

We would draw the attention of readers to the advertisements in "Fruit and Farm." There are reasons why our advertisers should have the preference over other firms when you are buying. The principal one is that the firms advertising in "Fruit and Farm" are making a special appeal to the farmer. The fact that they are pressing their claims for recognition through "Fruit and Farm" shows that they have what they consider special reasons for attention from the farmer. These firms are making a study of agricultural conditions; they are making a direct address to the farmer, and it is natural to assume they have made special preparation for handling the business of the farmer. Farmers are more

likely to get satisfaction from such firms than from concerns that are not using the advertising columns of the only farm publication in British Columbia. Incidentally, while you are patronizing advertisers in "Fruit and Farm" you will do "Fruit and Farm" a favor and yourself no harm by mentioning the fact that you saw their advertisements in this magazine.

RETURNED SOLDIERS AND THE LAND.

One of the greatest problems confronting Canada in connection with the war is what to do with the returned soldiers. By the time the war is over probably a half million Canadians will have been on the battle line. It is obvious that the return of this number or any considerable portion of it will constitute a new problem in the national life of Canada.

These men cannot be left to their own resources on the chance of getting back their old places or looking out for themselves. That is not the understanding with which they left for the firing line. There rests a moral obligation on the Government to look after the interests of the men who have sacrificed so much for those who have remained behind.

Numerous suggestions offer themselves for dealing with the returned soldier, the chief of which is that which naturally suggests itself in a young and new country of placing them on the land. Not all will want to take up agriculture, but a considerable proportion of them will. Many are experienced farmers; others are men in whom campaigning has destroyed all taste for office or shop and who will welcome an open-air occupation.

The problem of placing the soldiers on the land is one primarily for the Federal Government to solve, being a national affair, with, in all probability, such assistance as the Provincial Government can afford.

A great many ideas have been advanced, some practical, others so theoretical and visionary that mere mention of them relegates them to the discard. To begin with even all the men evincing a desire to take up agriculture cannot receive at once all of the advantage the Government is willing to place at their disposal. Not all will be adapted for farming any more than all men would make a success in any other given occupation. Before returned soldiers are settled on the land some provision must be made for finding out if they are liable to make a moderate success, or if the occupation will be to their liking. Then again no matter how strongly the call to the land may appeal to the men many must undergo special training along the principal branch of the industry they wish to follow. This involves finding ways and means for expert instruction and maintenance while undergoing that training. The latter aspect, of course, will not present such a difficult problem, as it will necessarily be self supporting to a certain degree.

There is the greatest part of the question to solve: On what terms will the land be granted to the embryo farmers, how much land, and, in the case of British Columbia, is all or a part only of the land to be cleared?

A committee has been busily engaged in British Columbia composed of Dr. Klinck, dean of agriculture in the University of B. C.; W. E. Scott, and Mr. Gibson, working under the chairmanship of Hon.

Dr. Young, in evolving some scheme of placing returned soldiers on the land. According to information obtainable it is believed that the committee will make recommendations covering the points raised above. It is probable that due regard shall be had to the fitness and aptitude of returned soldiers for agricultural pursuits; that a probationary period will be provided during which the soldier will occupy the land as a tenant under competent observation and advice permitting him to take up land under the plans provided for permanent ownership if he demonstrate a liking for the life; and that large areas will likely be set apart in different parts of the province and these in time will be surveyed into farm holdings varying in size according to the location of the colony but permitting the fullest scope for co-operation. It is further proposed that centrally located in these blocks, will be a demonstration farm under expert direction.

In Northern B. C. these farms will likely consist of about 80 acres and near the coast will have about half that area. The Government will eventually clear about one-quarter of the land, leaving the rest for bush lot and individual effort. They would also be provided with a cow, a team of horses, two hogs, a few chickens and such necessary implements as may be required.

It is believed by some members of the committee that farms thus equipped can be provided in the outer parts of the province from \$2500 and nearer the southern coast for \$3000.

An extended period for repayment of perhaps twenty-five years at a low rate of interest should make these a very acceptable proposition to the returned soldier. An independent commission would be required to impartially administer matters.

A report from the government is expected shortly.

Such a scheme will mean a very large expenditure, but it is a duty that the country cannot evade. If carried out with an earnest desire to advance the agricultural development of the country rather than a desire to only get rid as easily as possible of a vexatious question, we believe that it will prove a boon to Canada. Indeed, we would go farther and suggest that if successful it will be the commencement of a policy that will eventually bring under cultivation a great area of arable land throughout Canada with the privileges of the plan adopted extended to all worthy citizens.

BOOKKEEPING ON THE FARM.

A few years ago the job-printing business of America was at a decidedly low ebb. There was an abnormal number of failures and despite general commercial prosperity in other lines the printer failed to share in the good times. Then someone discovered the cost system in printing, which is nothing more nor less than an accurate system of bookkeeping that keeps a record of the entire cost of producing printing, giving in detail what each piece of printing cost for labor, machinery, plant, insurance, delivery, etc., etc.

The printers who adopted the cost system and charged a fair profit on their work began to be in that happy position where they could pay wages every Saturday night, could meet wholesalers' drafts and were raised to the plane of other business men. Today the cost system is generally adopted by the

printing trade throughout America. There are still some printers who say: "We know how we are doing without adopting these new fangled ideas." These printers are not proving very serious competition for those who keep track of costs and profits.

How many farmers keep a proper set of books? Last summer 400 farmers in Ontario were visited by a representative of the commission of conservation. One claimed to keep a systematic set of accounts. Several claimed to do bookkeeping, but the system was far from complete. Many claimed that they knew how their business was going without keeping books. These men have only an estimate and it is impossible to depend on estimates or to consider any phase of their business of farming independent of its relation to the rest of it.

Proper accounting may open your eyes. How do you know that every department of your farm is paying without a systematic record of costs and profits? Other men thought they knew their own business, but under a proper system of bookkeeping soon found out their mistake. We venture to say that if every reader kept the proper kind of record of his farming accounts there would be many surprises in store at the end of the year. Departments that you thought were paying big, perhaps, would show a net loss when time, investment and other costs were figured, and other departments that you thought were not paying might turn out profitable, showing how with more attention they could show a large dividend at the end of the year. Men in other lines of business have found this to be the case. Try it out for yourself if you have not already a systematic plan of bookkeeping.

THE LATE THOMAS CUNNINGHAM.

British Columbia lost a good citizen; the Provincial Government misses one of the most conscientious, valued employees it ever had in its service, and the fruit growers of the Province parted with one of the most zealous champions they ever had in the death of Provincial Fruit Inspector Thomas Cunningham which occurred during the month. Few men were better known in the province and none held a higher reputation for integrity and devotion to principle than the late inspector. A man of strong convictions, unswerving in his devotion to departmental duties no matter what interests or friends were antagonistic. Mr. Cunningham was also a man of high ideals. He was a Spartan of the Spartans. As inspector of fruit pests his was a work requiring untiring vigilance. A weaker official could have fulfilled the duties of the office in a prefatory manner sufficient to satisfy the requirements of the authorities. Mr. Cunningham was not the stamp of man whose character would permit him to proceed along the lines of least resistance and the passing of the years saw him prosecuting the arduous duties of his office with increasing vigor. The high standard he set for the requirements of his position did not permit of plausible representations evading the strictest application of the Government regulations. His high purpose and the disinterestedness of his views held sway at the risk often times of personal popularity. He died in harness at the ripe old age of 79 years, enjoying to a remarkable degree the esteem of all who knew the man and his great work for the fruit industry of British Columbia.

Men's Hats

The new spring blocks are now ready for your inspection--this is an appropriate and favorable time for hat buying--it is particularly favorable because the stock is most complete with what is new and fashionable.

We carry the variety of shapes and proportions necessary for the exercise of individual taste in the selection of a becoming hat.

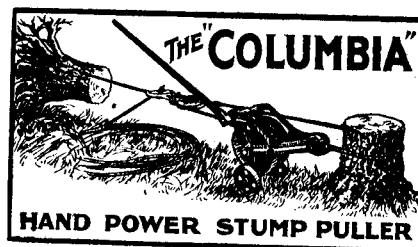
We have hats for all occasions in Scott, Christy, Stetson and many other makes.

T. B. Cuthbertson & Co. Ltd.

Men's Furnishers and Hatters

3 STORES VANCOUVER, B. C.

Land Clearing



Clear your stump land ALONE IN YOUR SPARE TIME with the "Columbia" Hand Power Stump Puller, the most complete and up-to-date land clearing machine in the world.

Pulls as much as any horse power stump puller, yet is easily and quickly operated by one man. Pulling stumps from the Pacific to the Atlantic, and giving SATISFACTION EVERYWHERE.

Our new booklet "Practical Land Clearing" is written by the men who are clearing land. Write today, NOW, for a free copy.

COLUMBIA BLOCK & TOOL CO.

(Foot of Smythe St.)

VANCOUVER, B. C.

Beekeepers Form Organization

A new era in bee culture was inaugurated in the Industrial Bureau, Vancouver, Wednesday, February 2, at 7:45 p. m., when a representative gathering of beekeepers formed The Beekeepers Association of British Columbia. The chair was occupied by D. Mowat, of McKay. The hon.-secretary, Williams Hugh, having reported on the work of the provincial committee, the meeting endorsed the same, and unanimously agreed on the formation of an association in the interests of beekeeping. The constitution and bylaws were placed before the meeting and discussed clause by clause, by Messrs. Brooks, Chittenden, Turnbull, Wilfred M. Smith, Gillam, William F. Dundas Todd, Geo. Coe, A. Smith, F. E. White and others.

The constitution and bylaws were adopted and ordered to be printed with membership cards. The meeting further resolved that the association be incorporated under the Agricultural Associations Act.

The objects of the association are: To promote and encourage the keeping of bees in the most suitable methods for their profitable management; to assist members in disposing of their produce to the best advantage by the adoption of uniformity in the packing and grading for market, and the provision of a special distinctive label or seal for the use of members only, which shall be a guarantee of excellence and purity; to obtain the most advantageous terms for members in the purchase of bee supplies; to effect the standardizing of such bee appliances as may be found most suitable for the province; to promote and regulate local exhibits of bees, honey, wax, etc., and arrange for the judging of same; to aid in the dissemination of reliable and practical information with regard to the bee industry and further its progress in every way possible. The annual subscription is one dollar. This will include a free copy of "The B. C. Fruit and Farm Magazine," the official organ of the association, every month. The following were proposed for the several offices: Hon. president, W. E. Scott; hon. vice-presidents, E. S. Knowlton, Rev. T. Menzies, Sandwich, V. I., J. Reagh, Ladner; J. C. Lucas, Enderby. President, D. Mowat, of McKay; vice-president, W. H. Turnbull, Sullivan Station. Directors: John Brooks, Vancouver; Fred. E. White, North Vancouver; Wilfred M. Smith, Dewdney; J. W. Winson, Huntington; H. L. Chittenden, Langley Prairie; H. Langdon Johnston, Chilliwack; Andrew W. Finlay, Veddar Crossing; W. Hill-Tout, Abbotsford; W. H. Turnbull, Sullivan; A. Smith, New Westminster; Chas. Sprott, J. P., Burnaby Lake; W. Rant, Vancouver; W. H. Lewis, Edmonds; Geo. Coe, McKay; W. G. Hills, Vancouver; Geo. Dennis, North Vancouver; Geo. Parks, Errington, V. I.; Arthur P. Glenn, Extension, V. I.; Mrs. C. A. Troughton, Duncan; D. Mowat, McKay; J. Robinson, Carlisle St., Esquimalt; G. F. Attree, Queen's Bay, Kootenay; Mrs. V. Ruddick, Lytton; J. A. Catherwood, Mission. Mr. Wilfrid M. Smith, of the firm of Messrs. Hamilton, Read and Mather, barristers, kindly granted the association the use of their offices as the registered office of The Beekeepers' Association of B. C., 21 Leigh-Spencer building, Vancouver. This offer was accepted. The meeting thanked both Mr. F. Dundas Todd and Mr. J. P. Markey of "The B. C. Fruit and Farm Magazine," the former for his generous assistance during the meeting, and the latter for the use of his of-

fice by the committee. Meeting adjourned until after the charter of incorporation has been granted by the provincial authorities, at the call of the president and secretary. The next meeting will be held in Vancouver, and will be more of an educational character as the organization work is now well in hand. This will give the many beginners in beekeeping an opportunity to obtain some practical information first hand.

Among well known beekeepers who have expressed their endorsement of the association are the following:

W. H. Lewis, Edmonds, writes: "I am willing to do whatever I can to further the beekeeping interests in B. C."

Geo. Dennis, North Vancouver; "Wishing the association lots of prosperity, for it should do lots of good to the bee industry."

Chas. F. Sprott, J. P., Burnaby Lake: "I had hoped to be at your meeting, wishing you success."

W. J. Rant, South Vancouver: "I am heartily in favor of such an association. If there is anything I can do to forward the movement in any way let me know."

Rev. Tom. Menzies, Sandwich, V. I.: "It will give me great pleasure to act as vice-president of the association. I would have been pleased to have been present at the organization, but our lines of communication were not open."

Andrew W. Finlay, Veddar Crossing: "Wishing the organization success in the good work."

W. S. Hill-Tout, Abbotsford: "Will always do all I can in the interests of beekeeping. It is going to be an important and profitable business in B. C."

H. Langdon Johnston, Chilliwack: "I hope to see the association a success."

Edward Quick, Hammond: "It is with pleasure I see you are starting the beekeeping association for the purpose of furthering the expansion of the industry."

J. Reagh, Ladner: "Weather conditions were so unfavorable I could not get to your meeting. I am pleased to hear of your efforts and wish you every success in your undertaking."

In view of the publicity given our organization meeting by the Vancouver "World" a large number of persons anxious to commence beekeeping have written asking advice and information. The question of devoting one evening for the benefit of members who are commencing beekeeping, will be laid before the directors at their next meeting, when it is hoped some action will be taken to supply the practical information asked for.

Questions and Answers.

Q. (L. K. Enderby.) How can I tell the Queen Bee from other bees?

A. The Queen Bee is much larger than the ordinary worker bee. You will have some difficulty at this time of the year in distinguishing her from the rest of the colony, as she becomes very small when not breeding heavily, and especially if your bees are black ones.

Q. (R. P. Duncan.) Would you kindly tell me what the queen excluder is used for?

A. A queen excluder is used to keep the queen down to the lower chamber so that she does not lay in the extracting combs in the supers above.

Q. (Mrs. L., Vancouver.) My bees are leaving the hive and die from exposure. What should I do?

A. It is quite natural, on warm sunny days, for bees to take a cleansing flight, but unfortunately they are too often misled by the sun's warm rays falling upon the alighting board. As a preventive, shade the entrance with a board. I have found, when bees have their spring flight, which is usually in front of the hive, they will sun themselves on the alighting board, or front of the hive, and will return inside immediately the weather becomes cool, but when stores are very low they will fly off in search of nectar, and ascending into the cool air, will quickly drop and die. Again, most old bees leave the hive to die. When the weather gets warm again look inside the centre frames where the bees usually cluster, if you find the stores very low, uncap some of the honey cells, or you may feed syrup or soft candy. You should only follow this course if your bees are short of food or if you wish to stimulate brood rearing early.

Q. (H. R., New Westminster.) I am a beginner. I have a chance to buy some bees in box hives. How can I transfer the bees to frame hives?

A. As you are commencing beekeeping, I suggest you begin with a colony of bees in a ten-frame standard Langstroth Hive, purchased from a reliable beekeeper. You will find more pleasure and profit in your proposed hobby. Box hives are a grave source of disease. Leave the trouble and difficulty of transferring bees to experienced men. I will however deal with the question of transferring bees from boxes to frame hives in my next.

SPRING MANAGEMENT.

As soon as the weather is favorable, that is warm weather, when the bees are flying well and there are no chilly winds, examine each hive; if the colony has been reduced, contract the size of the hive with division boards, the bees will then occupy only as many frames as they can manage, conserving the heat necessary for the raising of brood. You will, of course, first find your queen, if she has commenced to lay, you can stimulate brood raising by uncapping honey cells, or feed with a warm syrup, made from B. C. cane sugar as follows: One cup of sugar to one cup of water, a pinch of salt, two drops of vinegar, boil for few minutes, taking great care the sugar does not burn. If your colony is short of food, you may feed with this syrup. In the event of the queen having died during the winter the bees can be united with another colony. This can be done by sprinkling the bees very liberally with flour, the same being done to the colony you propose uniting. The sprinkling with flower prevents the bees fighting, as they are too busy cleaning off the flour to fight. When you have once examined a hive and found all in order and ready for the season's work keep the colony warm and disturb as little as possible, then only open the hive on warm days, as brood is quickly chilled by being exposed to the cool air. When the weather is sufficiently warm to induce frequent flights, place drinking water sweetened with a little sugar and add salt, within reach of the bees. If pollen is scarce give pea flour as mentioned in February issue, as the colonies increase in strength add empty combs or frames with comb foundation ready wired. It will take nearly six weeks to build up a colony with sufficient bees to take advantage of an early flow of nectar.

DYSENTERY.

By J. BROOKS.

On February 11 and 12 the bees had a good cleansing flight, the sun shining bright on the days mentioned. On the night of February 10 it froze a little, and the snow had somewhat of a crust formed on its surface. This assisted the bees to a great extent to take wing when they alighted on the snow, otherwise the dead bees caused through chilling would have been more numerous than they were, although a considerable number perished. There seems to be a little confusion in the minds of a number of beekeepers regarding the disease known as dysentery, especially among those who have not seen a colony suffering from that disease. It is a recognized fact that bees do not, under ordinary circumstances, void their faeces in the hive, but outside, when on the wing. Those little brown specks on the snow that were noticed in front of the hives on the dates mentioned above, were the results of the discharge of the accumulated faeces of the bees. This was more noticeable from the snow being on the ground than it otherwise would have been. But the same spotting of everything in the neighborhood occurs when bees are confined, be it summer or winter. Now this spotting on the roof of the hive and on the ground nearby must not be confused with dysentery, which is in many cases, quite a serious disease. A colony suffering from dysentery will soil the combs inside the hive; the entrance will be all daubed up with a dark brown semi-liquid substance, darker in color than the natural faeces; the bees themselves will, in many instances, be smeared, and an unpleasant smell emanates from the hive. The causes of the disease are many, but it will suffice to give the most fruitful ones, long confinements, and unwholesome food. The first cause we cannot control, as often times in winter when the weather is severe bees do not have an opportunity to fly for weeks at a time, and the temperature being low causes them to consume the food more rapidly so as to keep up their bodily heat, so that they become clogged up with the accumulation of fetid matter, and having no chance of going abroad to relieve themselves, the intestines become influenced, the abdomen distended, and death quickly follows.

Over the second cause the beekeeper has full control. Bees must have good stores to go into winter quarters and an abundance of them as well. It is signing the death warrant of any colony to pack it away for winter with too or three pounds of honey in the combs. Some beekeepers neglect to ascertain if their colonies are well supplied with food until very late in the season. This should be done while the weather is warm enough for the bees to work wax, as all stores should be capped over before winter sets in. If syrup is fed to colonies found to be short of natural stores, and the weather is too cold for the bees to manipulate the wax to cap them in the course of a month it will become sour, and bees feeding on this sour liquor will soon get dysentery. If it is found that bees are short of stores and the weather is cold it is better to put slabs of candy over the frames, as it has been found that bees

winter well on candy if well made and not burnt. At some future date I will send recipes for making candy.

NOTE:

Dysentery in bees may be attributed to poor or careless management. There is no reason why the unsuitable food should not be removed from the hive in the spring. As soon as the weather becomes spring-like, and warm days are in order, the trouble will disappear.

W.H.

SOME HONEY RECIPES.**Honey Drop Cakes.**

One cup sugar; one cup shortening (1-2 butter, 1-2 lard); 1-3 cup buttermilk or sour cream; 2 tablespoonfuls extracted honey; 2 or 3 eggs well beaten; 1-4 teaspoonful soda; one teaspoonful baking-powder; 1-2 teaspoonful vanilla, orange, or lemon as suits the taste. Flour to make a very stiff batter to drop from a spoon on greased pan, and bake in a moderate oven. These will run together on baking, and

must be cut apart with a knife, but are much better than rolled, besides being less trouble. This is a well-tested recipe, and pronounced excellent by all who have tried it.

Cough Medicine.

Three tablespoonfuls each of honey, lemon juice, and sugar (granulated); one tablespoonful of glycerine. Take occasionally during the day by the teaspoonful. One just before retiring will ease the throat wonderfully. With us this has proven invaluable with many hard colds, accompanied by severe coughing, and also for hoarseness.

Honey Apple Marmalade.

Cook tart apples until smooth; add 1 lb. of honey to 2 lbs. of fruit. Cook until about like cake batter. Then put into crocks or jars without sealing. It will cut out in a few weeks.

BEEKEEPERS'

SEND FOR
Our Illustrated Catalogue and Price List
of Bee-Keepers' Supplies

WM. RENNIE CO., LIMITED

1138 HOMER STREET, VANCOUVER
Also at Winnipeg, Toronto and Montreal

SUPPLIES

WABRE **WABRE**

G. J. SPENCER

BEEWARE MANUFACTURER

All parts of our Hives are made in Vancouver, British Columbia, and of B. C. lumber, and strictly adhere to the Standard Dimensions in use in the province. For excellence of finish and accurate adjustment they are not excelled anywhere. The bodies, covers and tops are made of thoroughly seasoned cedar of fine quality, the frames are of Vancouver Island pine.

So satisfied are we with the quality of our hives and fittings that we sell them on the distinct understanding that if not satisfactory they may be returned within ten days at our expense, and all monies paid will be refunded.

All necessary nails are supplied with hives or parts sold in the flat. The right nail is there for each particular part.

G. J. SPENCER, 1635 THIRD AVENUE W. VANCOUVER, B. C.

How to Grow Strawberries

Time to Start Vines That Should Be on All Farms.

The best time to set a strawberry bed is the early spring, as soon as the land is in good condition and the plants can be obtained. There is more moisture as a rule at that time and this, combined with the cool weather of spring, gives better growing conditions than August planting. Plants may also be set in the fall if extra attention and care are given them. It does not pay to set the plants in dry soil or in a dry season unless plenty of water for irrigation purposes is available.

Strawberries require a rich soil, hence it is well to thoroughly manure the land that is to be used for the crop in the fall and plough under from four to six inches deep. In the spring, disc, drag and smooth thoroughly. This gives a loose soil in which to set the plants and a firm subsoil to hold the moisture and yet open enough to let the roots through. Any land that will grow a good crop of corn will grow strawberries. Sod land should never be used if it can be prevented, as it is likely to contain grubs and cut-worms, which will eat off the roots of newly-set plants. A northern slope is to be preferred, as the plants do not start so early in the spring. They thus escape the early frosts and they are not so likely to be dried out by the hot south and southeast winds at fruiting time.

Plants having a small crown and a large number of white fibrous roots are best for planting. It is not a good plan to use plants that have borne fruit, as they are weaker. The best plants are obtained from plantations that have not been allowed to fruit. Their roots are white, while the roots of old plants are brown. Before planting all dead leaves should be removed. The roots should be pruned back to about three or four inches. All flowers should be kept off the plants the first season, as this provides a stronger growth. It is best to get the plants from a nurseryman or strawberry specialist, as they are not likely to be mixed as when obtained from a neighbor.

There are two classes of strawberries, known as staminate and pistillate, or perfect and imperfect varieties. The stami-

nate, or perfect varieties, all have well-developed stamens and pistils, the male and female organs of the flower. These varieties, as a rule, will bear fruit when planted by themselves. The pistillate varieties have only the pistils or female part of the flower. In order for these to bear fruit it is necessary that perfect or staminate varieties be planted near them. Usually, where pistillate and staminate sorts are used, one row of staminate is planted to three rows of pistillate. Planted in this way the pistillate varieties very often bear more fruit than the staminate. There is no way of distinguishing the difference between these varieties when not in flower, although there are certain characteristics of plant growth that may enable one very familiar with the strawberry to distinguish varieties.

There are several methods of planting in general use, which may be modified to suit the planter. The method in common use and which seems best is the matted row system. In the spring, when the land is in good condition to work, harrow smooth and mark out rows four feet apart and as long as possible. Then set the plants at 18 or 24-inch intervals in the rows and cultivate often enough to keep the weeds out and the soil loose until September, when, if the plants are vigorous growers, the runners should be about six inches apart. It is desirable to train the runners the long way of the rows, cutting out plants that crowd. An ordinary planting trowel or spade is used to set the plants. A spade is an easy implement to open the ground with. Strike it in to the ground and work it back and forth, draw out the spade, spread the roots of the plant and set it so the crown comes just to the surface of the ground. Firm the soil well about the roots of the plant. This method requires a man to handle the spade and a boy to set the plants. As soon as possible after setting the plants cultivation should commence and it should continue at frequent intervals till fall. Keep the weeds down and the top soil loose. If the runners get too thick cut out part of them, leaving about six inches between them. Runners may be encouraged to root by putting an inch or two of soil over each one near the end.



Since Senefelder discovered the secret of printing in colors from stone every decade has contributed some important advance in the art of Lithography.

The oldest established color printing and lithographing house in British Columbia, known as the B. C. Printing and Litho, Ltd., is abreast of the times with all the latest improvements in types and machinery.

In its studios are designed labels which are shipped from the canneries to every quarter of the globe. It specializes in the engraving and printing of municipal bonds and stock certificates, and prints from types as well as from stone, anything from a visiting card to a mammoth poster.

Its output of labels alone for 1915 touched forty million. An output such as this should convince you that it can serve you as well and cheaper than our friends can on the other side of the line. Remember, every dollar you spend in B. C. helps to build up the Province.

Our representative will shortly be visiting the Okanagan and other fruit districts. Before placing your order for this season's labels mail a card for prices and specimens.

B.C. PRINTING & LITHO.
LIMITED

901 Homer Street, Vancouver.

Phones: Seymour 3233 and 3234

Lilly's Soluble Sulphur Compound

Why pay freight on water? The standard Winter and Early Spring Spray used by progressive and up-to-date Fruit Growers in all of the established fruit sections of the Pacific Northwest. Experiment Station tests show Lilly's Soluble Sulphur 98% to 99% effective.

It is put up in powdered form, easily dissolved. Packed in 1-lb. tins, 10-lb. tins and 100-lb. drums.

Write for prices and 1916 Spray Bulletin.

Ask Your Dealer.

O'LOANE, KIELY & CO. Ltd.

Wholesale Distributors for B. C.

37-43 Alexander St. Vancouver, B. C.

"MR. FARMER"

Do you know that
**SWARTZ BROTHERS, 155 WATER ST.,
VANCOUVER, B. C.**

Sell more strawberries for the
B. C. FARMERS

Than any other commission house in Van-
couver, B. C.

WHY?

Because we get the best prices that can be
procured and guarantee prompt returns
within 36 hours after goods are sold.

**GIVE US A TRIAL WITH YOUR NEXT
SHIPMENT OF FRUIT OR VEGETABLES
and
BE CONVINCED.**

Our charge is 12½ per cent commission.
Write for particulars.
SWARTZ BROTHERS.

B. C. Farmers Exchange

(John McMillan Manager)

**WHOLESALE FRUIT AND PRO-
DUCE MERCHANTS.**

Goods handled strictly on commission.
Prompt returns our specialty.

138 WATER ST. VANCOUVER, B. C.

Spray Calender for 1916

By J. W. EASTHAM, B.Sc.,
Plant Pathologist.

Horticultural Branch, Provincial Department of Agriculture.

APPLE.

First Application—Spray shortly before buds burst. Use lime-sulphur A. For scale-insects, aphides, and red-spider eggs. apple-scab, etc.

Second Application—Just before the blossoms open. Use Bordeaux Mixture or lime-sulphur B with arsenate of lead for scab and bud-moth. If aphides are present, add Black Leaf 40.

Third Application—While last blossoms are falling. Use lime-sulphur C with arsenate of lead for leaf-eating caterpillars, scab, etc. Unnecessary in Dry Belt in ordinary seasons. Add Black Leaf 40 if aphides are present.

Remarks—Do winter pruning before the first application. In moist climates, or if weather be unusually damp, give a fourth application of lime-sulphur C two or three weeks after the third spraying. Spray for leaf-eating insects with arsenate of lead. 2 lbs. to 40 gallons, and for aphides with Black Leaf 40 diluted 1-800.

PEAR.

First Application—Spray shortly before buds burst. Use lime-sulphur A. For scale-insects, aphides, and scab.

Second Application—Just before the blossoms open. Use Bordeaux Mixture or lime-sulphur B. Second and third applications unnecessary with non-scabbing varieties or in the Dry Belt. For scab.

Third Application—Just after blossoms fall. Use lime-sulphur C for scab. Add 1 lb. of lead-arsenate to 40 gallons of water, for slug.

Remarks—In unusually damp weather, give fourth spraying of lime-sulphur C two or three weeks after the third for scab. Spray for leaf-eating insects with lead-arsenate when necessary.

PLUM, PRUNE AND CHERRY.

First Application—Shortly before buds burst. Use lime-sulphur A for scale-insects, aphides, and brown-rot.

Second Application—Just after fruit is set. Use lime-sulphur D or E or 2-2-40 Bordeaux Mixture for brown-rot, shot-hole fungus, etc. In Coast sections add Black Leaf 40 for aphides.

Third Application—Lime-sulphur D or E or 2-2-40 Bordeaux Mixture for brown-rot.

Remarks—Where brown-rot is prevalent, destroy all mummied fruit in the autumn; prune tree to admit sunlight and thin fruit so that no fruits touch each other. Prune bearing cherry-trees lightly after fruit has been picked. Discourage heavy growth by light pruning, and sod if necessary. Spray with lead-arsenic for slug and other leaf-eating insects.

PEACH.

First Application—Just before buds begin

to swell. Use lime-sulphur A. For peach-worm and leaf-curl.

Second Application—When new growth upwards of an inch long. Use arsenate of lead, 3 lbs. to 50 gallons, for peach worm.

Remarks—For mildew, cut off and burn all affected twigs at winter pruning. No satisfactory summer spray for mildew has been yet secured. Lime-sulphur E or atomic sulphur is worthy of trial.

CURRENT AND GOOSEBERRY.

First Application—Before growth begins. Use lime-sulphur A for mildew.

Second Application—Just after fruit sets. Use lime-sulphur 1-25 for mildew.

Third Application—Two to three weeks later, use lime-sulphur as before if necessary to control mildew.

Remarks—Spray with hellebore, 1 oz. to 2 gallons, or arsenate of lead, 2 lbs. to 40 gallons, for current sawfly or other leaf-eating insects.

POTATO.

First Application—Bordeaux Mixture when plants are about 6 inches high for blight.

Second Application—The same, ten to fourteen days later.

Third Application—The same, ten to fourteen days later.

Remarks—Four or even more applications are necessary in bad seasons. These sprayings unnecessary in Dry Belt.

Lime-Sulphur A, winter strength. Dilute the commercial preparation, 1 gallon to 9 of water.

Lime-sulphur B, spring strength, for apples and pears. Dilute the commercial preparation, 1 gallon to 30 of water.

Lime-sulphur C, summer strength, for apples and pears. Dilute the commercial preparation, 1 gallon to 40 of water.

Lime-sulphur D, summer strength for plums, cherries, etc. Dilute the commercial preparation, 1 gallon to 60 or 65 of water. Experimental as yet; try a few trees first.

Lime-sulphur E. Self-boiled lime-sulphur, for peaches, plums, and cherries.

Arsenate of Lead, use 2 lbs. of the commercial paste to 40 gallons of water. For slugs, 1 lb. to 40 gallons.

Black Leaf 40. Dilute 1 to 800 or 1 to 900, for different types of aphids.

ESSENTIALS IN SUCCESSFUL SPRAYING

1. Get pruning done before doing winter spraying.
2. Know what you are spraying for.
3. Get a good pump, and take care of it.
4. Spray with at least 100 lb. pressure, using a large circular nozzle of the Friend type. If you can use 150 lb. or over, the Bordeaux nozzle gives a better driving spray for winter spraying of old trees. Use an angle nozzle.
5. Spray thoroughly. Get every spot covered. There is no injury from over-spraying. Half-hearted spraying is useless for the trees, and costly for the owner.

When It's Nitrate Time for Apples

Use 200 pounds of Nitrate of Soda broadcast per acre in late February or early March, or use at Blossom Time.

Send Post Card Today for Fruit Books—Free

WM. S. MYERS, Director
25 Madison Avenue New York

The fact that it is at present impossible to secure supplies of Potash for agriculture has made it necessary for us to prepare new brands of Chemical Fertilizers for the season of 1916. We commend the following lines to your attention, and feel sure that you will find their use very profitable.

MIXED FERTILIZERS.

"IMPERIAL."
"COLONIAL."
"LAWN SPECIAL."

NITRATE OF SODA.
SUPERPHOSPHATE OF LIME.
THOMAS PHOSPHATE, (Basic Slag).
BONE MEAL.
LIME-SULPHUR SOLUTION.
SOLUBLE SULPHUR COMPOUND.
NICOTINE SULPHATE (40 Per Cent. Actual Nicotine)
ARSENATE OF LEAD.
SULPHATE OF IRON.

THE VICTORIA
CHEMICAL CO.,
LIMITED

VICTORIA, B. C.

Ask for our 1916 Catalogue.

If It's
Fruit or Vegetable
Boxes
ASK US ABOUT IT

PACIFIC BOX

COMPANY LIMITED

VANCOUVER, B. C.

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

If it's any other
kind of
Boxes or Crates
ASK US ABOUT IT

Gardening for the Home

By H. M. EDDIE, F.R.H.S.

(Our readers are invited to submit any troubles or difficulties which they may encounter, to Mr. Eddie, who will be glad to give them his advice, the outcome of technical training and practical experience. Address letters to the Editor.—B.C. Fruit and Farm Magazine.)

My forecast of the work for last month proved to be a little premature owing to the exceptionally severe and protracted winter we have just experienced, so it is likely that some of the suggestions made therein may still be applicable and I would advise another perusal of them.

The seeds recommended to be sown last month may still be sown and the biweekly sowing of green peas. Towards the end of the month a small sowing of each of early carrots, Milan turnips, radish and lettuce may be made for early use, selecting the warmest and sunniest corner in the garden for them; a narrow border against a close board fence facing south is a good place to sow early vegetables such as the above.

A rich warm spot should also be selected for a small sowing of cabbage, cauliflower, sprouts, savoy and borecole to produce plants for planting out in early summer. Those of you who followed my advice last fall on the fall sowing of cabbage will, barring accidents, have well developed plants by this time; hoe the ground between the rows at least once a week to keep down weeds and allow the warm air to permeate the soil. Fall sown cauliflower may now be planted out on freshly dug and well manured soil. Previously I have recommended the fall sowing of cauliflower in cold frames, but I find that this precaution is not really necessary, at least on the lower mainland. There has come under my notice a patch of cabbage and cauliflower sown last August which has come through the exceedingly hard winter in first rate condition and at time of writing the plants are in fine shape for planting, the cauliflower being quite equal in condition to the cabbage.

Those of you who are not fortunate enough to have plants of your own ought to procure some at once as early crops of these two excellent vegetables have a much better chance of escaping the dreaded maggot than later ones.

The middle of the month is a good time to plant shallots; plant in rows 18 inches apart and 9 inches between the sets, putting the bulbs in deep enough to leave merely the tip visible on the surface, also pack the soil firmly round the bulbs as they have a troublesome habit of throwing themselves out of the ground when the roots begin to push downward. If the asparagus bed did not receive a mulching of manure in the fall it must at once be covered with four or five inches of well rotted stable manure to ensure good long stalks of this excellent early vegetable. The end of the month or the beginning of next is a good time to plant new asparagus beds, and as a bed will last a lifetime if properly prepared no pains ought to be spared in this connection.

A good way to prepare a bed is to measure off a piece of ground 4 feet wide, trench it at least two and a half feet deep and mix

Stop Living Out of Cans Start Your Garden



Just the moment it is possible to get home-grown vegetables—fresh from the garden—you should hang up the can-opener. Nothing out of a can ever could compare with what you gather fresh and crisp just when you want it for the table. Select at once the seeds you require—Ritchie's new spring catalogue is yours for the asking—if you have not already received your copy. You will find it replete with suggestions for spring garden work, as well as having a full line of finest seeds to be bought anywhere.

Special offer of Choice Sweet Peas.

Ritchie's "Favorite"
Collection,

12 pkts. for 35c

50 seeds in each.
Here are some of the
choice varieties to
select from:

Black Knight, Gladys
Unwin, King Ed-
ward VII, Frank Dol-
by, St. George, Nora
Unwin.

No variety of annual better repays the care of planting than the sweet pea—it is deservedly a general favorite and furnishes such a profusion of bloom all through the season.



Write for Ritchie's
Spring Catalogue of Seeds and Plants.
Mailed free to any address.

Ritchies

840 Granville St.,
Vancouver, B.C.

with the soil when digging a liberal quantity of well fermented cow manure, also a good dusting of bone meal and a sprinkling of crushed bones if procurable; level the surface carefully and stretch the garden line along the bed one foot from the edge, make a mark with the back of the rake, lift the line and put plants in along the mark one foot apart, being careful to spread the roots out almost flat with the crowns two inches below the level of the surface; move the line to the other side of the bed and repeat the operation when you will have a bed four feet wide with two rows of plants two feet apart and one foot from either edge. If it is preferred to sow seed the details are the same, only instead of plants seeds are sown thinly one inch deep, and the seedlings thinned out to one foot apart when well up.

By using plants the bed will be fit to cut from the second year while it takes three years for a bed to attain maturity from seed.

In the flower garden there are hosts of things to be done and special efforts ought to be made to get transplanting of all kinds of hardy plants finished by the end of the month.

Rockeries require attention at this time, to see how the occupants have stood the

winter, see that the rampant growing arabis and aubretia are not encroaching on space devoted to plants of feebler growth; fill up blanks and replace soil that the winter's rains may have washed away. This is a good time to divide and replant occupants of the herbaceous border; helianthus, perennial asters, shasta daisies and a few others very soon outgrow their room and have to be dug up and replanted, retaining for planting the parts on the outer edges of the clumps as these are usually the youngest and strongest.

The last week in March or the first week in April is quite time enough to prune roses.

The past winter has been very trying on those especially teas and hybrid teas, but few have been killed outright; the standards have suffered most, for owing to the elevated position they hold, they did not get the benefit of the friendly blanket of snow. Where standards have been killed back to the point where they were budded on the stem there is no hope for them, but where they still show green wood and live buds they merely require to be cut hard back when they will likely sprout out again as strong as ever.

The freezing back of the dwarf roses need give their owners little concern, for on examination it will likely be found that



Sutton's Seeds

A. J. WOODWARD, Sole Agent

615 Fort St., Victoria, B. C. 667 Granville St., Vancouver, B. C.

DIRECT FROM
READING, ENG.
Catalogs on Application



the bases of the branches are quite sound, and as these have to be pruned hard back anyway the dead parts are of no consequence.

The pruning of dwarf roses this year will this be greatly simplified resolving itself into a cutting away of the dead wood, but it will be well to bear in mind that weak growers, like some of the teas, require hard pruning, while strong growers require light pruning.

Hard pruning means cutting back to within an inch or so of the previous year's growth; light pruning may be from six to twelve inches, according to variety. Climbing roses have suffered nearly as bad as the standards and will require harder pruning than usual. Remove entirely the old wood from the Ramblers and tie in as many of the strong young shoots as are required.

Hybrid tea and hybrid perpetual climbers require different treatment, the slender growths springing from the main stems ought to be cut back to one or two buds, a certain number of the strong growths shortened back a little and tied in but not as many as will cause undue crowding, and of course, all dead wood must be removed.

MANURE AND FERTILIZERS.

The division of chemistry of the Dominion Department of Agriculture has issued another of that useful series of circulars by Dr. Frant T. Shutt, Dominion chemist. This one, Circular No. 8, deals with "Manures and Fertilizers," and like all the work of the doctor, is at once explicit and practical. Here are a few sentences given in sententious form that illustrate the conclusions arrived at and the counsel given by Dr. Shutt:

Rational farming is "mixed" farming.

Barnyard manure is the most effective of all fertilizers.

The liquid portion of the manure is the most valuable.

Use sufficient litter in the stables to absorb the liquid.

The amount of manure on a farm being insufficient, frequent light dressings are advisable instead of larger ones at longer intervals.

The manure is most advantageously applied for the root or corn crops in the rotation.

It is not wise to "bury" the manure, a shallow ploughing under is more advisable. Manure is worth more when first voided.

Rational farming involves a rotation of crops.

Investigation has proven the high manurial value of clover, alfalfa and other legumes.

The lesson is: Grow a leguminous crop

RENNIE'S SEEDS

Always Grow
The Finest in the Land

SEND FOR OUR 1916 SEED ANNUAL
DO IT TODAY

Wm. RENNIE CO., LIMITED,

1138 HOMER STREET

VANCOUVER, B. C.

ALSO AT WINNIPEG. TO RONTO AND MONTREAL

SPRAY WITH PHYTOPHILINE

The Great Non-Poisonous Insecticide and Plant Tonic.

The best all-the-year-round spray for all insect pests and fungous diseases, including caterpillars, slugs, aphids, white fly, scale, ants, leaf curl, worms, thrip, mildew, rust, etc., etc., on Fruit trees and bushes, Roses, Indoor and Outdoor Plants, Vegetables, etc., and also for vermin on animals, and for moths, wasps, etc. Absolutely safe to use and a splendid tonic for plant life. Special booklet with testimonials, etc., on application. Grade 1 for general use for insects on plants. Grade 3 for spider, woolly aphid, mildew and rust on plants, and also for vermin on poultry and animals, and their houses, and for moths in furs, etc. Postpaid prices, 55c, and double sizes 85c, \$1.25 and \$2.50. CASH WITH ORDER. All leading florists or from, **PHYTOPHILINE, DISTRIBUTORS, 1493 SEVENTH AVENUE WEST, VANCOUVER, B. C.** Agents wanted everywhere. **SPRAYERS** for Phytophiline. Special mist sprayer 90c postpaid. Also the famous "Florists' Friend" Sprayer, solid brass, all latest improvements, \$3.85 postpaid.

in the rotation, as all other crops, save the legumes, leave the soil poorer for their growth.

Commercial fertilizers cannot be depended upon profitably to maintain the soil; hence their exclusive use is discontinued.

By home mixing fertilizers a saving of 25 to 35 per cent can be effected.

MORE FRUIT PACKERS NEEDED.

A circular has just been issued by the Department of Agriculture at Victoria calling attention to the urgent need of more fruit packers in this province and the possibility before the people of today of joining one of the many packing and pruning schools the department is now organizing with this end in view. Early in November a similar statement was sent out through the province outlining the intention of the government to start these schools and making clear the manner in which any community could receive such instruction. To date the department has been requested to organize 20 pruning and 13 packing schools, but in consideration of the great number of packers who are certain to be required next

Chilliwack Grown

English Walnuts, Chestnuts, Filberts, Berry Vines and Bushes, Fruit and Ornamental Trees, Roses, Perennial Flowering Plants and Bulbs.

Full line of Bee Supplies at reduced prices. Home grown seeds, such as parsnips, parsley, spinach, beet, Brussels sprouts, cabbage, cauliflower, salsify, peas, beans and many others. Price List Free.

TOMS BROS.
Chilliwack, B. C.

season, the men behind the movement feel the number of schools asked for is very small.

All persons who are interested in this work and who feel that they and their neighbors might profitably study the methods which are sanctioned by our most modern fruit experts are requested to communicate with the Department of Agriculture at Victoria.

BRAND'S
SEEDS
GROW

BRAND'S SEEDS

723 ROBSON ST.

VANCOUVER, B.C.

CATALOGUE
AND GUIDE
FREE OF
CHARGE

Brand's Seeds are the result of over twenty years' careful study and practical experience with some of the Oldest Established and Foremost Firms in the trade. viz:

Austin & McAslan, Glasgow (Established 1717);
Laing & Mather & Stuart & Mein, The King's Seedmen, Kelso;

Toogood & Sons, Royal Seed Establishment, Southampton;
John Forbes, Ltd., The King's Nurserymen, Hawick;

and in Portadown and Belfast, and for the past three years in business at the above address.

All Seeds are carefully tested as to Purity, Quality and Germination by ourselves.

ANNUAL CONVENTIONS AT VICTORIA.

The following letter has been sent out by Mr. W. E. Scott, deputy minister of agriculture and superintendent of institutes, to all secretaries of farmers' institutes in the Province of British Columbia:

Re Annual Conventions.

With reference to my circular letter of the 7th inst., I have to advise you that certain extension of dates has been arranged for the various conventions to be held in this city, as follows:

B. C. Fruit Growers' Association, Monday and Tuesday, March 6-7.

Farmers' Institutes, Wednesday to Friday, March 8-10.

B. C. Stock Breeders' Associations, Monday and Tuesday, March 13-14.

I shall be glad if you will at once notify delegates as there may be cases of some who will desire to stop over for the Stock Breeders' convention in the following week.

All transportation companies operating in the province have been advised as to these dates and convention plan rates have been obtained. The following instructions should be carefully noted:

1. Each delegate must purchase not more than three days, not counting Sunday, before the date of attendance at the convention, a first-class one way continuous trip ticket to Victoria, or to the nearest point to which the company can sell a ticket, and must obtain a receipt for the ticket on a standard convention certificate form, which you must ask the ticket agent for.

2. If delegates have to travel over more than one line, they will require to purchase tickets and obtain standard certificates, as above, from each company.

3. Reduced fares will be granted to delegates, and their wives and daughters when accompanying them, no reduction being made for children of the half-fare age.

4. If the attendance is over one hundred, delegates will be returned free.

5. The identity form which has been supplied to the secretary and the delegate, should be signed by the president or secretary of the institute and presented to the department upon reaching Victoria.

Do not forget to ask the ticket agent for your standard certificate.

ANNUAL MEETING OF MUTUAL FIRE INSURANCE COMPANY.

The annual meeting of the Mutual Fire Insurance Company of B. C. was held on Wednesday, the 9th of February, when there was a representative attendance of farmers, who form the bulk of the company's members. Mr. Thos. Kidd, president, of Steveston, presided, and there were also present Capt. W. F. Stuart, Eburne, vice-president; D. A. McKee, Ladner; Jas. Bailey, Sardis; Jas. Thompson, Terra Nova; J. W. Miller, J. Laity, Hammond; Alex. Webster, Agassiz.

The manager reported that the year had been a successful one, and that there had been a considerable increase in the amount of insurance carried by the company, as well as an increase of \$4,728.86 in the company's assets. Several members spoke enthusiastically of the great benefits which the company was bestowing upon the farming community, and stated that so far as their experience went it was the most successful movement in aid of agriculture that had ever been attempted in the province. From its inception in 1902 down to the present time its growth had been steady, both in amount of business and in con-

fidence of the agricultural community. Messrs. John W. Berry, of Langley Prairie, and Samuel H. Shannon, of Cloverdale, were unanimously elected to the board of directors.

In the evening the company held its annual banquet in Spencer's Restaurant, when speeches were delivered by the president, vice-president, manager, Messrs. John W. Berry, Jas. Bailey, John Catherwood, Wm. McAdam and others.

Among the guests present were Rev. Mr. Wright, Eburne, and Mr. Alex. Philip, North Vancouver, who gave excellent addresses. Mr. G. S. Wilson, at one time a resident of Eburne, but whose headquarters are now Winnipeg, also gave a most eloquent speech on the great and self-denying work which is being done on the battle fields of Europe by the Red Cross doctors and nurses.

Messrs. Spencer surpassed themselves in the choice banquet which they provided. The evening was a most enjoyable one, and terminated with the singing of the National Anthem.

Mr. H. M. Eddie, F.R.H.S., who has been for the past three years nursery foreman in the Royal Nurseries, Kerrisdale, has just been appointed nursery manager of the Sardis branch of the British Columbia Nurseries Company. Mr. Eddie, who is well known to our readers as the writer of our "Home Gardening" articles, is a man of wide experience and broad education, having been over twenty years in the nursery business. We congratulate both the B. C. Nurseries and Mr. Eddie on the appointment, and wish him every success in his new sphere.

Special Announcement

WE HAVE AN ABUNDANT SUPPLY OF CHOICE FRUIT TREES, in all leading varieties of Apples Pears, Cherry and Plum Trees, etc.

"ONE YEAR OLDS" on "THREE YEAR ROOTS," CLEAN, VIGOROUS, WELL GROWN TREES that will please.

We are prepared to offer LIBERAL PRICES and TERMS on large or small orders, for delivery this spring.

WE GUARANTEE SATISFACTION.

A Further Liberal Discount for Cash With Order.—

Write today, the time is short.

British Columbia Nurseries Co., Ltd.

1493 SEVENTH AVE. W.

VANCOUVER, B. C.

BERRY GROWERS TO MARK QUANTITY ON BOXES.

A recent service and regulatory announcement of the bureau of chemistry of the United States department of Agriculture contains the following, which should be of interest to shippers of berries, peaches and tomatoes when ordering their crates for next season's shipments:

The department is of the opinion that berries, peaches or tomatoes in small open containers which are packed in crates and arranged within the crates in layers or tiers, constitute food in package form within the meaning of the net-weight amendment, and that consequently the law requires that the crates shall be marked with statement of the quantity of the contents. Each such statement should include the number of small containers and the quantity of the contents of each.

Feeds that will injure the flavor of the butter and which should not be fed to milch cows are. 1, turnips and turnip tops; 2, rape or rye; 3, decayed ensilage; 4, leeks, onions, or apples in large quantities.

FOR FARMERS' LOANS.

The Manitoba government has endorsed the proposal of New York brokers to borrow two million dollars in New York at 5 per cent, and loan to farmers at 6 per cent.

At present there is one hundred and fifty million dollars out in loans in Manitoba, bearing interest from 7 to 10 per cent, one hundred million of this being loans to farmers.

The money will be given to municipalities who will instruct assessors to value the risks, and the municipalities be made responsible for the loans.

CROPS AND LIVESTOCK IN B. C.

A preliminary statement of British Columbia's crop and livestock production for the year ending December 31, 1915, has been issued by the Department of Agriculture, statistics branch. The report records an increased production in the main divisions as grains, fodders, vegetables, fruits, dairy products, livestock and meats.

Despite lower prices ruling in many of the chief products, the province, states the report, will be able to show a slight increase in the total value of the year's production for which credit is largely due to the increased yields of grains and fruits, also to the production of livestock and meats during the year.

The increase in production is also attributed to the decrease in the importation of agricultural products, especially those from other provinces in Canada, which shows a falling-off in value of 35 to 40 per cent, from 1914. This, says the report, means a very considerable financial saving to British Columbia as a whole, when it is considered that in 1914 the total value of imports from other provinces amounted to nearly \$20,000,000.

Arrangements of the Farrowing Pen and Care of Sow and Litter.

About ten days before time to bring pigs, a sow ought to be put up by herself in a small pen with a good dry bed and yard to exercise in. A warm pen six feet square is large enough to farrow in, and a railing about a foot from the floor and six or eight inches out from the wall will act as a protection for the young pigs when the sow lies down.

I have watched my sows and have found that this railing has been the means of saving pigs from being killed.

The farrowing pen should be arranged to admit plenty of sunshine. It is difficult to get too much sunlight into the pen when the weather is cold and damp.

It promotes warmth, invigorates the dam and litter, and gives comfort where without it may be discomfort and disease. There are several indications that a sow is about to farrow, and these should warn the owner to keep special watch.

The pigs will make their appearance in about 12 hours from the time the milk can be drawn from the teats, which can be tested when the sows are accustomed to being handled. There is a vast difference in the temperament of sows; some are best left entirely to themselves, while others may be attended to without in any way disturbing their minds.

When the pigs are born the sow needs nothing to eat the first day, except a little warm water with a handful of oatmeal. The next day a very thin slop may be given, gradually increasing the feed for a full week before the sow is put on full feed. After this she may be fed all she will eat, for by this time the pigs will take all the milk.

A sow which is a good milker will give as much milk as a fairly good milk cow, and if fed too much milk-producing food when the pigs are very young she will make more milk than they can take, and bad results are likely to follow. I once lost a valuable sow by not feeding properly just after farrowing. I fed too much swill and middlings too soon. The sow died and so did the pigs. I learned a lesson and have since given the matter more careful attention.

If pigs come rather unexpectedly, as they

do sometimes, and one does not have time to enclose the mother in a warm pen to herself, do not let the little fellows chill. Heat a soap stone, or two or three bricks, and put in the bottom of a bushel basket and spread some fine straw or hay "brooder" of first quality. Let them remain in the basket until they are perfectly dry, when they can be put with their mother to get their feed.

If a pig wanders from a nest and gets chilled do not give up as long as there is any life. Put some hot water in a pail at a temperature as warm as one can hold the hand in. Take the pig and immerse it in the water all but its head and hold it there until it revives.

After it is thoroughly warm and is revived wipe it with a dry cloth and wrap it up in some flannels. It will not be long before the youngster will assert its nature and begin to look for some food. Put it with the mother for its food, and if she has a warm place it can remain with safety. If not, keep it in a warm place in the house for a day or two, taking it to the mother for food when the rest of the litter are getting their meals.—Farm Life.

ROOM FOR GREAT NUMBER OF SHEEP ON VANCOUVER ISLAND.


As the result of a visit to Vancouver Island of Mr. George T. Willingmeyer, who has charge of the sheep and goats division of the federal live stock branch, Ottawa, wool grown in this section of the province will hereafter take its place with other kinds in the wool market, and instead of being sold "flat," as was the case all over Canada a little time ago, it will have a standard fixed to it, the present aim of the department being to standardize the whole of the wool production of Canada.

After conferring with the provincial live stock commissioner, Prof. W. T. Macdonald, Mr. Willingmeyer proceeded to Duncan to confer with the president of the Vancouver Island Flockmasters' Association. He has just finished the work of forming an association of wool growers in southern Alberta that will clip over 100,000 sheep. British Columbia up to the present has been the only province in the Dominion where there were not facilities to secure a graded product.

Can Make Exports.

Mr. Willingmeyer is of the opinion that instead of the limited production of wool in this country, Canada should care for not only her own wants, but have a large quantity for export. There was, in his

A TREATISE on the Horse—FREE!



We offer free this book that tells you about many of the diseases afflicting horses and how to treat them.

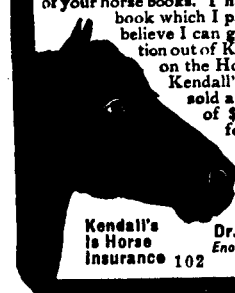
KENDALL'S SPAVIN CURE

is a safe and reliable remedy. It will cure Ringbone, Splint, and other bony enlargements. It is also a reliable remedy for Curbs, Sprains, Bruises, Cuts and Lameness. It does the work safely and at small expense.

Read what James M. Thompson, Fraser Mills, B.C., writes: "Kindly send me one of your horse books. I have a Veterinary book which I paid \$5. for, but I believe I can get more satisfaction out of Kendall's Treatise on the Horse."

Kendall's Spavin Cure is sold at a uniform price of \$1.00 a bottle, 6 for \$5.00. If you cannot get it or our free book at your local druggist write us

Dr. B. J. Kendall Co.
Enosburg Falls, Vermont U.S.A.



Kendall's Horse Insurance 102

Stability The Essential Requirement of the Experienced Investor

Conservative investors seeking safety and a good return will find the B. C. Municipal Bonds we handle to be a safe and profitable investment.

As Fiscal Agents, we offer today City of Salmon Arm Debentures at a price to yield 7-8 per cent. net, interest payable half yearly. Circular on request.

CANADIAN FINANCIERS TRUST COMPANY

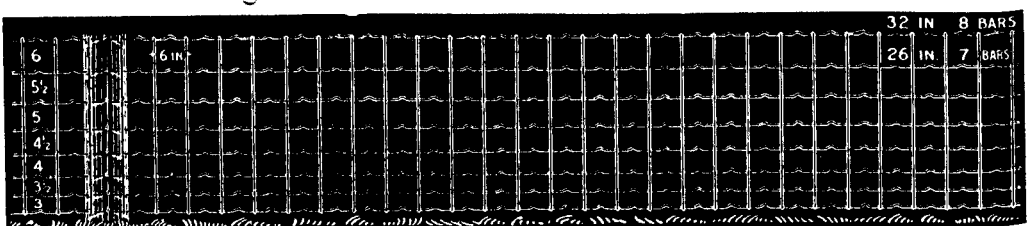
Head Office, 839 Hastings Street W. Vancouver, B. C.

Patrick Donnelly, General Manager

judgment, room for a great increase in the number of sheep on Vancouver Island. The existing association is handling about 2000 sheep, which was a very poor showing, considering the many fertile valleys on the island. An effort will be made to form an association on the mainland.

"PITTSBURGH PERFECT" HOG FENCING
(MADE IN CANADA)

Genuinely double galvanized, every joint welded by electricity, every rod guaranteed perfect. Write for Catalogue showing styles for all purposes—Field, Ranch, Farm, Poultry, and Lawn.



DISTRIBUTORS FOR BRITISH COLUMBIA
A. I. JOHNSON & CO.
844 CAMBIE STREET VANCOUVER, B. C.

At the meeting called recently in the Board of Trade rooms, Kamloops, to discuss the possibilities of establishing an evaporating plant, Mr. Bone, manager of Graham Evaporating Company's plants throughout the Okanagan, stated that his company could not consider the installation of a plant unless there were from 1500 to 2000 tons of potatoes at hand before the plant opened. It would only require a very short time to install the machinery and get things going. The prices would range from five to fourteen dollars per ton for potatoes. The former price being for frozen vegetables and the other prices varying according to the grade.

The United Farmers of Alberta at their annual convention in Calgary adopted a resolution favoring co-operative credits backed by the government. Amendments advocating agricultural banks were rejected.

A meeting of the directors of the Armstrong Fruit Growers' Association was held last month. Mr. W. E. Chapple was appointed delegate to the B. C. Fruit Growers' Association convention at Victoria, March 6 and 7. One matter of prime importance which is to be taken up at the convention, is the proposed increase in duty on apples coming into Canada.

BRITISH COLUMBIA MILK AND CREAM CONTESTS.

The third annual milk and cream contest in connection with the Annual Convention of the B. C. Dairymen's Association held at New Westminster on January 27th and 28th, brought out a splendid display of high class products.

Three classes were offered: viz., Approved Milk, Market Milk and Market Cream, open to producers only. Entries were forwarded from Vancouver Island, Interior and Lower Mainland points.

The milk was drawn on January 20th and shipped to New Westminster, where it was stored with the New Westminster Creamery Association. The products were scored on January 24th on bacteria, flavor, sediment, acidity, fat, solids not fat, and package. Prizes of \$20, \$15, \$10 and \$5 were awarded in each class. A bacteria count of 48 hours' duration was made, and a remarkable feature of the contest was the low bacteria counts recorded, the highest count in either of the milk classes being 3,000 per c.c., and the highest in the cream class being 6,500 per c.c. The average count of all the exhibits in both approved and market classes, 17 in number, being 800 per c.c. Eleven samples resulted in a count of 500 per c.c. and under.

The market milk entry of Joseph Thompson, Sardis, B. C., scored highest in the contest, the final score being 99.05. In the approved milk class, J. M. Steves, of Steveston, B. C., and Shannon Bros., of Cloverdale, B. C., tied for first place with a score of 98. In the market cream class, first honors went to William Hampton, of Port Hammond, B. C., with a score of 97.3.

The following is a list of the prize-winners and the total scores obtained:

Approved Milk Class.

1st—J. M. Steves, Steveston	98.0
—Shannon Bros., Cloverdale	98.0
2nd—Thos. Davison, Port Hammond	97.75
.. —J. A. Laity, Port Hammond	97.75
3rd—A Laity, Port Hammond	94.75
4th—E. and T. Raper, Victoria	94.35

Market Milk (Producers Only).

1st—Joseph Thompson, Sardis	99.05
2nd—Grimmer Bros., Port Washington, Pender Island	97.5
3rd—Isaac Else, Agassiz	96.65
4th—Joseph Hamilton, Chilliwack	96.5

Market Cream (Producers Only).

1st—William Hampton, Port Hamond	97.30
2nd—Isaac Else, Agassiz	93.
3rd—J. W. Langley, Canford	90.6
4th—Bridges Bros., Sandwick	87.0

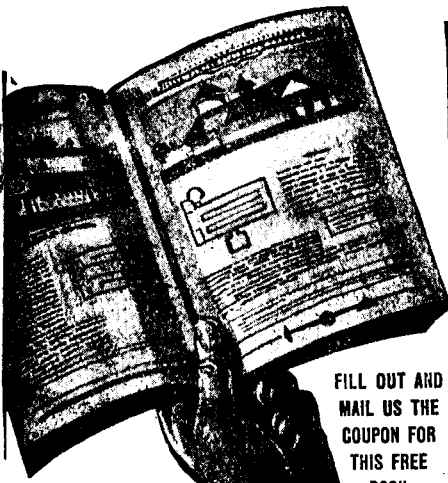
T. A. F. WIANCKO,
Provincial Dairy Instructor, Victoria, B. C.

LOUDEN BARN EQUIPMENT

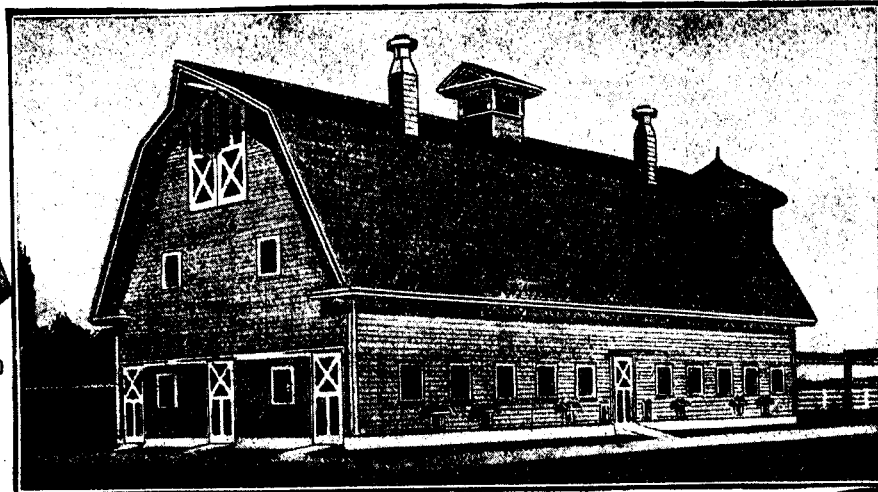
FOR QUALITY

FOR SERVICE

FOR SECURITY



FILL OUT AND MAIL US THE COUPON FOR THIS FREE BOOK.



Louden equipment makes possible a clean, sanitary barn with a minimum of expense for upkeep. When cows are transferred from dark, dirty barns to Louden barns, the milk flow often increases from 15 to 25 per cent. and the labour of caring for the herd is reduced from one-third to one-half.

The cost of installing Louden equipment is surprisingly small, and is just as great an economy for the man with a half dozen animals as for a man with a hundred. The percentage of labour saved is the same.

The Louden Line includes:

- | | |
|------------------|--------------------|
| Litter Carriers, | Hay Carriers, |
| Feed Carriers, | Cow Stalls, |
| Horse Stalls, | Water Basins, |
| Cow Pens, | Bull Pens, |
| Hog Pens, | Barn Door Hangers. |

Catalogues Free

Please send me a copy of Louden Barn Plans, expect to build (or remodel) barn for

.....cow and..... horses

Barn will be about x ft.

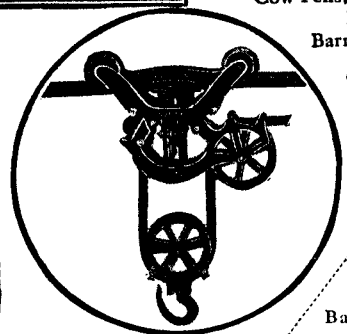
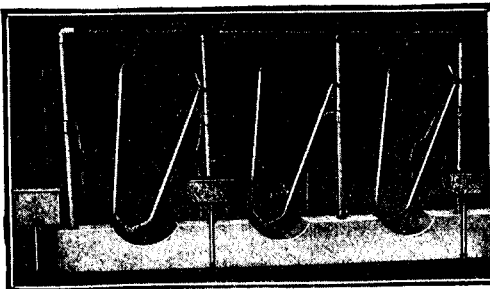
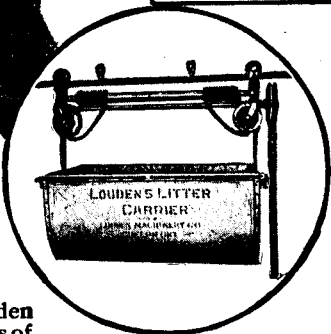
Name.....

P.O.....

Prov.....

Book of Barn Plans Free

Louden "Barn Plans" is not a catalogue of barn equipment. It is a complete and valuable book of reference and instruction on barn construction. The 112 pages of Louden Barn plans is full of dollar saving information—the best of ideas gathered by the Louden Company during many years of barn building, and barn equipment experience. 51 representative designs for cow barns, horse barns, general purpose barns and hog houses. In addition, there are 32 pages devoted to general construction problems, such as concrete work, laying floors, roof construction, ventilation, etc.



LOUDEN MACHINERY CO.

15 CRIMEA ST., GUELPH, ONT.

VANCOUVER, B.C. WINNIPEG, MAN. ST. JOHN, N.B.

POULTRY SECTION

STARTING A POULTRY FARM.

By MICHAEL BOYER.

A poultry farm built upon a secure foundation, is sure to be successful if afterwards properly managed. It is not only necessary to make the right kind of start, but the work must be regularly and faithfully performed, day in and day out.

As a rule, beginners start with great enthusiasm, and not a few build air castles, but to very many of them the sameness of the work, the close application, the constant watching, soon becomes monotonous, and then there is a shirking of duty, neglect, carelessness—and the enterprise becomes a failure. The point is to begin in a small way—measure the size of the initial step with the amount of capital and experience at hand.

It is often the case that men with more or less available capital practically put all their money in houses and stock. This is a mistake, and more so in the case of those who have had no personal experience in the work.

It is a noteworthy fact that the most successful poultry farms of today are those that have started from a small beginning, and gradually expanded as business and experience warranted. Men who would not go into the dry goods business for the reason that "they knew nothing about it," will build houses and stock them, and expect the hens to do the rest.

Hens, like cows, yield a profit according to the treatment given. They will not stand neglect. They are hard workers when properly rewarded, but can be the most idle and indifferent producers when made to shift for themselves.

Our agricultural colleges have done much to teach the new aspirants how to tread in poultry paths, and men and women who endeavor to improve by these excellently arranged courses of instruction, will have won half the battle—the other half naturally belongs to practical experience.

A man with \$1000 had better invest one-half of it in buildings, stock and fixtures, and reserve the other half for feed and running expenses, rather than invest the whole amount in the equipment and have to go in debt for the feed.

Eggs and poultry are staple crops, and the demand is far greater than the supply. This country needs more poultry farms, and they will be successful when properly built and managed. But the beginning must be small, and the growth gradual, so that every part of the work is promptly noted and correctly performed.

Ducks.

The duck laying season opens in February, although a number of early hatched ducklings begin laying in January. The first eggs of the season are rarely ever fertile.

The duck house should have an earth floor, and this ought to be heavily bedded with leaves, straw, or some other light litter.

It is claimed by those who have tried it, that a cross of Muscovy on Pekin ducks will produce sterile progeny.

While breeding ducks can be successfully kept on land, it has been proved that those having the advantage of bathing water keep in a more healthful condition, and there is greater fertility in their eggs. Bathing is the only real exercise a duck can take, for, unlike the hen, she cannot scratch. A less number of drakes are needed in a flock where water is supplied.

The age of vigor and productiveness in a duck is about double that of the hen. Ducks have been successfully bred up until seven years of age.

Geese enjoy low, wet pastures. They do not thrive in confined quarters. Grass and water is their principal diet. According to an experiment tried some years ago in Rhode Island, fall-sown rye, spring sown oats and peas, and sweet corn furnishes the finest kind of pasture.

Clover is as much an egg producer as it is a producer of milk. It is rich in nitrogen and mineral matter. Having a high nutritive ratio, it is equal to barley, and almost as high as wheat. Its action is to extend the food ration, reduce the too-concentrated grain food, and prevent the accumulation of internal fat. The second crop, or

SPRATT'S HEARSON'S PATENT CHAMPION INCUBATOR AND FOSTER MOTHER

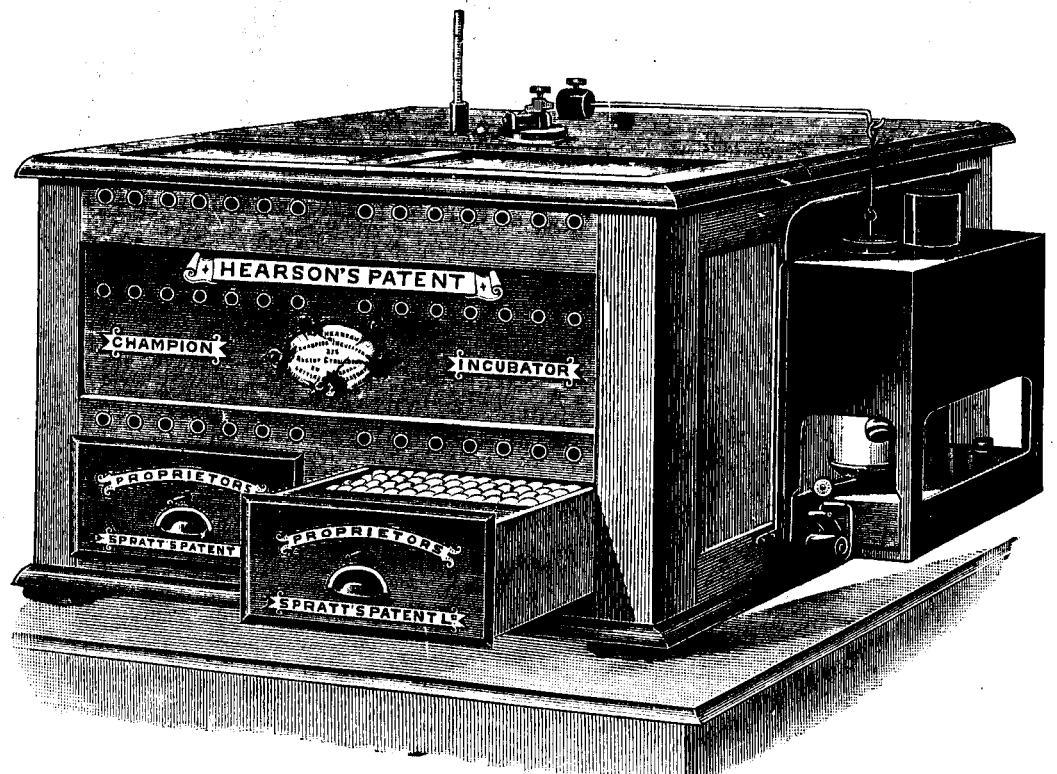
GUARANTEED

to hatch every fertile egg.

HEARSON'S has demonstrated its superiority for over 50 years in all parts of the world.

Follow instructions as indicated in "THE PROBLEM SOLVED," supplied with each machine.

We carry a good assortment of Hearson's Incubators and Foster Mothers in Vancouver, B. C., and are prepared to make prompt shipment through our agents,



MESSRS. O'LOANE KIELY & CO., LIMITED

37 to 43 ALEXANDER STREET, VANCOUVER, B. C.

"rowen" clover is the best. Clover should be cut when in full blossom. Let it grow until the first blossoms begin to turn brown.

Charcoal is an excellent corrective of the evils of injudicious overfeeding, and also is a good remedy in bowel disorders in poultry. Having wonderful absorbent powers, especially for gases, only a small quantity should be put in the feed hoppers at a time on account of its absorbative nature. It should be kept in a thoroughly dry vessel with a close fitting cover, so as to exclude the air. If charcoal is heated well before given to the poultry, it will have a tendency to drive off impurities which may have become absorbed, and will be equal to fresh charcoal.

In turkey culture, never use a gobbler that is akin to the hens. Inbreeding is the cause of much of the "bad luck" in raising the young.

Ginger, if fed poultry for too long a time, is apt to weaken the digestive organs, while asafoetida and gentian are excellent digestive stimulants. Asafoetida, garlic and onions have a good effect on the lungs and bronchia.

When a fowl has a bilious look, dysentery and then costiveness, it is a strong indication that it is suffering from liver trouble. When the edges of the comb and wattles are of a purplish red, it is a sign of indigestion. Fowls in good health always have a bright red comb.

Ducklings usually start to molt when eleven weeks of age, and it will require about six weeks for them to finish the process, and get into good condition again. For that reason ducklings should be marketed at ten weeks of age, for after that they are more apt to lose weight than gain it:

Eel grass, such as is found in the bottom of the creeks of Long Island, seems to be a natural food for ducks. Inland breeders substitute steeped clover hay or alfalfa, and some chop up green rye, oats or corn. Where there is a scarcity of green food, more bran must be fed in the ration.

Richardson, a farmer English authority, said the ideal gander has large dimensions, active gait, lively and clear eyes, an ever-ready and hoarse voice, and a demeanor of full boldness. The goose should be chosen for her weight of body, steadiness of deportment, and breadth of foot—a quality said to indicate the presence of other excellencies.

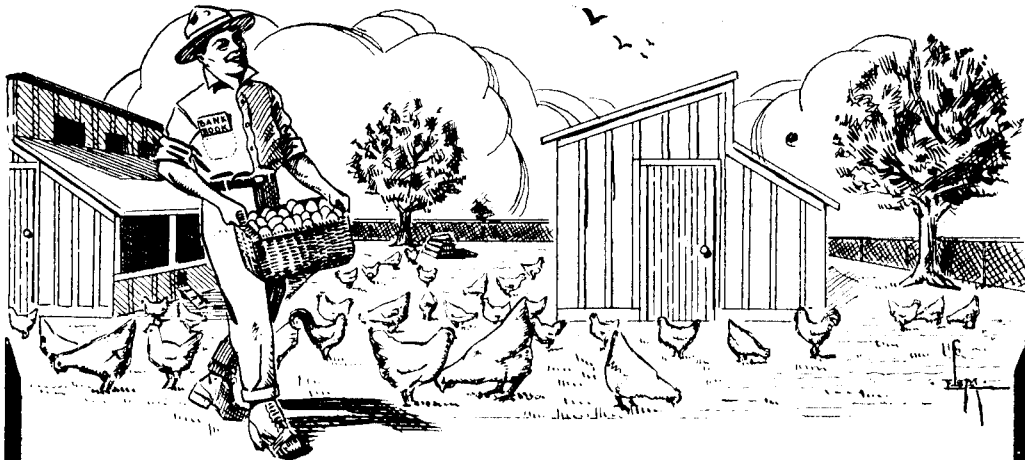
FEEDING CHICKS.

By L. F. SOLLY, Westholme, B. C.

Chicks should be from 36 to 48 hours old before they receive their first meal. Take care that chicks do not become chilled the first week, and on the other hand do not overheat. If the chicks crowd they are not getting enough heat, and if they pant they are too hot. From first to last do not overcrowd as fresh air is essential. Dry sand in the brooder is as good as anything. Clean brooders frequently.

First Week.

Sand should be placed so that chicks may obtain this at first together with clean water in shallow tins. Scatter coarse oatmeal four times a day in litter, and make the chicks scratch for their food. Pick up a chick occasionally and feel its crop, to make sure they are getting enough feed. After the third day two feeds of ground egg should be given, as much as chicks will eat up



GOOD CHICK FOOD MEANS--GROWTH--EGGS--DOLLARS FOR YOU

Lay the right food for your chicks and later they will lay the right food for you; namely EGGS. Eggs continue to command high prices that spell **DOLLARS AND CENTS FOR YOU.** But you **MUST** feed your chicks well.

ROYAL STANDARD MILLS CHICK FOOD

does not scour young chicks causing mortality, but nourishes and hastens a healthy growth. Contains no dust or waste—ingredients are not "cheapened" for sale purposes. Scientifically compounded, contains special high-grade meat scraps, and has a **PROTEIN VALUE** of **75 PER CENT.**

A BETTER CHICK FOOD IS NOT SOLD ANYWHERE.

The sooner your order, the better for your chicks.

ROYAL STANDARD GRAIN PRODUCTS AGENCY.

VANCOUVER MILLING & GRAIN CO., LTD.

Vancouver, Victoria, New Westminster, Nanaimo.

clean in ten minutes. Run hard boiled eggs together with the shell through a meat grinder. Two eggs per hundred chicks is about the correct amount for the first two days' feeding, and increase to three eggs per hundred chicks per day toward the latter part of the first week. The greatest care must be taken the first week not to overfeed, as chicks will not finish absorbing their yolk if fed too much the first few days, and bowel trouble will often be experienced later. Chilling or overheating will also cause this complaint, so that great care needs to be exercised the first week. Remember the sand and change the water often, and see that your chicks are busy and scratching for their feed.

Second and third Weeks.

First thing feed coarse oatmeal in litter. Place dry hopper mash in tins before chicks from 10 to 3 o'clock daily. Always take the mash that is left away at 3 o'clock, so that the chicks will be hungry at 5 o'clock, when a good feed of chick food should be given. Charcoal, fine bone and sand should be kept before the chicks always, and green feed, preferably chick weed, should be fed daily. The second week, weather permitting, the chicks should be allowed to run outside.

THE TIME TO ACT.

The old saying has it "there is no time like the present." That this applies with telling force to the selection of good dairy cows, will be admitted by every thoughtful dairymen. Selection may be made on the evidence of certain well known external indications of good milking qualities with special attention paid to the udder, loin, skin, barrel, etc.

But no matter how skilled the expert judge of dairy "quality" in a cow may be, he is not infallible as to the amount of hard cash that any one cow in the herd will earn in a year. He may be, the ordinary farmer, too, may be considerably mistaken in his judgment. One system will give him accurate results, that of selection of dairy records. It is easy to weigh and sample, it is easy to add up a few figures for each cow, it is easy to compare such totals, and it is eminently satisfactory to know for certain which cows are best to keep and breed from.

Now is the time to act, prepare to keep records all season; write the dairy division, Ottawa, for free milk record forms, either 3 times per month, or daily. You will never regret it.

L. F. SOLLY, LAKEVIEW POULTRY FARM

Westholme, B. C., breeder of vigorous laying strains of White Leghorns and White Wyandottes. Order now for spring delivery. Day-old chicks and hatching eggs. Write for illustrated catalogue containing valuable information on raising chickens and feeding fowls.

WHITE and **COLUMBIAN** Wyandotte, Light Brahmas and S. C. White Leghorns. Over thirty years a breeder. Stock and eggs for sale. **MICHAEL K. BOYER**, Box M, Hammonton, New Jersey.

BROODING CHICKS.

Brooding chicks with a properly constructed brooder is a simple proposition and easily done. To design and properly construct a brooder, however, is an art. It must be to a chick all that a house is to a young child—its sleeping-room, living-room, and playground; all well heated, ventilated, and lighted. When first hatched the chick has but little power of resistance, and cannot keep up its normal temperature in a cold room. It is easily chilled, which acts upon the digestive system, and unless it is directly afterward placed in a warm compartment until it gets the reaction, death shortly follows. It is, therefore, of first importance that the brooder be warmly constructed, and have ample heating capacity, that the necessary temperature may be maintained regardless of the other conditions.

The brooder must have a sleeping-room, termed a hover, that is warmer than the living-room or playground to harden the chick preparatory to the out-of-door life. The hover and nursery need to be warmed evenly and thoroughly. A grate fire may be a cheerful addition to a moderately heated room on a cold night, but who ever felt thoroughly comfortable before a grate-fire in an otherwise insufficiently heated room.

The chick, in its young and sensitive state, is particularly affected by radiated heat, and if it feels the heat coming from any one point it crowds toward that point, and where there are large numbers together they huddle and crowd and eventually pile up one upon another, and those underneath are smothered. While the hover or sleeping-room should be somewhat warmer than the nursery in which it is located, the heat should be diffused through it in such a manner that one part is as warm as another.

Ventilation.

The ventilation should be a part of the heating system. This is the only way draughts can be avoided, and draughts are as dangerous as hot spots. In other words, the nursery portion of a brooder should be equally and thoroughly warmed and ventilated, so that it is as comfortable to the thinly-clad and sensitive chick as a properly heated and ventilated nursery room is to the thinly-clad infant. Unless this can be accomplished one can not successfully brood chicks by artificial means. Thin-walled, improperly heated and ventilated brooders have been the cause of more failures in the poultry business than any other one thing. If one cannot successfully rear a good percentage of the chicks hatched the operation is not a profitable one. The beginner will do well to see that he secures a workable equipment, an incubator that will hatch a large percentage of the fertile eggs, and a brooder that is a brooder in fact as well as in name.

The common practice has been to see how cheaply a brooder could be constructed and sold, so that large numbers could be disposed of. Brooder houses have been designed which are as incapable of keeping out the cold as a plantation shanty of the South; and heating systems are sold the beginner which are as inadequate for the end intended as is the scaldino with its handful of burning charcoals which the Italian carries from room to room in a vain effort to secure warmth. The beginner will do better to purchase a smaller equipment that will actually do the work for which (its name would imply) it was intended,

rather than an incubator or brooder that is little more than a packing box with a lamp attached to it and called by a name which the article does not truly represent.

THE INCUBATOR vs. THE HEN.

Getting chicks in large numbers early in the season necessitates artificial incubation. If one wishes to raise a hundred or more chicks a year—which would only add thirty-five or forty really good pullets to the flock—there is no argument for setting hens. The incubator is always ready to go to work, without regard to the climatic conditions; will not quit the job or break the eggs; and it is no more work to look after a machine which will hold up to two hundred and fifty eggs than to care for a hen and one setting of eggs. It is not advisable for the amateur to use a machine larger than the 250-egg size.

My own experience indicates that a machine will hatch a larger percentage of the fertile eggs than hens will average, and that the artificially incubated and brooded chicks are more vigorous, mature more quickly and evenly, and make better fowls.

The machine not only enables one to hatch chicks at the most profitable time of year, but a large number of chicks of the same age will mature more evenly, and early chicks may be worth more than three times their number hatched later in the season. If eggs are purchased for incubation, it is much cheaper to use machines, because breeders will sell at a lower rate per hundred than per setting, as the expense of handling and packing is reduced when the larger orders are involved.

Incubators are of various sorts, but most machines made by reliable firms will do good work if given proper attention. Unless the operator is an expert, it is wiser to run the incubator by the instructions formulated by its manufacturer, who may be expected to know what the machine will do and how it will do it best. Certainly, one should so follow the maker's way during the earlier experimental hatches, and not test a new machine and one's own theories at the same time.

Buy a Good Machine.

It pays to purchase a good machine, because it will need the least care. It is best to purchase early in the season before the factories are rushed, as prompt attention can be given orders and the early delivery will give the novice time to become familiar with the machine. The first hatch often pays the difference in expense between small and medium-sized machines, so it is not economy to purchase the very small ones, which cost only a trifle less, and use as much fuel and time for operation.

Mr. Tom Barron, of England, whose birds are well known as prize winners of egg-laying competitions, has made a very close study of type.

Mr. Barron believes that an egg-laying strain cannot be produced by inbreeding. In order for a hen to be a good producer, she must be in good health and full of vigor. In his own case, he has not bred from a male for years which was not bred from hens which laid 200 eggs, or more; and he recommends that method. He does not try to overdo the thing, and has not bred for the 300-egg hen. He breeds for high averages instead of exceptionally high individuals.

A good layer usually stands high in front, he says, and her back is not on a level, nor the rear higher than the front.



CANDEEL
COLONY
BROODERS
CAST IRON
COAL BURNING—SELF REGULATING

300-500 Chicks—One Flock
One Heater—One Building

BUY OR HATCH 300 to 500
chicks all at one time.

Put them with one Candeel Colony Brooder, all together in one building.

Attend the coal fire once or twice a day.

Set the Automatic Temperature Regulator when you start the Brooder and it keeps a correct heat continually, requiring adjustment only when the chicks get older and need less heat. A turn of a screw does it.

RESULT. Chicks and buildings always safe from fire. The largest possible number of birds brought to strong maturity. Much time, labor and fuel saved and greater profit at the end of the season.

SPECIAL FEATURES. All cast iron heater that lasts a lifetime. Large 12-inch grate—the safe size. Safety Grate Shaker. Sealed Base. Swinging Hover Section that makes it easy to get at the heater. All-woven-wool felt curtain, guaranteed for 5 years.

Satisfy yourself that this is the safest, surest and most economical way to raise the most of your chicks.

Write for literature illustrating and describing these brooders more fully.

Distributors **A. I. JOHNSON & CO.,**
844 CAMBIE ST. VANCOUVER, B.C.

The best producers usually have large combs, a high tail, and a prominent, large bright eye. Upon handling the birds he finds that most of the best layers have thin straight pelvic bones. This indicates capacity—lots of room for the egg and digestive organs. He likes the wedge shape, rather narrow in front, but wide behind and wide between the legs.

THE PRESENT CONDITION OF THE CANADIAN EGG MARKET.

For the first time in a number of years eggs have taken a prominent place in Canada's export trade. This is largely due to the unprecedented demand for eggs on the part of the British market, and the fact that British dealers have shown a marked preference for Canadian eggs over United States eggs, and a willingness to pay a distinctly higher price for them.

So great in fact has been the demand that Canadian dealers have shipped practically all of the available Canadian storage product to the Old Country. As a result there is not in Canada at the present time sufficient eggs in storage to supply home consumption until fresh receipts in appreciable quantities begin to come in.

Quantities of eggs from the United States however, are being imported into Canada, some in bond for export, but the larger part to take the place of the Canadian product exported. On account of the keen demand for Canadian eggs above mentioned, United States eggs can be laid down in Canada at the present time, duty paid, at several cents

per dozen less than the price at which Canadian eggs are selling for, for export, and they should be procurable accordingly.

On the other hand the Canadian market at the present time is very firm for Canadian "Specials," new laid, the production of which is not enough in most instances to supply the demand at local country markets. This means that high prices will have to be paid in consuming centres in order to draw a portion of these supplies from local points. Producers may therefore definitely expect reasonably high prices during the period of low production for fresh gathered eggs that will grade "Specials."

The question has been raised as to whether the phenomenal demand on the part of the British market for Canadian eggs will continue. This depends entirely upon the quality of Canadian eggs exported. Canada has tremendous possibilities as an egg producing country. The poultry industry is at present but a mere fraction of what it might be. It remains, therefore, for those most interested in the development of this trade to make the best possible use of their present opportunities, and by careful supervision of the quality of Canadian eggs going forward to pave the way for an extensive and profitable export trade in the future.



Hotel LOTUS

Corner Abbott and Pender Streets

Absolutely Fireproof European Plan VANCOUVER, B. C.

THE LOTUS "Serves You Right"

Room with detached bath \$1.00 day up
Room with private bath \$1.50 day up

GRILL Moderate Prices
Unsurpassed

OUR FREE AUTO BUS MEETS ALL BOATS AND TRAINS

Provincial Hotels Co., Ltd., Proprietors

HOWARD J. SHEEHAN, President
W. V. MORAN, Resident Manager

Get a Farm of Your Own

TAKE 20 YEARS TO PAY if you wish. The land will support you and pay for itself. 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 from \$35. Terms—One-twentieth down, balance within twenty years. In irrigation districts, loan for farm buildings, etc., up to \$2,000, also repayable in twenty years—interest only 6 per cent. Here is your opportunity to increase your farm holdings by getting adjoining land, or secure your friends as neighbors. For literature and particulars apply to ALLAN CAMERON, Gen. Supt. of Lands Desk 81, Department of Natural Resources C. P. R.

CALGARY ALBERTA

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

Farmers ! Poultrymen ! A Message For You

Read the following carefully:

Last January when we decided to enter the Poultry Business, we determined on four unflinching principles which we knew would be necessary to bring us permanent success:

1. The very best stock obtainable.
2. A poultry site second to none.
3. A careful and thorough management.
4. Most modern buildings and up-to-date appliances known.

In selecting our stock, we visited the poultry farms of the best known breeders on the Pacific Coast and inspected their stock. From the best stock obtainable we selected 2,500 day-old chicks, realizing that our success must depend upon the quality of our foundation stock. In this we spared no expense. Not being satisfied with this alone, we imported several hundred dollars' worth of breeding stock from breeders who had and still are winning first places at the greatest shows in America and Great Britain. This was for the purpose of infusing new blood in order to produce stock of unequalled quality. These were placed on SHELLYBROOK FARM—a 136-acre site especially selected for poultry raising, equipped with the most up-to-date buildings and poultry raising appliances known.

Since that time, by maintaining the most exacting standards, by painstaking care to produce birds to meet the demands of the most exacting, OUR BUSINESS HAS GROWN RAPIDLY AND STEADILY, AND THOSE WHO DEAL WITH US ARE HIGHEST IN THEIR PRAISE OF OUR EFFICIENT SERVICE. And we promise to give to you the same faithful service that is making SHELLYBROOK so well known.

SHELLYBROOK FARM gives only fair dealing and honest representation. We sell satisfaction as well as stock. Visitors are always welcome at SHELLYBROOK FARM and we will be only too pleased to let you see for yourself the system and care exercised to maintain perfect standards. Information regarding Systems of Management, Feeding, Breeding, and the Care of Chickens furnished on application.

Order Now for Spring Delivery.

Shellybrook Farm, Parksville, B.C.

ONE QUALITY—THE BEST

ALL STOCK, ETC., GUARANTEED

Breeders of Exhibition and Utility Strains of:—

White Wyandottes.
White Orpingtons.
White Leghorns.
White Pekin Ducks.

Orders taken for:—

Fawn Indian Runner Ducks.
Hatching Eggs.
Day-old Chicks and Ducklings.
Ten-week-old Pullets and Ducks.
Four-month-old Pullets and Ducks.
Six and eight-month-old Pullets and Ducks.
Cockerels and Drakes.
Yearling Breeding Hens and Ducks.
Yearling Cocks and Drakes.

NOTE—This year we have no Exhibition Stock for sale until after April 20. Special prices and descriptions on all stock furnished on application. All stock positively guaranteed as represented. Order early as our output is limited.

FILL IN AND MAIL TODAY

Dept. F, Gentlemen: Please mail me further information.

Name

Address

TO ATTACK FRUIT PEST PROBLEMS.

Hon. Martin Burrell has authorized special entomological investigations in British Columbia with a view of determining suitable measures of control for some of the more serious pests affecting fruit. In this work the provincial department will cooperate by assisting in the matter of spraying and will have its assistant horticulturists work with the help of the federal officers. The present Dominion officer is unable to undertake this particular work in addition to what he already is doing and the min-

ister has arranged for the appointment of another officer. It is absolutely necessary for the success of such investigational work that only highly trained and practical entomologists should be engaged and after making careful enquiry Mr. Burrell has authorized the appointment of Dr. Alfred E. Cameron, M.A.D.S.C., (Aberdeen) of the University College of South Wales. Dr. Cameron has had an unusually broad entomological training, including a year's investigational work in the United States which made him familiar with conditions obtaining on this continent.

NEWS FROM FARMERS' INSTITUTES

N.B.—All Subscriptions (or renewal subscriptions) to FRUIT AND FARM, which are forwarded through secretaries of Farmers' Institutes will be accepted at the reduced rate of 50c. per annum, instead of \$1.00

Langley Farmers' Institute.

At a meeting of Langley Farmers' Institute held at Langley Fort, several important government communications were read.

It was stated in a letter from the provincial horticulturist that thirteen applications for fruit packing schools and twenty for pruning schools had been made by institutes throughout the province and that the department desired that many more such schools be established.

The Dominion government has taken up the egg question on behalf of the British Columbia producer. It is endeavoring to bring British Columbia into line with the rest of Canada by introducing the "Standards for Canadian eggs," into this province, by which the eggs are graded according to certain standards. But, it was pointed out what the British Columbia producer wants is an "Egg Marks Act," whereby all eggs offered for sale shall be marked with their point of origin. By this means, Chinese eggs and preserved eggs from the United States and other places could not be sold as fresh British Columbia eggs.

Owing to further increases in the prices of raw materials, the price of stumping powder has again advanced and is now \$6.50 per case, according to a letter from the Canadian Explosives Ltd., read by the secretary.

Mr. J. Allen, a successful poultry farmer of Langley, gave a highly interesting address on "Baby Chicks."

Kootenay River Farmers' Institute.

On Saturday, February 5th, the Kootenay River Farmers' Institute held its regular monthly meeting at the Kootenay Falls hotel, South Slokan. In the absence of T. H. Negus, who has enlisted with the 102nd Battalion and is now at Comox, J. M. Shepley of Shoreacres was appointed secretary. Collingwood Gray, who occupied the chair, read a letter from W. E. Scott, deputy minister of agriculture, regarding the right of farmers' institutes to do business in groceries. It was felt that there was a great need for co-operative buying and it was decided by the meeting to communicate with several of the wholesale houses with reference to buying groceries in large quantities. There were 10 members present. The next meeting will be held on March 4, at the same place.

Cranbrook's Farmers' Institute.

Mr. Ivor Bassett, the secretary of the Farmers' Institute, has been appointed Club Organizer of the Junior Institute, and will shortly hold an organization meeting. The potato competition, and other competitions which were run for the boys and girls of Cranbrook last year, will be conducted this year through the Junior Institute. All members will receive special bulletins from the Department of Agriculture, explaining fully and simply the best methods of ensuring success in the different competitions.

Junior Farmers' Institutes.

During the past two years the Department of Agriculture of this province has conducted potato competitions for boys and girls, under the direct supervision of farm-

ers' institute secretaries, which limited the holding of these competitions to those districts where farmers' institutes had been organized.

These competitions will in future be run by the boys and girls themselves who become members of the junior farmers' institutes. These junior institutes will be organized as far as possible under the supervision of the local farmers' institutes, but where this is not possible, they will be supervised by any public official of that district.

All boys and girls between the ages of 10 and 17 years inclusive are eligible for membership, on payment of a fee of 25c to ensure good will and cover the cost of postage on correspondence with the department. The minimum number of members in order to secure recognition by the department is ten.

The boys and girls elect their own officers, with the exception of the club organizer, who is appointed by the Farmers' Institute and who acts as an honorary secretary and assists in the conduct of business.

Burquitlam Farmers' Institute.

At the annual meeting of the Farmers' Institute held in the Agricultural Hall on January 28, the following officers were elected: President, Mr. Robert Morrison; first vice-president, Mr. E. M. Wiltshire; second vice-president, Mr. E. M. Wiltshire; third vice-president, Mr. W. Whiting. Mr. F. Cockerill was re-appointed secretary-treasurer, and the directors appointed were Messrs. W. Walker, R. Newman, W. Wilson, H. Asson, H. M. Sawyer and C. Halvorson. It was agreed to hold a directors' meeting on the first Wednesday of each month, beginning February 2. Arrangements are in course of negotiation whereby the purchase and distribution of grain will be facilitated.

Aldergrove Farmers' Institute.

The directors of the Farmers' Institute met in the Orange Hall, Aldergrove, on Saturday, January 29, Mr. W. Warner presiding. It was agreed to send a delegate to the conference at Victoria to press the improvement of the international boundary line between Blaine and Sumas as a Centenary of Peace memorial. Potatoes and carrots were again chosen as the most desirable roots for field competition for the current year. An entrance fee of a dollar will be charged. The institute agreed to purchase clover seed and lime sulphur spray for its members who are requested to hand in their names to the secretary as early as possible.

Peachland Farmers' Institute.

Farmers' Institute held its annual business meeting on the 14th of January. Interesting reports of the work were given and the following officers were elected: President, Thos. Powell; vice-president, L. D. McCall; secretary-treasurer, Wm. Buchanan, M. D.; committee, A. Cutbill, O. Pope, and I. Sutherland. Also a committee to wait on the council re fence and herd bylaw, consisting of A. N. Pope, R. H. Hueston and A. Cutbill. M. N. Morrison was appointed a delegate to attend the convention at Victoria in February.

DU PONT FABRIKOID

MOTOR QUALITY

*The Standardized
Automobile Upholstery*

DU PONT Fabrikoid, Motor Quality, is used on more than half of all 1916 automobiles.

Several years' use on hundreds of thousands of cars has proved its superiority over coated splits, commonly called "genuine leather."

Popular motor car prices are low because every detail of their manufacture is of standard guaranteed quality and cost.

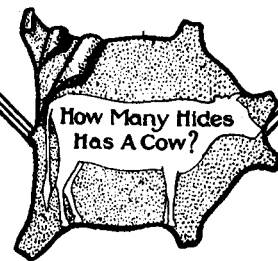
Coated splits, weak and irregular in quality, durability and price, cannot be standardized.

Motor Quality Fabrikoid, uniform in quality, price, durability and handling costs, is standardized.

Insist upon Fabrikoid upholstery. Buy a standardized car and get the most for your money.

Send for samples and booklet No.

DU PONT FABRIKOID COMPANY
Wilmington, Delaware
Factory at Newburgh, N. Y.
Canadian Sales Office, Toronto



Naramata Farmers' Institute.

A business meeting of the Farmers' Institute was held on Friday night, January 21, for the purpose of electing officers for 1916. The following directors were elected: Mr. George Cook, Mr. John Pushman and Mr. T. H. Boothe. A great many matters of interest to the community were discussed. A regular programme of work consisting of subjects of interest to the association is being prepared by the directors. At the conclusion of the meeting a directors' meeting was held and Mr. Geo. Cook will retain the presidency; Mr. J. Pushman, secretary, and Mr. T. H. Boothe, treasurer.

Okanagan Farmers' Institute.

The second annual social and dance given last month by the Okanagan Farmers' Institute was even more successful than that of last year. Over 300 persons were present, the agricultural hall of the Court House being beautifully decorated for the occasion and the music furnished by the band of the 30th B. C. Horse. In his opening address, the president, Mr. Thomas Richmond, spoke of the many advantages to the community to be derived from an institution of this nature, and drew attention to the opening for growth and expansion in many directions among the farmers. He advocated the more extensive growth of alfalfa and clover, whereby much of the heavy clay land in the district now idle might be brought under cultivation.

Mayor Smith spoke of the intimate relationship in practical interests that existed between the civic population and the farming community upon whom the cities were largely dependent for their growth and progress. Speaking of what dairying could do to build up a prosperous community, he referred to a visit he had made last year to Chilliwack, where he found that within a radius of ten miles, the farmers had received cash for their dairy products amounting to about \$360,000 or nearly \$1,000 per day. He hoped soon to see the dairy industry in this section placed upon a somewhat similar basis.

Mr. Price Ellison, M. P. P., congratulated the institute upon the eminently successful and pleasant nature of the gathering. He advocated the necessity of seeking an expansion in markets for fruit, and not depending so largely upon the prairie consumers.

When traffic was fully organized through the Panama Canal, he said, apples might be laid down in England for a freight charge of 25 cents per box, and it was in markets such as this that the best results could be obtained for the fruit growers.

The annual meeting of the Delta Agricultural Society was held Wednesday evening, February 16, the principal order of business being the election of officers. President F. J. Green, Vice-President W. J. Fredericks and Secretary-Treasurer A. de R. Taylor were re-elected, as were all last year's directors. One new director, Mr. A. Davie, was elected to fill the vacancy caused by the retirement of Dr. Wilson.

Kaslo women have sent one ton of jam to Red Cross headquarters at Toronto.

The B. C. Gazette announces incorporation of farmers' institutes at Fort Steele, Barriere, Mapes, and Sointula, Malcolm Island.

It was the king in "Gulliver's Travels," who said that "Whoever could make two ears of corn, or two blades of grass to grow upon a spot of ground where only one grew before would deserve better of mankind, and to more essential service to his country, than the whole race of politicians put together."

The Burquitlam Agricultural Society directors met last month and unanimously decided to hold the usual fall exhibition this year and the energies of the officials will be directed from now on to ensure the fair the same measure of success which it has attained in the past.

The Burquitlam's Women's Institute will supervise the holding of the annual flower show this year, which is to be held early in July.

FRUIT AND FARM NOTES

According to all reports received in various parts of the Fraser Valley the coming season will see a decided increase in live stock, including horses, beef, cattle, dairy cattle, sheep, swine and poultry, and especially will this be the case in reference to dairy cattle. From contemplated plans now under discussion by the majority of creameries in the valley, the butter output this summer will be increased at least 40 per cent. It is also stated that the B. C. Creamery at South Sumas this summer will practically double their output. All this has a tendency to warrant the increase of dairy cattle.

Fred S. Neve of Summerland, who is acting as instructor for the provincial government packing schools, states that there is a great need at the present time for women packers.

For the past three or more years, says Mr. Neve, women have almost entirely taken the place of men as packers in the Okanagan, the men doing the heavy work of trucking. The need for packers, he declares, grows greater, as many of the men who were engaged in this work in the past have enlisted or are about to enlist. A real problem confronts the growers in Kootenay-Boundary, as he feels that when the fruit crops are to be shipped this year unless the women turn in and learn the packing business at once great difficulty will be experienced in handling the crops.

On Thursday evening, February 10, Mr. J. W. Berry, one of the leading dairymen of the valley, was taken completely by surprise at his home when about 40 residents of Murrayville carried out a surprise party and presentation. The presentation, a beautiful gold-headed cane, was made by Mr. Rod Cummings on behalf of the residents and farmers of the district in appreciation of the good work Mr. Berry has done for the farmers and residents, both as a farmer and as a member of the Langley school board.

Speeches were made by Messrs Cummings, Buoy, Crozer, Harrison, Boseman, Reeve Wark and Magistrate Deans.

There are thirty-three million acres of agricultural land in British Columbia still vested in the Crown, equivalent to all the land actually under cultivation in the entire Dominion, from the Atlantic to the Pacific.—Mr. Alex. Lucas, M. P. P.



**Keep The Toes
In Your Harness**

Keep it strong and good
looking with

**EUREKA
HARNESS OIL**

Makes harness last longer
and look better.

Dealers Everywhere

The Imperial Oil Company
Limited
Branches in all Cities

The annual meeting of the Slocan-Kootenay Farmers' Exchange was held on February 4th, when the annual reports and statements of accounts were rendered and adopted, showing a balance in hand of \$100. The following directors were elected: C. S. Brockington, president; R. D. Kennedy, vice-president; J. M. Shepley, A. Smith, H. Bourgeois, E. W. Dawney and J. F. Bird.

The question of the secretaryship was left open. T. H. Negus recently left with the 102nd for Comox. A Smith agreed to act temporarily.

C. S. Brockington, who had attended the Kootenay-Boundary fruit grower's convention in Nelson, spoke of the benefits to be derived by the association joining the central exchange. The meeting desired unanimously to support the central selling agency at Nelson.

As far as I know personally, the demand for sheep products has never been so great as it has been the past fall, and ever so great for breeding sheep—W. A. Dryden at Dominion Sheep Breeders' meeting.

Successful Farmers

Use

McCORMICK FARM MACHINERY

We carry a complete stock. Send for Catalogues and Prices.

MARK DUMOND

**HARDWARE, FARM MACHINERY,
POULTRY AND BEE SUPPLIES**

1048 Main Street.

Vancouver, B. C.

WOMEN'S SECTION

British Columbia Women's Institutes

Motto—"FOR HOME AND COUNTRY"

PATRIOTIC AND RED CROSS WORK.

Undertaken by the Women's Institutes of British Columbia Since the Commencement of the War.

The attached summaries relating to patriotic and relief work undertaken by the women's institutes in this province have been compiled to a large extent by the members of the Advisory Board.

Owing to the fact that in 1914, during the earlier stages of the war, but little organized effort was made and practically no record kept of work done by separate institutes, the statements submitted are necessarily lacking in detail and are to a certain extent incomplete. They present, however, a very good record, and it is believed that it will compare well with the help that has been rendered to the Red Cross and Patriotic Societies by institutes in other provinces.

Vancouver Island Institutes.

Colwood—Patriotic work commenced August 31st, 1914. Initiative taken by institute. Collections, donations, proceeds of concerts, etc., \$629.20. Total number of articles: (a) Patriotic Fund, 122; (b) Canadian troops, 63; (c) Red Cross work, 265. Funds and supplies sent through Victoria Red Cross and Patriotic Society.

Comox—Work commenced October, 1914. Institute bought materials, finished same, and dispatched through Patriotic Society. Funds collected, \$40. Material to the amount of \$19 bought and made up into articles for soldiers. Twenty-three articles sent to the Queen Mary's Needlework Guild.

Cowichan—Commenced work August, 11th, 1914. Initiative taken by institute, public meeting held, collections taken. First collection, \$250; supplementary, \$429.98; \$10 sent to Patriotic Fund; \$250 subscribed for bed in Cliveden Hospital; 8,364 articles made. Forwarded through Red Cross and Patriotic Society, together with many cases of garments for the Belgians.

Gordon Head—Commenced August 25th, 1914. Initiative taken by institute; after twelve months joined the local branch of the Red Cross Society. First funds collected, \$99.75; additional funds, \$91.05. Supplies and comforts sent to troops to the value of \$20. No record kept of first articles supplied. Since joining the Red Cross Society the following have been furnished: 8 kits fully equipped; 4,565 articles. Members are taxed 25 cents per month each, and concerts and other local efforts are used to provide funds.

Garden City—In the autumn of 1914 local conditions were such that this institute did not feel that the members could make any further contributions to Red Cross or Patriotic Funds. Since May supplies were obtained from the Red Cross in Victoria and the work of individual members supervised. Arrangements have also been made for other members to attend at the Central Office in Victoria and assist in the cutting-out of garments, packing, etc. A separate record of articles made has now been commenced, the figures for October being 110;

November, 176 articles. The raising of funds in this district has been so thoroughly looked after by other bodies that it was felt that the institute could help in a better way by supporting the organizations already existing.

Langford—January to November, 1915. Socks, woollen articles, contributions to Red Cross and to Patriotic Funds, materials, etc., \$78.85. Sewing meetings have been held once a month since July, and the institute has aimed to make 100 surgical shirts per month, whilst numerous other articles, of which no detailed record has been kept, have been forwarded through the Red Cross Society. \$5 per month is being contributed to the Patriotic Aid Society, and the sums contributed so far total \$137.80.

Lake Hill—Commenced September, 1914. Initiative taken by institute. First collection, \$105; subsequent collections: (a) Patriotic Fund, \$26.35; (b) \$80. Articles to the value of \$26.35 were sent to the troops. Institute members have been working for several months in connection with the local branch of the Red Cross.

Metchosin—Commenced August 21th, 1914. Initiative taken with Farmers' Institute; since February, 1915, alone. Entertainments were given, the first collection totalling \$126.30; other collections totalled \$208.50. The clothing, etc., made was sent in to the Victoria branch of the Red Cross Society. A total of 7,900 articles was recorded; cigarettes and puddings have also been dispatched to British Columbia boys.

Oyster District—Commenced September, 1914. Initiative taken in conjunction with local Red Cross branch. First collection, \$30; supplementary collections for wools, etc., \$3.85. Large box of clothing sent to Queen Mary's Needlework Guild. All active members are also members of the Red Cross Auxillary, and no details are recorded for the institute.

Parksville—Commenced September, 1915. The Women's Institute was only organized in August, 1915. \$9 has been collected, and three boxes, weighing 250 pounds, containing 56 parcels, have been dispatched to England for distribution to Canadian troops. The local Red Cross branch was organized and in active operation prior to the incorporation of the Women's Institute.

Royal Oak—Commenced September, 24, 1914. Initiative taken by the institute. In April, 1915, the Central branch of the Red Cross Society requested the co-operation of the Women's Institute. First collection, \$25, for Patriotic Fund supplementary collections, \$13. \$5 worth of tobacco and cigarettes sent to troops. All members belong to one or other of the various parties in the district organized by the local Red Cross branch, and no separate record has been kept as relating to the Women's Institute.

Shawnigan—Work commenced January 7, 1915, from the date of the formal organization. Red Cross work had been carried on prior to this since Sept. 3, 1914. Weekly meetings have been held without a break since September 3, 1914. First collection, \$87.50. The Girls' committee sent

A Good Watch is a Necessity on the Farm

Paul & McDonald's watches are adjusted and tested to keep accurate time. Buy your watch here and be sure of the guarantee of a reliable firm.

We carry one of the largest stocks of Military Wrist Watches in Western Canada. Being official watch inspectors for Canadian Northern and Great Northern Railways, we are in a position to give you expert advice about your watch purchase.

Paul & McDonald,

"The Diamond Men"

413—HASTINGS STREET W.—413

Vancouver, B. C.



I CAN MAKE YOUR MOUTH SIGHTLY

There is need no longer for you to suffer the social consciousness of poor teeth, nor indigestion and other ailments resulting from poor mastication.

My high-quality CROWN or BRIDGEWORK can overcome this for you.

FOR CROWNS \$4.00 FOR BRIDGES

Four Dollars is my one and ONLY charge for work which cannot be excelled elsewhere NO MATTER HOW MUCH MORE YOU PAY. This high-grade work elsewhere would ordinarily cost from \$7 to \$10.

There is no pain—no inconvenience—no "incidental" high charges for you to pay—and I positively guarantee all my work.

EXAMINATIONS FREE.

Special attention to Out-of-Town Visitors.
Call at my Offices.

Dr. Lowe

• DENTIST •

COR. HASTINGS & ABBOT STS.
Phone Sey. 5444

\$5 a month to a prisoner of war. Supplementary collections, results of subscriptions, entertainments, etc., \$576.68. Patriotic Fund: (a) Donation of \$5, with many individual subscriptions; (b) 585 articles sent to Canadian troops; (c) 987 new articles and 2,284 articles made from old linen forwarded for Red Cross Society. From September, 1914, to August, 1915, articles were forwarded to the Red Cross Society, Vancouver, and since September, 1915, to the society at Victoria. 420 pounds of jam, the ingredients of which had been donated, was sent to the Red Cross Society for the boys at the front.

Sooke—The institute has not done any individual work in connection with Red Cross or Patriotic Societies, all efforts being made through local branch of the Patriotic Society.

South Saanich—Commenced May 11, 1915. Work organized under East Saanich branch of Red Cross Society. First collection, \$160.65; supplementary, \$400.10; (b) 5 1-2 dozen pint bottles of jam forwarded through Victoria Red Cross Society.

West Saanich—Commenced second week in May, 1915 (organized in March, 1915). The local branch of Red Cross Society formed. First collection, \$182.10; supplementary, \$718.29; (c) 864 articles made. The institute donated a great quantity of old linen of which no record has been kept. Other supplies were obtained through the Red Cross Society and made up by the institute and returned through the Victoria branch.

Lower Mainland Institutes.

Agassiz—Patriotic Fund, \$10; Hospital Ship Fund, \$255; Belgian Relief, \$10; Red Cross, \$100; relief work, South Vancouver, \$22. Sent 45 sacks potatoes; 1 box canned fruit and also clothing to Central Park Women's Institute Relief Fund; made shirts, socks, wristlets, and bandages for Red Cross.

Atcheltz—Red Cross, \$35; wool for socks, \$5. Sent 2 boxes clothing to Belgians; sent socks, 7 shirts, 6 draw-sheets, and 891 handkerchiefs to Red Cross.

Burquitlam—Red Cross, \$122.62; for materials, \$20.60. Made 24 hospital garments; made 4 garments, Queen Mary's Needlework Guild; made 25 garments, Victorian Order of Nurses.

Central Park—Patriotic Fund, \$22.90; Hospital Ship, \$10; Belgian Relief, \$25; relief work (local), \$117.50. Sent clothing to Queen Mary's Needlework Guild; 130 pounds linen to Red Cross; 25 pairs socks to Red Cross; 65 pairs socks to Daughters of the Empire; assisted 37 families during the winter.

Chilliwack—Patriotic Fund, \$5.50; Red Cross, \$32. Sent four large cases clothing to Belgians; sent 1 box clothing to Queen Mary's Needlework Guild; assisted 2 families.

Coquitlam—Patriotic Fund, \$5; Belgian Relief, \$20. Sent clothing to Belgians; 30 British Columbian Horse supplied with socks, belts, helmets, and well-stored hamper of food and comforts.

Hazelmere—Patriotic Fund, \$10; Relief Fund, \$51.85; Sock Fund, \$5. Sent 14 pairs socks; sent 17 hospital shirts; assisted 1 family.

Hatzic—Patriotic Fund, \$14; Hospital Ship, \$63; Sock Fund, \$9; hospital supplies, \$26; Tobacco Fund, \$52.75; Aeroplane Fund, \$40.25; Prisoners of War Fund, \$11.85. Sent 172 pairs socks and 4 pairs mits; sent 16 mufflers; sent 15 shirts; sent 3 cases and 3 sacks old linen to Red Cross.

Langley—Patriotic Fund, \$152; Red Cross, \$34.30. Sent clothing to Belgians.

Matsqui—Women's Employment Bureau, \$5; Patriotic Fund, \$19.50; Belgian Relief \$30.80; Red Cross, \$24.40; Prisoners of War Fund, \$57.50; Sock Fund, \$24; spent for materials, equipment, etc., \$468; kits for British Columbia Horse, \$5. Made 444 garments, 72 pairs socks, including 192 hospital shirts; clothing, fruit, and vegetables sent Central Park Women's Institute relief work; old linen sent to Red Cross; 1 box socks, scarves, shirts, etc., to Queen Mary's Needlework Guild; 1 box wristlets to British Columbia Horse.

Mission—Patriotic Fund, \$25; for material, making 139 pairs socks, 58 shirts, 12 belts, and 30 scarves.

Surrey—Patriotic Fund, \$24; Hospital Ship, \$10; Red Cross, \$49.70; Surrey Relief Fund, \$52.18.

Strawberry Hill—Red Cross, \$58.41; Surrey Relief Fund, \$37.70; Sock Fund, \$8. Sent 6 pairs socks; sent 6 pyjamas.

Tynehead—Red Cross, \$20; Patriotic Fund, \$20. Sent 9 pairs socks to soldiers; sent 1 ton fruit and vegetables to Orphanage.

Upper Sumas—Patriotic Fund, \$8.90; field comforts, \$5. Assisted 1 family; sent 17 pairs socks, 10 shirts, and other hospital supplies to Red Cross; sent 6 bags potatoes and 6 boxes apples, canned fruit, clothing, etc., to New Westminster Relief committee.

Total Work Done and Money Raised.

Institute Patriotic Fund	\$ 316.80
Hospital Ship Fund	338.00
Belgian Relief	97.00
Red Cross Funds	476.33
Relief Funds (local, Van., etc.)..	280.78
Prisoners of War Fund	69.35
British Columbia Base Hospital ..	10.00
Hospital Supplies	25.00
Field Comforts (tobacco, etc.) ..	57.75
Aeroplane Fund	40.25
Sock Fund	51.00
Paid for wood and materials, Red Cross, etc.	715.20
	<hr/>
	\$2,477.46

Number of socks reported, 549 pairs; number of garments reported, 714, including 310 shirts, 3 1-2 tons fruit and vegetables sent Relief Committees; 4 institutes sent boxes of clothing to the Belgians; 4 institutes sent clothing to the Queen Mary's Needlework Guild; 43 families given assistance; many cases of bandages and old linen sent to Red Cross.

Okanagan and Similkameen Institutes.

Besides the detail work listed, members of institutes are, with few exceptions, engaged one or two afternoons a week making articles and comforts for the soldiers, the work being done entirely through the Red Cross Society and forwarded to the troops through that society.

Naramata—A consignment of jam sent to Belgian soldiers.

Peachland—Donation to Patriotic Fund, \$40; by sales and teas for Red Cross, \$32; proceeds of lawn social, \$37; several boxes of clothing sent to Belgians; yarn purchased for socks, \$10.

Kelowna—A large consignment of jam sent through the Red Cross to wounded soldiers. This institute gives \$4 a month to send a parcel of food to a Canadian prisoner in Germany.

Rutland—Money raised for Red Cross work, \$88.95.

Kalamalka—For those thrown out of work by the war who have no claim on the

**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. Rly.

VICTORIA, B. C.

WHY NOT A CHEESE FACTORY?

When the cheese factories of Ontario were paying the farmers 7c a pound for their cheese, the farmers grew wealthy. The past year this price has jumped from 13c to 17c a pound. This is better for the cow farmer than producing butter at 50c a pound the year round. The wholesale price of cheese in British Columbia is now 24c a pound.

While talking about a creamery, why not enlarge the discussion to take in a small cheese factory? An institution of this nature would mean more money to the milk producers and a ready supply for the market.

The Ford Motor Company has decided to establish an assembling plant at Calgary and has bought a site in the city for that purpose. It will proceed in the early spring to put up a large building, which will be so designed as to permit additional storeys being added as needed. A considerable staff will be employed from the first, and it is expected the business will grow to very large proportions.

government, \$25; donation to British Columbia Base Hospital, \$75.

Salmon Arm—Donation to Red Cross, \$25; donation to Patriotic Fund, \$27; donation to local relief, \$15.

Salmon River Valley—Donation to Red Cross Fund, \$4.75; donation to Patriotic Fund, \$12.50; sold 50 Allied-for-Right buttons, \$5; Farmers' and Women's Institutes, raised for Red Cross work, \$20; 22 garments for hospital use; several pairs of socks knitted by institute members.

CATALOGUE NOTICE.

Send 10c in silver or stamps for our Up-to-Date 1916 SPRING AND SUMMER Catalogue, containing over 400 Designs of Ladies', Misses' and Children' Patterns, as well as the latest Embroidery Designs, also a CONCISE AND COMPREHENSIVE ARTICLE ON DRESSMAKING, giving valuable hints to the home dressmaker.

1619-1625. Ladies' Costume.

Waist 1619 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 1/4 yards of 44-inch material, if made in plain outline. For pointed outline, 2 1/2 yards will be required for a 36-inch size. Skirt 1625 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 4 1/4 yards of 44-inch material for a medium size, and measures 3 yards at the lower edge. This calls for TWO separate patterns, 10 cents FOR EACH pattern.

1620—Costume for Misses and Small Women.

Cut in 3 sizes: 16, 18 and 20 years. It requires 6 yards of 44-inch material for a 16-year size. The skirt measures 3 3/4 yards at the foot, with plaits drawn out. Price, 10 cents.

1609—Girls' Dress, with or without Bolero.

Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3 3/8 yards of 44-inch material for a 6-year size. Price, 10 cents.

1615. Ladies' Camisole in Kimono Style.

Cut in 3 sizes: Small, Medium and large. It requires 1 1/4 yards of 36-inch material for a Medium size. Price, 10 cents.

1623-1427. Ladies' Coat Suit.

Coat 1623 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 1427 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 6 1/4 yards of 44-inch material for a medium size, for the coat and skirt. The skirt measures about 3 yards at the foot. This calls for TWO separate patterns, 10 cents FOR EACH pattern.

1596—Ladies' House or Morning Dress.

Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 6 3/8 yards of 36-inch material for a 36-inch size. The skirt measures about 3 yards at the lower edge. Price, 10 cents.

1470. Girls' Dress.

Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 3 3/4 yards of 36-inch material for an 8-year size. Price 10 cents.

1617. Junior Dress, with or without Bolero.

Cut in 3 sizes: 12, 14, and 16 years. It requires 5 1/2 yards of 30-inch material for the dress, and 2 yards for the bolero, for a 14-year size. Price 10 cents. individuals.



NOTICE.

Patterns will be mailed to any address on receipt of coupon and money. Address, Fashion Dept., FRUIT AND FARM, Vancouver, B. C.

Name

Street and No.

City and Province

Pattern No.

Sizes

Please mention B. C. Fruit and Farm Magazine when writing to Advertisers.

Save Money On Summer Dress Goods

Shop by Mail Direct With the Importer. NO MIDDLEMAN'S PROFIT TO PAY.

CREPES

Fine, Washable Cotton Crepe, that wears like iron, white, all shades, and neat stripes, per yard .. 20c
 A very fine Cotton Crepe, in white only, launders beautifully, yd. 30c
 All dainty shades and colors in the very finest Cotton Crepe made. The spring shipments are here, yd. 50c

Dainty Figured Crepe, in 1916 spring patterns, per yard 25c

Write for Free Samples of any of these crepes.

SABA BROS.

Importers.

564 GRANVILLE STREET
 Vancouver, B. C.

Satisfaction or Your Money Back

Buy Your Spring Suit From Us By Mail

You can obtain a smart SPRING SUIT or COAT, combining the newest and most desirable styles and ideas, without a special shopping trip to Vancouver. Our Mail Order Department will give you wonderfully efficient service, goods being sent on the definite understanding of perfect fit and entire satisfaction or your money back. We'll send you particulars and prices of the very latest spring styles, and materials, and tell you how to take your own measurements. We pay all express charges.

A Stylish Suit \$15.00

\$17.50, \$20.00 or up to \$35.00, made in our own workrooms, by experienced tailors and garment makers—a suit that will compare with any suit in its own particular grade in B. C. High-class materials, authoritative styles, newest ideas, honest value, low prices. Write us now.

New York Cloak & Suit Co.

MANUFACTURERS and DIRECT IMPORTERS
 125-127 Hastings St. West,
 VANCOUVER, B.C.

WHAT MAY BE DONE WITH OLD NEWSPAPERS.

Spread newspapers over your kitchen table when dressing fish or cutting up poultry. Then when through destroy the papers and your table is not soiled.

Use crumbled newspapers to wipe grease off plates and cooking utensils before putting them into the dishwasher, thereby doing away with that most disagreeable thing—greasy dishwasher.

Slip newspapers between your house plants and the windows these cold nights and protect the tender plants from chilling.

Lay a thick magazine in the oven until good and hot and give to the little folks in place of uncertain hot water bottle. It never leaks and will hold the heat a surprising long time.

Several layers of newspapers under the carpet make good substitute for carpet paper.

A newspaper placed across the chest and buttoned under the coat will prevent many a hard cold on the lungs when one has to ride in a hard wind.

Newspapers spread over woven wire springs under the mattress will prevent the unsightly rust marks that sometimes occur.

A number of newspapers spread out to their fullest extent and placed one above another and then covered with a piece of old sheet or other soft cloth and then all basted together with heavy thread, makes very best kind of bed-pad to use in sickness, as it can be removed and burned and another substituted as often as necessary.

When packing dishes for moving, fill all hollow dishes with small balls of crumpled paper, packing them in good and solid. Dishes so packed, with paper stuffed around them tightly, will stand an amazing amount of rough handling in safety.

A part of a newspaper crumbled up and slightly dampened is excellent for polishing windows, also the nickel on the stove and the stove itself.

SOME B. C. FRUIT RECIPES.**Rhubarb Marmalade.**

Rhubarb, 7 lbs.; sugar, 7 lbs.; figs, 2 lbs.; ginger root, 1 large piece. Cut rhubarb in 3-4-inch lengths, pour on it the sugar, and let stand overnight. In morning add cut-up figs, and boil.

Rhubarb Jelly.

Cut a pound of rhubarb into inch lengths, without peeling, and put into a covered crock in the oven with a cup of sugar, a slice of lemon, and a bit of ginger root, or a pinch of ginger; cook till tender. Have ready two tablespoonful of gelatine dissolved in half a cup of cold water and then melted over boiling water. Stir into rhubarb till well mixed, pour into a mould and chill. Serve with cream.

Rhubarb Pudding.

Cover the bottom of a buttered pudding dish about 1-inch deep with fine bread crumbs and sprinkle with bits of butter. Lay on this raw rhubarb cut into 1-2-inch lengths and 1 doz. seeded raisins and sprinkle with 2 tablespoonfuls of sugar. Put on this more crumbs and more butter. Repeat the rhubarb, raisins and sugar, and so on through the dish, making crumbs the top layer. Put bits of butter over this, strew with a teaspoonful of grated orange or lemon peel, and bake covered for 1 hour in a steady oven. Uncover and Brown. Eat hot with hard sauce.

Baked Apple Dumplings.

Cut rich pie crust into 6-inch squares. In the centre of each, place a small apple.

pared and cored. Fill the apple with sugar, cinnamon, and a whole clove. Wet the edges of the pastry with white of egg, fold it over the apple, pinch and flute to look well; bake about 40 minutes; towards the last brush the top with white of egg and sprinkle with sugar. Serve with hard sauce.

Boiled Apple Dumplings.

Beat well, without separating, 2 eggs, add a pinch of salt, 1 pint of milk and 1 cup of flour. To a second cup of flour, add 2 teaspoons of baking powder; add this to the batter and as much more flour as is necessary to make a soft dough. Roll out quickly 1-2-inch thick. Cut into squares; lay 2 or 3 quarters of pared apples on each, sprinkle with sugar and pinch the dough around the apples. Have a number of pudding cloths ready, wrung out of cold water, and sprinkle well with flour. Put a dumpling in each, leave a little room for swelling, and tie tightly. Drop into a kettle of rapidly boiling water and, keep the water at a steady boil for an hour. Serve hot with hard sauce.

Have a saucer in the bottom of kettle to prevent burning.

PRACTICE HOME PRODUCTION.

Nearly 50,000 girls in the fifteen Southern states of America, enrolled in 1915 in the girls' canning clubs carried on co-operatively by the state agricultural colleges and the department. The purpose of these clubs is to encourage girls from 10 to 18 years to grow tomatoes and other vegetables in tenth-acre gardens and to can their products for home use or for sale.

The amount of grain grown in the Cowichan district during 1915 was four times as great as that grown during the previous year.

THE March Issue of our Monthly Mail Order Review is now being sent to thousands of Mail Order Patrons.

Is your name on our list---
A post card will bring you our Review every month.

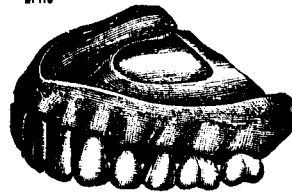
Gordon S. Sydsale
LIMITED

575 TO 587 GRANVILLE STREET
VANCOUVER, B. C.

DO IT NOW!

While Our Prices Are About Half

You have been wanting your teeth fixed for a long time but have dreaded the pain and expense. Here is your opportunity. We kill dental pain and our prices are about half of what you have been accustomed to pay.



Dental War

Dr. Gilbert has always been considered the lowest priced reliable dentist. To maintain this he has so greatly reduced his fees that the best of dentistry is now within the means of the most humble. All work guaranteed ten years.

EXAMINATIONS FREE
ESTIMATES FREE

DR. GILBERT'S PAINLESS DENTAL PARLORS

2nd Floor Dominion Bldg.
Hastings and Cambie Streets
Vancouver, B. C.

1304 Govt. St., Victoria, B. C.

Market Conditions

By S. J. FEE.

Conditions for the marketing of 1915 fruit crop were particularly favorable, a short crop across the line, a partial failure in Ontario, great crops in the prairie provinces, meaning good buying power, helped by the splendid and effective advertising campaign carried on by the B. C. Government, Horticultural Branch. Most of the crop was sold at prices sufficiently good to give the growers quite satisfactory returns. There were, however, exceptions and disappointments, but on the whole the net returns to the growers must have been fairly satisfactory. That the season was not a satisfactory one to the jobbers is a regrettable fact. Very little sympathy is given the jobber. He is a middleman, scorned and abused, sometimes unjustly. He, however, is a necessity until such a time as a better system of marketing is established, and his welfare is of vital interest to the growers. He will endeavor to make up in 1916 his losses of 1915, by more careful buying, more careful handling and avoidance of any risk. In 1915 everything was favorable for high prices, and jobbers felt they were safe in paying good prices and sure of selling at a fair advance. They, however, were up to the Court of Last Resort, the consumer, and the consumer absolutely refused to pay high prices. So much would he pay and no more. Winter apples were forced down nearly 30 per cent lower than they should have been sold at. Then country collections have not been what was expected. They have been delayed and renewed, costing the jobber interest and exchange as well as general inconvenience. It can hardly be said that any special progress was made in marketing, except by the Mission and Hatzic growers, who loaded cars with raspberries and in this way successfully reached markets too distant for open express shipments, and the Creston-Wyndell district which loaded cars with strawberries and extended their markets. This is a very brief summing up for 1915.

The Effect on 1916.

The unsatisfactory season of 1915 to the jobbers will have its effects. They must buy more carefully in order to break even. Careful buying is a tory season of 1915 to the jobbers will have its effect. They must buy more carefully in order to break even. Careful buying is a factor in leading to a heavy or glut market, snappy buying keeps a market cleaned up. It has been for the past few years the great endeavor to sell F.O.B. shipping points, and prices being right, this of course is the most satisfactory from a grower's or shipping association's point of view and it is a fact that jobbers almost to a man prefer to buy, if they are assured of a fair margin, to handling on commission. But this safety in buying is becoming a difficulty. A jobber may buy a car of standard varieties, pack and grades for a certain point, only to find on the arrival of the car, that a car of similar fruit shipped by another association or grower is on sale there, probably by a retailer at prices sometimes lower than his cost. Then in the larger centres we have agents for B. C. associations and growers operating for a short time selling their own goods and making prices lower than the jobber could buy and lay them down at. It is not my intention to make any complaint of associations or growers selling

Test Edison's wonderful instrument, The Phonograph at your own home--at our expense.

Music—Such as you have never heard unless you have been fortunate enough to hear the world's great artists at first hand—and right at your fireside—that is what we want you to hear and at our expense. Send for particulars regarding this offer by filling coupon below and forwarding at once.

Remember that you can get this or any Edison instrument and records at the same price that you would pay for it at the factory—as low as these machines are ever sold—and on easy terms.

Here is an instrument that brings the greatest music of the world to your fireside. Get particulars today.

THE KENT PIANO CO., LIMITED

"Here in B. C. for 53 years."

558 Granville Street
Opposite Drysdale's

Try This Edison Free.

Send the below coupon and receive free full particulars of our five day approval plan by which you may get this Edison—New Model No. 30—shipped to your home on trial. This will give you an opportunity to test for yourself the marvellous tone of the Edison Phonograph. The model shown here plays Edison Amberola indestructible records. It is fitted with the Edison diamond point reproducer and is an exemplar of the great Edison Tone. It will be forwarded to you with twelve indestructible records of your own choosing for

48.40

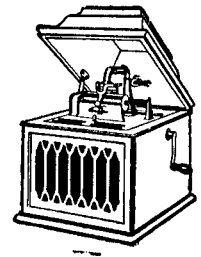
\$8.50 Down and \$5 Per Month

Please forward me postpaid, particulars of your 5-day approval plan by which I may secure Edison Phonograph subject to approval; also catalogue of machines and records and the new book "Edison's Life."

Name

Address

THE KENT PIANO CO.



their own goods, that is their right and they have certainly had excuse for trying to do so, but to show the difficulties the jobber must contend with in buying F.O.B. shipping points, that he really cannot do so unless he has some protection from this competition. For instance, last season there was a car of raspberries on sale in Edmonton at a price of \$1.00 a case higher than what the very same berries from the same shipping point sent direct to a retailer were being retailed at. This was certainly discouraging to the jobbers buying and handling that car.

Then the direct shipping by the growers and associations to the farmers' associations is another serious competition, laudable as it is to cut out all middlemen to the mutual benefit of the producer and consumer. The farmers' associations getting direct and distributing at a trifling cost to their members, the retailer must make the same price in order to sell, buying lower from the jobber in order to do so. These problems are becoming more serious and difficult of solution. The jobber finds the cost of business greatly increased, sales are smaller, entailing greater expense, with keener competition for those sales.

Co-operation is recognized as the great solution, but the method of this co-operation is the difficulty. There are schemes without number, ingenious, complicated schemes, that only the schemers themselves can operate. We study carefully what they do in the south, the east, in Denmark, forgetting that our conditions are entirely different.

Consigning without supervision is ruinous, permitting two cars to be placed in a town that can handle but one, permitting one jobber to fight another with your goods, leaving it to one small dealer in a community to make the prices for the great total. That is what consigning or even selling without supervision will permit, resulting in very serious losses to the growers. A district combining and placing a broker in

the main centres, is a step in the right direction, so concentrating the business that it can be handled on a small margin.

After twenty-six years in the wholesale and commission business, I am still convinced that the place to market, is in the markets, and getting a little better net returns is the way to build up a business. I believe that it is feasible to ship mainly through one channel. That is, whatever goods are not sold F.O.B. shipping points. This one channel to be brokers at the main distributing centres, brokers under one responsible head, handling only B. C. goods. These brokers in turn, selling or giving for sale to whatever jobbers give the best results, the goods on sale under their direct supervision at all times.

The Calgary Board of Trade is advocating that all dealers in Calgary receiving consignments of fruit and produce for sale, shall be licensed and bonded. This would be of great advantage to the shippers.

Supply and demand will always control prices. No scheme, no matter how plausible, will advance prices beyond what consumers can afford to pay. That the present marketing is very costly and wasteful, there can be no denying. Concentration and supervision are practical and inexpensive of operation and will prove of immense benefit to the growers and gradually lead to a marketing system of the least possible cost and waste.

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.

213 Hastings St. East, Vancouver, B. C.
J. E. HUGHES, Manager.

THE STRUGGLING FARMER.

Reasons Why He Is Poor.

A writer in an American exchange in a picturesque article upon "Why Some Farmers Remain Poor," says:

"I passed the home of a farmer in Northern Minnesota who was reported as being a poor man, with a large family of children to support. He was away from home working with his team. He did not have time to clear much land, because he had to be away nearly all the time to make enough to buy groceries and clothe the family. I could see the reason why it would keep him busy, for it would seem that everything in the way of food had to be bought.

"There were not even enough potatoes growing on the place to feed an Irish family a month, and potatoes are a good form of food for everyone. The vegetable garden and small fruit garden were missing, and there was not even a flower to cheer. No wonder they were poor. People are poor indeed when there is not thrift enough in the mother, if not in the father, to have a garden.

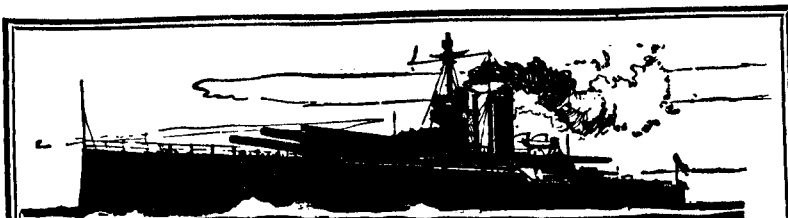
"'Grow enough to eat,' should be the motto of every settler, and this can be done on a very small tract of ground. Potatoes, beans and peas make a pretty, nice-balanced ration, and with other vegetables and small fruit and a cow and flock of hens the poor man may have a table that kings might envy. The first clearing would be garden, and every child should learn to work in the garden as soon as it starts to learn to work at its lessons at school. There is absolutely no excuse for not having a profitable garden where there are children in the family over eight years of age, even though the father has to work out.

"Potatoes and such vegetables as onions, carrots, parsnips, and beans generally can be exchanged for groceries. When they cannot be traded they always can be fed on the farm and converted into products that will sell. How often we have seen settlers buying salt pork, butter and even eggs and potatoes. When these products have to be purchased on the farm, it is no wonder that the farmer has to work out."

OF INTEREST TO FARMERS.

It is the intention of the Agricultural Department of Victoria to inaugurate a Publications Branch of this department in order that information on agricultural matters may be more readily disseminated among the farming community, and in order to give publicity to the results of investigation, experimental and demonstration work which is being carried out by this department in various parts of the province by means of experimental and demonstration plots, and also by different lines of investigation work which are being carried out under the supervision and direction of expert officials of this department and in order that the work may be as effective as possible.

A local fruitgrowers' association has been organized in Oyama under the name of the Oyama and Okanagan Centre District Fruit Growers Association: President, Mr. E. Trask, Oyama; vice-president, Mr. J. Goldie, Okanagan Centre; secretary treasurer, Mr. R. E. Bourne, Oyama; directors, Mr. Twogood, and Mr. S. Heddle, both of Oyama. Mr. Trask was appointed as delegate to attend B. C. F. G. A.'s annual meeting at Victoria.



BRUCE'S DOMINANT SEEDS

Just as the British Fleet dominates the World's waters, so "BRUCE'S SEEDS" are the dominant ones with the planter whose living depends upon "Real Seeds."

It will be even more apparent at this time, when many seeds are in short supply, that there will be more stocks offered by unreliable and inexperienced growers than in the past, and that houses with long established reliable connections such as we possess will have an incalculable advantage. Why take a chance, when you can buy "The Best Seeds that Grow"—BRUCE'S—for very little more than so-called "cheap" seeds!

It costs as much to plant and care for poor seeds as good ones, and you have very meagre, unsatisfactory results to show in return for your labor.

CHEAP SEEDS ARE DEAR IF YOU GET THEM FOR NOTHING.

Send for our 128 page Catalogue of Seeds, Plants, Bulbs, Poultry Supplies and Garden Implements, full of valuable information, which is now ready and will be mailed FREE to all applicants.

JOHN A. BRUCE & COMPANY, LIMITED
HAMILTON Established 1850 ONTARIO

AGRICULTURAL SOCIETY OFFICERS.

Officers for the Burquitlam Agricultural Society this year will be: Honorary president, Hon. W. J. Bowser; hon. vice-presidents, Lieut.-Colonel J. D. Taylor, M. P.; W. J. Manson, M. P. P.; F. Carter Cotton, M. P. P.; A. C. Flumerfelt, M. P. P. Robert Newman was re-elected president and Mr. Robert Morrison was selected as vice-president. F. Cockerell was appointed secretary over Mr. H. B. Baker on a close vote. The directors will be: Messrs E. H. Wiltshire, W. Walker, Andrew Haliburton, Wallace Whiting, A. Cameron, S. Cowan, Robert Findlay, Ewen Martin and W. Wilson.

FINE WOOL WILL BE NEEDED.

Farmers in Western Canada are rapidly getting into the sheep business. They are commencing with range bred Merinos largely, and then proceeding to use coarse-wooled rams, in the endeavor to increase the size of their lambs. This is what is being termed on this side "muttonizing." It would not be at all amiss if these mutton fans would remember that the world has got to have fine wool, and that they must keep a certain amount of Merino blood in their flocks, if they are to shear this class of wool. It would be better by far to keep their flock entirely pure if they could do so. Fine wool breeders are facing the greatest year in the history of their breeds.

A decided change of conditions is noticeable in the Matsqui district since the advent of the creamery at Clayburn, and there is every indication that what heretofore has been a large hay and grain district will gradually be transformed into a dairying district similar to the Chilliwack Valley.

Many of the larger farmers are already planning to go into mixed farming and recently on one 500-acre farm on Matsqui Prairie 40 head of milch cows were added to the stock, while on scores of smaller farms additional cows are being purchased. It is stated that hundreds of cows will be added to the herds on the prairie in the spring. The creamery, which is now churning three days per week, will, it is stated, in the summer churn daily, as they are at present unable to supply the demand for the butter which they turn out, and which recently secured first prize at the Dairy-men's convention held at New Westminster.

We Are Headquarters
FOR

Fruit Wrapping Papers

DUPLIX 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.

CO-OPERATIVE FARM IMPLEMENT SOCIETIES IN IRELAND.

A few years ago, under the auspices of the Irish Agricultural Organization society, a scheme was devised for the formation of co-operative societies which should be able to place at the disposal of their members practically every kind of farm implement, from a one-horse plough to a high-power agricultural tractor. The scheme is described in an article by Mr. T. Wibberley, which appears in the August number of the Journal of the Board of Agriculture. In illustration of its results in increasing the area under tillage, the writer gives the following figures relating to four societies:

Society	Number of Members	Total area in tillage for each Society			Average increase per Members
		1913	1914	1915	
		Acres	Acres	Acres	Acres
Meenabeela (Co. Limerick) ...	21	71	104½	158½	4.1
Killeedy, (Co. Limerick)	20	122	146	176	2.7
Menlough, (Co. Galway)	64	454¾	519	683	3.6
Fourmilehouse, (Co. Roscommon)	32	94	106	153	1.8
Totals	137	743½	875½	1,171	
Averages	34	186	219	293	3.12

These societies were not specially selected, but all are situated in very poor districts, amongst farmers whose capital is very limited and whose holdings average about thirty acres. Had all Irish farmers increased their cultivated area in the same average proportions as the members of these societies, the result would have been an increase of 1,500,000 acres under the plough.

The societies are formed in the same way as other agricultural co-operative societies. As a rule each member is required to take at least five shares of the nominal value of \$5 and to pay 60 cents per share on allocation. He also signs a form making himself responsible to the committee for the payment of his shares in full, in the event of the society meeting with financial disaster. The working capital is obtained by means of an overdraft from the local branch of a joint stock bank. This is guaranteed by the members of the committee,

SPRAY EARLY.

Those who expect to spray this year for cankerworms on maple trees or any other pest should remember that it is very important to spray early. The average man waits until the insects are almost full grown before he decides to act. Perhaps he has then to order his spray pump and spraying materials. By the time he is ready to apply the remedy, the insects have completed their larval growth and have commenced to pupate. The result is that the destruction has all been done to the plants, and the spraying does no harm to the insects.

Be ready beforehand. If it is the cankerworm, put on the spray while he is yet a tiny fellow, just out of the egg. He is then eating voraciously, and in every instance is likely to be poisoned. The trees, too, are not foliated.

It is the same, too, with such pests as elm leaf aphid and many others of the

who are thus directly responsible to the bank for the security of the amount borrowed, but are in turn secured by the un-called share capital.

As a general rule, the implements are hired out in the order in which applications for them are made by the members, but precedence is given to the member who wishes to use the implement for the longest period. The rate at which implements are hired out to members of a society is about half what it would cost to carry out the various operations under the old regime. If, for instance, potato sorting by hand costs \$3.65 per ton, the potato-sorter is hired out at \$1.80 per ton. Again, if the ploughing of stubble by horse labor costs \$2.40 per acre, a double disc harrowing with the

agricultural tractor (which tills the land more effectively) is undertaken at the rate of \$1.20 per acre. In the case of grain threshing the usual rate is 1 cent per stone (14lb.) threshed.

A well managed society can soon earn sufficient to pay for the initial cost of the implements. Many instances are on record where a society commencing with two binders has in one harvest earned sufficient to purchase a potato-digger. The potato-digger has gone out on hire, and in its first season has earned sufficient to earn a corndrill, which in like manner has earned the price of a horse-power sprayer, and so on. A society usually begins operations in a small way, but once the farmers of the district recognize its utility the membership rapidly increases, and the society then becomes in a position to undertake the purchase of the more expensive implements.

aphis class. These, as they grow, cause the leaves to curl up and enclose them, so that sprays cannot touch them. Better to spray early when the trouble is just commencing

DISINFECTANTS.

For Wounds on Trees and For Pruning-Tools Used for Blight.

Corrosive sublimate, 1 part to 1,000 of water. Best to get the drug-store tablets; use one tablet to a pint of water. Apply with brush or swab.

Corrosive sublimate is highly poisonous if taken internally. It also corrodes metals, and must be used in wooden or glass vessels.

Formalin (Formaldehyde) is useful in the disinfection of seed, e.g. against grain smuts. Particulars of such treatments will be sent on application. Formalin should not be used as a disinfectant in fire-blight work.



Synopsis of Coal Mining Regulations

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

Applications for a lease must 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 should be furnished at least once a year.

The lease will include the coal mining rights only, but the lessee may be permitted to purchase whatever available surface rights may be considered necessary for the working of the mine at the rate of \$10 an acre.

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.—58782.

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