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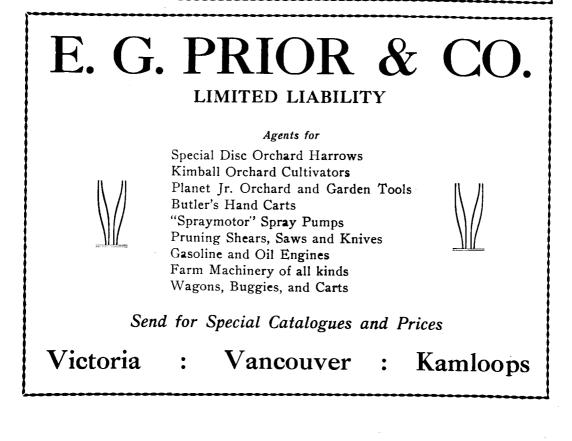
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THURSDAY, OCTOBER 9, 1913

on their farm, situated on Sea Island, half a mile west of Eburne, on the Steveston branch of the B. C. Electric and ten minutes run from Vancouver, commencing at 10.30 sharp, their entire herd of choice dairy cows, heavy farm teams, etc., described as follows:

Cattle—Eighty-six head, of which 81 are high class dairy cows, mostly Holstein grades and heavy milkers, 25 of them are fresh, 14 more will be fresh by date of sale, 42 head in full milk and bred to freshen late this fall and early in spring of 1914; 1 pure bred Holstein cow, bred to choice bull; 1 pure bred Holstein bull, four years old; 3 two-year-old heifers, springers.

Horses—1 span of registered Clyde mares, weight 3400, in foal to Silver King; 1 black team, weight 2700, six and seven years old; 1 bay team, weight 3200 lbs., six and seven years old; 1 mare, eight years old, 1500 lbs., bred to Silver King; 1 bay mare, seven years old, 1450 lbs., bred to Silver King; 1 sorrel gelding, two years old; 1 gray filly, 1450 lbs., rising three years old; 1 black mare, three years old, foal at foot; 1 gelding, 1 year old, chestnut; 1 gelding, one year old, black; 1 gelding, 1 year old, dark bay; 1 draft filly, one year, registered; 1 four-year-old general purpose gelding.

Light Horses—1 gelding, five years old, by Glengarry Patchen, well broke and a good one; 1 pair of geldings, one year old.

Implements—1 twelve horse power gasoline engine, good as new; one grain grinder; 1 milk cooler and dairy utensils; 1 horse-turnip seeder; two wagons with racks; one rubber-tired carriage; 1 hay tedder; 2 feed barrows; 2 rott cutters; 1 road cart; 2 wheel barrows; 1 cooking range and two tables

Terms—Cash. WM. ATKINSON, Auctioneer. Lunch will be served. 1385 8th Ave. W., Vancouver, B.C.

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FRUIT AND FARM

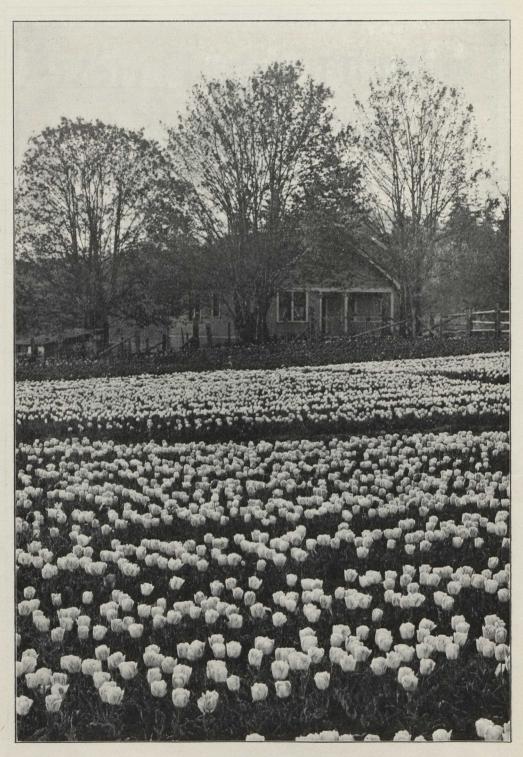
A Monthly Journal Devoted to the Interests of the Man on the Land

309 Empire Block, Vancouver, British Columbia



CONTENTS FOR OCTOBER

Holland Bulb Farm (Illustrated)	
Farm Financing in Germany	Homer C. Price
Accounts at Colony Farm	Cowan MacGowan
Developing Loganberry Market	V. R. Gardner
Sheep Raising in the Okanagan	
Tobacco Culture in the Okanagan Valley	Dr. C. W. Dickson
The Poultry Industry in B. C.	H. E. Upton
Editorial	
What It Costs to Start Poultry Raising	J. T. Bartlett
Gardening for the HomeH	I. M. Eddie, F.R.H.S.
Attractive Labels of Fruit PackagesE. H. Wartn	nan, Dom. Fruit Insp.
New Home of Manitoba Agricultural College	••••••
The Woman's Page	Kathleen Ferguson
Our Short Story	Madeline M. Oyler
The Home Circle	-



HOLLAND BULB FARM Royal Oak, Victoria, B.C.

The Holland Bulb Farm at Royal Oak Victoria, B.C.

The Holland Bulb Farm is situated at Wilkinson Road, two minutes from the Victoria-Sidney Railway station. The owner, Mr. W. J. van Aalst, was born in Holland, and came to Victoria in 1911, where he started growing bulbs for a florist in that city. Mr. van Aalst soon noticed that the soil and climate seemed to be suitable for Dutch bulbs and he tried a few varieties the same year. In spite of the fact that the specimens planted were in bad condition after the long journey, and were planted late on new uncultivated land, the trial was a gratifying success, and his first flower field in Canada attracted numbers of visitors to his place and brought orders from towns as far away as Winnipeg, where the flowers arrived in the best of condition, as did cut tulips and hyacinths sent to Nebraska, U.S.

Encouraged by his success, Mr. van Aalst decided to enlarge his farm as far as his limited means would admit, and made ready about 4 acres for the following planting season. Many loads of stable manure were plowed under, and the land was levelled, drained and treated just as he had been accustomed to prepare it in Holland. In the fall of 1912 over a million bulbs were planted, including hyacinths, early and late tulips, daffodils. crocuses, Scillas. spring and fall gladioli and other varieties. Great care was taken to avoid failures as some differences in soil and weather conditions had to be taken into account. Spring of 1913 was one grand success. Not one bulb missing, not one bulb weaker than another, no disease, everything perfect. Mr. van Aalst had never seen in his own country such a strong growth or such a healthy stock. The biggest flowers and the strongest foliage. It was no wonder that visitors came in their automobiles to look at the sea of flowers. Photographs were taken by numbers of people and were published in the daily press and in the magazines, and Mr. van Aalst congratulated himself that while bulb growing was a failure this year in Holland, his crop was the best he had ever seen.

Is bulb growing to become a new industry on the Pacific Coast? Every year millions are imported to Canada and the United States, and in the two years the Holland Bulb Farm was established is has become so widely known that orders are received from Chicago and New York, as well as from California. Our bulb grower of Royal Oak believes that this part of British Columbia ought to become another Holland.

The livestock commissioner for the Panama-Pacific Exposition, to be held in San Francisco in 1915, has written to the Progress Club asking it to use its best efforts to interest the farmers of the province in a livestock exhibit for this great fair. He suggests that the agricultural association and the farmers as individuals be approached and induced to impress upon the government the desirability of having Canada represented with an exhibit of this class of agriculture.

With the new tariff law in existence, he declares that Canada has an opportunity of shipping livestock to the United States in large quantities, and suggests this as the best method of attracting the attention of the world to the fine class of stock produced in this country.

"'Lo. Jim! Fishin'?" "Naw; drownin' worms."

Farm Financing in Germany

Homer C. Price, Dean, College of Agriculture, Ohio State University.

Germany has the best system of farm financing in the world. As a direct result of this, German agriculture is on a permanent basis, and the average crop yield of the German empire is greater than for any other equal area in Europe or America.

German farmers regularly secure long farm loans at 4 per cent. interest, through their co-operative farm mortgage banks—the so-called *landschaften* societies. These societies are farmers' organizations pure and simple, under direct government control, and have outstanding over one billion dollars in farm loans. The loans are repaid in small annual installments and after once made cannot be called in or the interest rate raised.

The land mortgage banks of Germany are simply the result of applying business principles to farm finances. Instead of each farmer seeking his loan individually, they have organized and substituted collective credit for individual credit and a negotiable for a practically non-negotiable security. They have organized to market their farm securities to better advantage and to **avoid** the tremendous waste of time and expense involved in each farmer borrowing individually.

For personal credit, the Germans have developed their Raffeisen system of rural banks, which are the model of the world and in the last half century have spread over practically all Europe. In Germany alone there are over 16,000 such institutions doing a business of over five million dollars a year. Through these banks the "landless man" with character, industry and health, has opportunity to borrow working capital to begin farming. At the same time they serve as savings banks for the rural population in which they may invest their earnings and secure interest on them. It is a remarkable fact that seventy-five per cent of the working capital of these banks is derived from the savings deposits of the rural population.

The agitation for a better rural credit system in America is no passing demand that will be superceded by something else next year. It is fundamental to a permanent system of agri-With an investment of over culture. \$40,000,000,000 in agriculture and an indebtedness of over \$6,000,000,000, American farmers are beginning to awaken to the fact that they are paying from \$100,000,000 to \$125,000,000 more interest each year than would be necessary if they had their credit system properly organized. We talk about economy in marketing and distributing farm products. But where is there the opportunity to make the saving that there is in marketing farm securities? There is no better security than arable farm lands, but until the mortgages are converted into negotiable securities the farmer making a loan on his farm mortgage is handicapped just as much as a farmer a hundred miles from a shipping point is in marketing his wheat crop. He is too far from the market. It costs too much to get into the channels of trade.

What American farmers need is not government loans or any special concession from bankers; it is simply to organize their securities so that they will be desirable collateral for any kind of a loan. It is because rural credit is not organized in this country that farmers pay from two to three per cent more interest than other industrial enterprises do on security that is not so .good as the farmer offers.

Economic and Business-like System of Farm Accounting at Colony Farm, Essondale, B.C.

By Gowan MacGowan, Bursar.

I will endeavor to outline in a simple manner what this system will do, and how easily it can be installed by almost any farmer wishing to know just what his farm is making or losing.

At the commencement of our fiscal year, I came to the conclusion that Colony Farm had arrived at a time when it needed a proper accounting system; and, after talking the matter over with our medical superintendent, I outlined a system to handle this branch of the farm, and engaged an expert accountant, in the person of Mr. P. L. McNeill of Vancouver, to work out all the details, which entailed no small amount of labor. The result is that I now have a most complete but simple statement issued each month of the entire working of every branch of Colony Farm placed on the medical superintendent's and my own desk, for our information.

I have placed Colony Farm on a departmental basis in order that the Farm Superintendent can tell at the end of each month exactly what branch of the farm is making a profit, or a loss, and so govern himself accordingly, and keep the institution officials in close touch with all the details of the farm stock.

Below, under various headings, I will endeavor to lay before you the particulars and description of the working of each department:

1. Ascertain the total capital investment (including lands, building and equipment), and its proportionate distribution amongst the various departments created, viz., horses, cattle and dairy, pasture, crops and maintenance.

2. Ascertain the monthly progress of operations, in each department, in terms of profit and loss.

3. Ascertain total cost of operations and the proportionate distribution of same, to its proper department.

4. Ascertain in each department the proportionate distribution of its total cost, amongst its various channels of expenditure.

5. Control the receipt and delivery of all general and dairy provisions, brought to, or made from, the farm, and ascertain the quantities on hand at any date (without taking an inventory of stores in stock).

ą

6. Ascertain the revenues, received through the various departments.

The total area of land is surveyed and distributed in proportionate sections, amongst the various departments; each plot representing a definite acreage and capital value.

The building and equipment represent a definite value and are treated as capital investments, into the specific departments to which they belong.

The land carries a charge of interest, while the buildings and equipment carry a charge of both depreciation and interest.

The Horse, Cattle and Dairy Departments.

The operative cost, in these departments, is treated through the various channels of expenditure, viz., interest, depreciation, feed, bedding, medicines, salarics and keep of employees and labor of patients.

The current revenue arises through service of breeding, increase of live stock and profit through sale of live stock in both departments; through production of milk in the dairy, and through labor of horses in the horse department.

The quantities of feed, bedding and medicines are controlled, through the use of perpetual stock books, located in the feed, cattle and horse barns. These records are very simple, and show at a glance, the exact quantity of any commodity on hand; thus eliminating the necessity of taking an inventory of the stores in stock.

The increase and sales of live stock are automatically kept through the use of the perpetual stock books. The births and purchases mark the increase while the deaths and sales mark the decrease.

The production of milk is controlled through the dairy stock books and shows the quantities of milk produced, as well as the quantities of milk, cream, skim milk, butter and buttermilk perpetually on hand, together with a record of the daily deliveries and of milk transformed with cream and skim milk, and cream churned with butter and buttermilk.

The Crop Department.

This department is divided into three sections, viz., hay, grain and roots; under the heading of grain is comprised wheat, oats and corn; and under the heading of roots is potatoes, mangolds, carrots, turnips, cabbage and garden stuff. The land is divided into fields numbered consecutively from 1 to 15, each of which represents a definite acreage. The operative cost of this department is treated through the following accounts, viz., horse labor, and patient labor (in planting, cultivating and harvesting). Seed, fertilizer and interest.

The current revenue arises through the yield of the annual crops.

The horse and patient labor is regulated by schedules showing the total labor employed, and the distribution of same over the various fields in operation, these schedules also show the amount of labor employed in connection with any other department.

Maintenance.

The operative cost in this department represents all expenses incurred in conection with show and exhibition operations, together with the outlay and keeping the general condition of farm up to a high standard of efficiency. In this connection a part of the work comprises care of buildings, pavements, highway, ditches, drains and fences. The loss necessarily sustained by this department is quite properly offset by the economic benefit produced.

In closing I would like to point out that with the above system installed, probably on a smaller scale for the average farmer, a great many of the leaks which eat up the yearly profit could be eliminated.

The Bishop of London, speaking at the Mansion House, a few days since, said he believed the Anglican church may have started too late in Northwest Canada, but he believed that they were not too late in British Columbia.

"Canada," he declared, "is the garden of the world, and is absolutely the Godgiven cure for our over-crowded population, not for wastrels, but for the great cheerful mass who would be splendid folk if only given a chance. If the church and home during the next fifty years did its duty, Canada would become the most God-fearing nation the world has ever known."

Developing the Loganberry Market

By V. R. GARDNER, Oregon Agricultural College.

In nearly every section of the United States where a commercial fruit industry has been developed. small fruit-growing occupies a more or less prominent position. Especially is this true in the newer fruit sections where it is often found very desirable to grow small fruits between the trees until the larger orchard fruits begin to bring in returns. In Oregon, at least, the small fruit industry is very important, ranking third only to the apple and the prune. The cane fruits, including the raspberry, blackberry and dewberry, nearly always occupy an important place among the small fruits. Their position in this state is especially prominent because they include the Loganberry, the Phenomenal, the Primus, and certain other raspberryblackberry, or raspberry-dewberry hybrids.

The fact is that very recently the first mentioned of these hybrids has been coming to the front as one of the most important of the cane fruits in this part of the country; and apparently it is destined to occupy a still more prominent position. Inquiries regarding its habits of growth, soil and cultural requirements, yields and prices have been very numerous. There is little in print regarding it to which inquirers may be referred. Unfortunately there is at hand very little experimental data pertaining especially to the Loganberry that may serve as a basis for cultural recommendations. Still. because of the persistent demand for information on the subject, it seems desirable to bring together some of the facts that are known regarding the industry and the crop, and thereby make them available to the small fruitgrower. It should be realized, however, that investigations that are now

in progress and subsequent experience may render necessary modification of some of the practices that are here described.

The Loganberry, according to Shinn, originated in the early eighties in the garden of a Mr. J. H. Logan, of Santa Cruz, Cal. It is supposed to be an accidental seedling of the Aughinbaugh dewberry, one of the cultivated varieties of the western dewberry (Rubus vitifolius). It is practically certain that the male parent is one of the European red raspberries, probably the Red Antwerp. In both plant and fruit characters, the loganberry is intermediate between these two probable parents. Like both parents it is a perennial with biennial canes. The plant is semi-trailing in habit but considerably more erect than the western dewberry. The leaves resemble those of the male more closely than those of the female parent. The fruit is like that of the dewberry in structure but in both flavor and color more nearly resembles the raspberry. Like most hybrids the plant shows greater vegetative vigor than either parent. Coupled with this extra vigor is a correspondingly increased productiveness.

The geographical range of the European red raspberry (Rubus Idoeus) to which the Red Antwerp belongs, is Europe and Western Asia. The species is usually regarded as a reasonably hardy one. Red Antwerp itself is supposed to have originated near the city of Antwerp in Belgium and is known to be able to stand considerable frost, 40 to 45 degrees at least. Like most fruits of European origin it does better in Western Europe and on the Western coast of this continent than it does in the eastern and southern states. The variety is grown, however, to a limited

extent in many of the states east of the Mississippi river.

The western dewberry is apparently found only in California, Oregon, Washington and parts of Idaho, and is completely at home only in the sections west of the Cascade and Sierra Nevada ranges. The cultivated varieties of this species are few in number and apparently have not been tried to any extent outside of the Pacific Coast states. This species is to be regarded, therefore, as almost exclusively a Pacific Coast form, The fact that it ranges north to British Columbia, however, would indicate that at least some of its forms possess considerable hardiness. The Aughinbaugh, from which the Loganberry is supposed to have descended, does not apparently possess the hardiness of some of the more northern forms of the species.

Almost from the first the Loganberry has been regarded as an excellent fruit for the home garden. Though soon after its introduction small quantities found their way into local markets, its soft texture made it a poor shipper and a large commercial Loganberry industry has been slow to develop. It is only within the last few years, in fact, that what might be dignified by the term "Loganberry industry" has been developed. The first gradual expansion of the industry was due mainly to the increasing size of the local markets and to the increasing popularity of the fruit. It was not until the fruit began to find its way upon the market in the form of by-products, however, that a great impetus was given the industry. A five-acre field of Loganberries was considered a large planting five years ago; now a 20-acre area is not regarded as especially large and some much larger fields have been established.

The Loganberry is one of the most productive of the can fruits. Three hundred 24-pound crates, or approximately three and one-half tons of fruit per acre is a very moderate yield. Even rather poor soil should produce a crop of this size. On very rich lands, with plants in prime condition, yields of 500 to 600 crates, or approximately six to seven tons of fruit per acre, are often obtained. Four hundred crates per acre, or a little over five tons, may be considered a good average yield from well cared for plantations growing on good soils and under good conditions.

Heretofore the demand for Loganberries has been more or less limited. The fruit is comparatively soft and not suitable for long distance shipments. With the development of the canning trade and with the discovery that the fruit can be dried to advantage, a very large market is open to it. Canneries are willing to pay about four cents a pound or \$80.00 a ton for the fresh fruit, the same price that they pay for raspberries and strawberries. They are able to pay this price because they can sell it to practically the same trade that takes these fruits, and it is no more costly to put on the market in cans. Furthermore, it seems very likely that they will continue to pay this price for it, for the prices of strawberries and raspberries will tend to establish a level below which it cannot well drop.

If an average of five tons is obtained, this means an income of approximately \$400.00 per acre. With an average yield of only four tons, a very moderate estimate indeed, the income per acre would be \$320.00. The cost of picking amounts to about 25 cents per crate or \$20.00 per ton. This leaves a very good margin to cover the cost of production and for profit upon the amount of capital that is invested. From a strictly commercial point of view, in fact, the Loganberry seems to be one of the best business propositions that is open to the small fruit grower of the northwest at the present time.

"Poverty may be a blessing in disguise."

"No doubt," replied Miss Cayenne, "but it is such a small blessing and such a big disguise!"—Washington Star.

He---"Her face is her fortune."

She--"Well, that enamel must have cost a few dollars."

Sheep Raising in The Okanagan

In the spring of this year, at Vernon, Mr. George Heggie, manager of the Land and Agricultural Company of Canada, brought in 1800 head of sheep from Maple Creek, Sask. Their introduction was to a certain degree an experiment, the result of which cannot fail to have far-reaching results on the future of the Okanagan. A representative of the Vernon News called on Mr. Heggie recently to find out how this experiment was progressing.

They had encountered a number of difficulties at first, said Mr. Heggie. The sheep had come from the plains, and did not take kindly to rustling their food on the B. C. hills. Sheep like short feed, and as they had been introduced in the late spring, the bunch grass had had time to grow long. Then, too, they had experienced a great deal of trouble with coyotes.

The mutton a sheep puts on, said Mr. Heggie, depends to a great extent upon the shepherd. He must be thoroughly versed in the habits and diseases of his charges. The sheep had suffered at first from inexperienced and careless handling. It was not every man who was competent to take care of sheep. After awhile they had advertised in the News, and had been successful in obtaining the services of Mr. David M. Kirkby, who has handled sheep on the Welsh mountains ever since he left school. Since his appointment, the company has received all sorts of applications for shepherds.

"Mr. Kirby says that he has no hesitation in stating that the coyote forms the greatest obstacle to the sheep raising industry in this country, said Mr. Heggie. There does not appear to be very many in the district, but, when they get to know that there are sheep in the country, they congregate in packs. This question, he went on to say, has often been brought up in the Central Farmers' Institute meetings at Victoria, and the government has been requested to raise the bounty from \$3 to \$5. If this were done it would go a long way towards exterminating the coyotes. At present the bounty is not enough to induce a man to go out after them.

"Personally," said Mr. Heggie, "I have offered Mr. Kirby \$10 for every one he kills. I would sooner lose the \$7 over and above the bounty than have a sheep killed. It is not the loss of the sheep that is to be avoided; but letting the covote get the taste of mutton. It would be the first thing toward putting the sheep industry in the Okanagan on its feet, if we could exterminate the coyote. The sheep would put on flesh far quicker if they could be left out all night, and more people would go in for them. There is not enough in it for the small farmer at present.

"We intend to go in for breeding, and we shall keep 1,000 ewes every year for this purpose. We intend to import every year, till we have 1500 breeding stock. This will give us a flock of between 2500 and 3000."

"How about the use of dogs to keep off the coyotes?"

"We have not yet found any breed that will kill coyotes. Possibly some breed might be trained to kill; but my experience at Enderby is that the coyotes simply play with the dogs."

He had thought at first that it would be possible to leave the sheep out at night under the guardianship of the shepherd, but it was found that the shepherd got no rest at all, and that the sheep got so frightened by the attacks of the coyotes that they would pile up at the flutter of a bird. The company had therefore built a corral at the northern end of Swan Lake. This corral was large enough to allow all the sheep to lie down. They were put in, or rather went in of their own accord, every night, and were able to settle down and rest.

The sheep were let out at daybreak and remained feeding till sunset. They had to be fed a little salt to keep them in good condition. The company had also erected a dipping vat.

They were pasturing the sheep partially on land that had once been used for grain and which had never been properly seeded down to hay, and where the hay was so thin as not to pay for mowing, and partly on alfalfa lands. On the former land, the sheep kept the ground clean, controlling the weeds and improving the land till they could get the land into a profitable crop of hay. They had about a thousand acres of this land at the north end of Swan Lake, on the flat, some of the finest land in B. C., and they were succeeding in getting about 200 acres of it seeded down to hay every year.

The company were also using the sheep to make a "rotation" on the 400 acres of alfalfa land that they had at the north end of the lake. It was their plan to divide this land into 100 acre lots and put the sheep on one hundred at a time for a few days so that only one hundred acres would be ready to crop at one time, thus distributing the press of the haying season.

In the spring, when the grass on the hills was short, they intended to turn the sheep, and especially the lambing ewes, out on the hills where they would keep the grass short enough to be good feed for them. As the snow disappears from the ranges in the early spring, it will enable the company to get their lambs on the market very early in the season.

They hoped to be able to supply the valley with fresh meat all the year round. The local butchers had expressed their willingness to handle 50 or 100 sheep per week. It was their policy to stock up their farm lands with as many head as they could feed, both mutton and beef.

Mr. Heggie heartily endorsed the expressions of Mr. Bury on the crass foolishness of the Okanagan's importing farm produce.

The company, said he, was working out of grain into hay, and they intended to feed their hay to stock. Besides the hay lands of the company they had 7,000 acres of magnificent range land on which there were several natural lakes. Thus they were in a particularly favorable position to raise stock, as they would be able to give them all kinds of change of diet. This would be necessary as alfalfa was too strong a feed to be given as a straight diet to sheep.

Speaking of the value of alfalfa as a crop, Mr. Heggie said, "I have great faith in alfalfa. So much so, that I prophesied that I could, on land valued at \$250 per acre, net the company eight or ten per cent. on their money. We are now heading along these lines." They were renting out small fields of alfalfa at \$25 per acre and there was all kinds of demand for it.

Under irrigation this would raise five tons to the acre, at a conservative estimate. Thus, without touching the land themselves, they were making 10 per cent. At a conservative estimate one could take off three crops a year and at a value of \$15 per ton, again a conservative estimate, this would give a handsome profit to the renter.

LET US MAKE BUTTER.

"During the fiscal year 1912-13, 71,-062 boxes of butter have been shipped to Vancouver from Auckland direct, and cold storage companies, from several points in Canada, are endeavoring to get in touch with New Zealand butter shippers." The above despatch from the Canadian Commissioner in New Zealand indicates an extraordinary condition of affairs in Western Canada. British Columbia is a garden. Saskatchewan and Alberta have millions of acres of fertile agricultural land. Yet 71,062 boxes of New Zealand butter came into Vancouver in a year. The present industrial development of these provinces is amazing. Factories are humming where the prairie lay unbroken two years ago. The workers in these factories will eat a lot of butter. Where are they to get it? From New Zealand? Or, will some of our western "farmers" stop mining the prairies and start producing other foods besides wheat?-Industrial Canada.

Tobacco Culture Under Irrigation Conditions in the Okanagan Valley

By Charles W. Dickson, Kelowna, B. C.

Part I.

That the tobacco industry is fast assuming the importance of a national Canadian enterprise is a fact appreciated by but a small proportion of the citizens of this country.

Tobacco growing in the Okanagan began some 15 years or more ago, when Mr. Lewis Holman came to Kelowna from the tobacco fields of Wisconsin. Recognizing the suitability of soil and climate of this fertile valley, Mr. Holman began a number of experiments in growing various kinds of leaf, and soon discovered that his first impressions were justified, and that tobacco of a decidedly superior quality could be successfully grown.

Many difficulties handicapped the early growers, chief among these being lack of sufficient capital to conduct the business along the most desirable lines. Another factor which held the industry back was the unfavorable customs and excise regulations, which gave no encouragement whatever to the home-grown product. This has been overcome within the last five or six years by the imposition of a duty of 28 cents per pound on all raw leaf brought into Canada, and various other encouragements offered to growers by the Dominion Government. A permanent Tobacco Branch has been established under the Department of Agriculture in Ottawa, in charge of experts, whose services are at the disposal of growers all over the Do-In Ontario and Quebec. minion. tobacco experimental farms have been established and experiments are being carried on to determine the best varieties to grow in various sections, the best methods of growing, cultivating

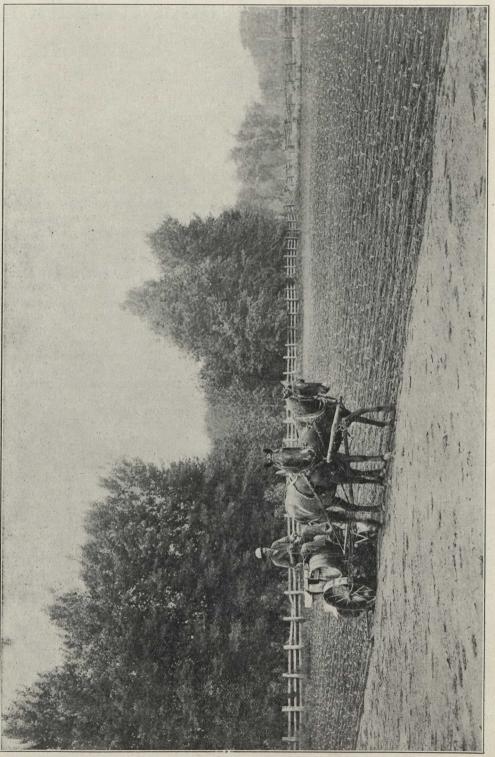
and curing, and, in fact, to try and solve the many problems that confront successful growers.

British Columbia up to the present has not been granted one of these experiment stations, but we have hopes, as the advantages to be gained are too obvious to enlarge upon.

A local company was formed several years ago in Kelowna, which carried on the business of growing the tobacco and manufacturing it into cigars for some time. The area planted was restricted to some 50 or 75 acres, and the business was somewhat limited as a consequence. In 1912, this company was taken over by the British North American Tobacco Co., Limited, with a capitalization of \$500,000 (which has since been increased to \$1,000,000). and since then an era of activity and enterprise has been inaugurated, which has placed the tobacco industry at Kelowna, B. C., among the big commercial projects of Canada, and incidentally made the B-NAT-CO Cigar well and favorably known throughout the West. This year, about 300 acres are under crop, and next year the area will be larger. Mr. A. W. Bowser, the president and general manager of the company, is a Canadian, and has gained his experience in the tobacco business in the United States, West Indies and South Africa, and brings with him a business ability and technical knowledge which go far to ensure success.

Tobacco Lands.

At the present time, Kelowna is the centre of the tobacco growing industry in British Columbia. Experiments in growing the leaf in other sections are being carried on, and it is safe to pre-



PLANTING, YOUNG TOBACCO PLANTS, KELOWNA, B. C.

dict that within a few years many other places, distributed over a large area, will be found to have a suitable soil and climate. Possibilities are great, returns are excellent, and expansion is bound to follow.

The soil giving the best results in Kelowna at present is a rich sandy loam, verging to a clay loam. The heavier soils are not as suitable to the grades of leaf grown, but can be utilized for coarser grades of tobacco used for pipe and chewing purposes. The lower or bottom lands are at present almost exclusively used, but the possibility of successfully growing on the sandier bench lands is one that should be borne in mind as worthy of experiment.

Varieties of Tobacco.

Leaf for cigar purposes constitutes the principal crop. The varieties are: Cuban or Havana, Comstock Spanish, Wisconsin seed leaf and Sumatra.

The Havana leaf is used principally for filler, that is for the main body of the cigar. A certain proportion, however, of this leaf is of an exceedingly fine quality and is suitable for wrappers.

The Comstock Spanish and Wisconsin leaf is a much larger, silkier leaf, and is used for the cigar binder.

The Sumatra leaf is the finest and most expensive leaf grown, and is used exclusively as a wrapper. This tobacco is grown under shade and will be discussed later.

Other varieties are being grown in an experimental way and results so far are very encouraging. These are: Bright Virginia, for pipe and cigarette purposes; White Burley, for pipe and chewing; and Boer tobacco, for pipe smoking.

It is the intention of the British North American Tobacco Co., at a later date, to instal a plant for the manufacture of pipe tobacco and cigarettes, and these experiments are for the purpose of selecting the most suitable varieties for a pleasing blend.

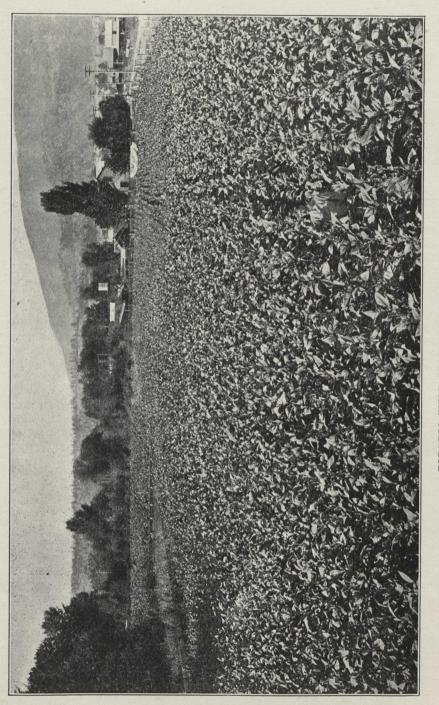
Field per Acre and Profits.

A good average crop of Havana tobacco will be about 1,000 pounds per acre, worth about 25 cents a pound to the grower. Wisconsin and Comstock Spanish are heavier yielders, giving 1,400 to 1,800 pounds per acre, and worth 15 to 20 cents or more per pound. Profits range on an average from \$125 to \$175 per acre, and are sufficiently attractive to be worth considering seriously.

Beds and Plants.

The tobacco plants are raised from seed and must be started in seed beds. In Ontario and Quebec, hot beds with glass tops are often necessary for this purpose, but in the Okanagan a cold frame covered with cheese-cloth and cotton is quite satisfactory. The land should be fine, light and loamy, and worked up very carefully, and the beds given a southern exposure. Inch lumber is used for the frames, and a convenient size is 3 ft. x 12 ft. or 3 ft. x 24 ft.; a bed of the latter size will supply sufficient plants for an acre of ground.

Tobacco seed is very minute; some idea of its size can be gathered from the fact that a tablespoonful will give plants enough for an acre. The seed should be carefully selected, and only that obtained from a reliable source used. All light material and light seed should be eliminated, and only full, plump, heavy seed used for planting. As germination is comparatively slow, the common practice is to hasten the growth of the seedlings by germinating for 5 to 7 days in small woolen bags. kept moist and at a temperature of about 65 deg. F. The seed bed is carefully worked up and the surface rolled or pressed down firmly and evenly. The seed is sown about the 1st of April, or even earlier if weather conditions permit. As the seed is so small, it is best to mix it thoroughly with a large quantity of inert material such as leaf mould or wood punk, or fine dry sand. This mixture is spread broadcast, as evenly as possible over the prepared bed; but not too thickly, as it is not advisable to crowd the plant too closely. The surface of the bed is then very lightly raked, again pressed or rolled, and the beds watered. The beds now require constant attention. They must be watered regularly,



TOBACCO FIELD READY FOR HARVESTING

sometimes twice a day if evaporation is rapid. They must be kept continually moist, but not soaked or flooded. During the day, the cheese-cloth cover is kept on, except for a short time to ventilate and water. This cover retards evaporation and keeps the temperature up. At night, the outer cotton or burlap cover is put on, to keep the beds as warm as possible, as the nights are apt to be chilly. In spite of the germinated seed, growth is very slow at first and the plants will not be much over an inch after the first month. Once well started, however, growth is rapid, and at the end of the second month the plants should be about four to six inches high and in condition for transplanting, right which takes place toward the end of May or the 1st of June.

Preparing the Field and Irrigating.

Work in the tobacco field should be started as early as possible; if ploughed the fall before, so much the better. The field is ploughed, disced and harrowed till the surface presents the finest kind of a mulch; it is then rolled. Next comes the irrigation. While irrigation plays an important part in tobacco growing and is quite essential in the Okanagan, except during a verv rainv season, it is of the simplest kind and should present few difficulties, even to a novice. One irrigation is all that is necessary or advisable, and this irrigation is done at a season when water is most plentiful, and one seldom gets into heated arguments with a neighbor on the subject. The prepared field is ploughed and cross-ploughed into squares of about ten or twelve Water is run into the furrows, feet. and from these the squares are successively flooded; the water being allowed to stand in each square a sufficient time to thoroughly soak in, and is then run off to the next square. The work of irrigating the field should be completed a few days before planting begins-sufficient time only in fact to allow the field to be disced, crossdisced, harrowed and rolled. We now have sufficient moisture stored in the soil to last the tobacco plant during its growing season-that is, if we follow

the golden principle of cultivating constantly and thoroughly. And I might mention, in passing, that this same cultivation may mean the success or failure of the whole crop.

(To be Continued.)

WHEN A MAN FAILS.

When he has no confidence in himself or his fellow-men.

When he values success more than character and self-respect.

When he does not try to make his work a little better each day.

When he becomes so absorbed in his work that he cannot say that life is greater than work.

When he lets a day go by without making someone happier and nore comfortable.

When he values wealth above health, self-respect and the good opinion of others.

When he is so burdened by his business that he finds no time for rest or recreation.

When he loves his own plans and interests more than humanity.

When his friends like him for what he has more than for what he is.

When he knows that he is in the wrong, but is afraid to admit it.

When he envies others because they have more ability, talent or wealth than he has.

When he does not care what happens to his neighbor or to his friend so long as he is prosperous.

When he is so busy doing that he has no time for smiles and cheering words.—Ideal Power.

There are many pleasing methods of training or growing roses. One is to take a long vigorous shoot of the previous season's growth, say of some perpetual rose, such as General Jacqueminot, bending it over and fastening the point of the shoot to the ground. This will cause every eye to break, and give you a short spur of growth, each surmounted with its brilliant blossom; an entire border treated in this way will give a perfect blaze of bloom.

The Poultry Industry in British Columbia

By H. E. Upton, Provincial Poultry Instructor.

Although a detailed treatise cannot be given on this subject in so small a space, yet the writer wishes to set before the public what a great amount of importance the poultry industry is assuming in British Columbia.

To quote the figures in the Budget Speech of 1913 by the Honourable the Minister of Agriculture, we find that the home production value of poultry for 1912 was \$1,351,000, and for eggs, the value is given as \$1,203,212; yet, with all this value for home production we find that the value of imported poultry produce from the Canadian provinces and points outside of Canada for 1912, amounted to \$1,840,467. These figures certainly show that there is great room for more poultry to be produced in British Columbia as the production stands today. Yet, with the growing population, we must not forget that more eggs and poultry are to be consumed. Therefore, there is still an opportunity for settlers wishing to locate in British Columbia to give at least some attention to poultry-raising. Within the past two years poultry has nearly doubled itself in numbers, and we look for the same to take place in the next two years ahead of us, with the great influx of settlers which we are certain to have in our rural districts.

Transportation.

Although the transportation facilities in some of the more unsettled parts are not such as would allow more than a tri-weekly shipment, yet the time is near at hand when our facilities for shipping will compare quite favorably with those of any of our Eastern provinces or states.

Climate.

There is probably no other province

or state which possesses an ideal climate for poultry-raising. There are, however, many varied climates in different parts of British Columbia, which the poultryman can easily overcome if he has a good knowledge of detail, enabling him to adopt housing and feeding methods which will offset the climatic conditions in whichever locality he may settle.

The Industry in Itself.

During the past few weeks, much notice has been given to the splendid quality of our fruit in British Columbia. Many of the fruit ranchers are now combining flocks of pure-bred poultry with their fruit work, after learning the benefits, as well as the many profits from an economical standpoint, to say nothing of the money that is to be derived by so doing.

We may expect in the next few years to hear a well-founded assertion made of the British Columbia hen. The town of Petaluma in California, was made famous by the great work accomplished there in poultry-growing. We teel that British Columbia will have several of these Petalumas to show to people of the world within a few years. These small "Petaluma" districts which we will have in this province, will be here to stay, however, for fowls are not crowded on the land so thickly as they have been in California. In so spreading out our stock, we hope to prevent the great dangers that are experienced from soil contamination. If plenty of free range is allowed for poultry, and a crop taken from the soil each alternate year, one has little to fear from soil contamination, if he be a poultryman.

Associations and Co-operation.

There are some 28 Poultry Associations in this province at the present time. Most of these associations are affiliated with the Provincial Association, which is run along the same lines as the Stock Breeders and Fruit Associations.

The Provincial Association represents a membership of several hundred breeders from every part of the Province. To show the growth of Associations, we would like to state that there were only five or six Affiliated Associations in 1910. In 1911 there were nine associations, and in 1912 there were 22, with others pending affiliation.

Still, with all these Associations, the poultry industry may be considered to be only in its infant stages. The idea in view of all these associations is co-The buying of different operation. foodstuffs is taken up first. The marketing end of the poultry produce will be handled later on, after the associations have secured a good footing. One association has purchased a "Mammoth" incubator, and it is their intention to do community hatching in that district. By this, we mean to say that the people of that certain district will bring their eggs to one centre, where the "Mammoth" incubator is located, have one man attend to the running of the incubator, and, after the hatch is over, the different people will take their young chicks away. This is probably one of the greatest steps that a district can take to help along community breeding. The results will be worthy of interest, and, if successful, will be followed by other associations.

Conclusion.

Exceptional markets for all kinds of poultry products await the producer. With the ever-increasing demand for poultry products, and the high cost of other foodstuffs, the supply can never keep pace with the demand for good produce. The prices offered are very good, and are higher and better in many respects than in our big eastern markets.

In some parts of the province, the breeders resort to egg production

alone. Especially is this true on the southern part of Vancouver Island, where more light weight breeds are kept. There are some exceptional strains of light weight varieties found in this district that do what many eastern breeders would say was almost impossible.

Last year an International Egg-Laying Contest was engaged in, but the conditions were not the best that could be had. This year the Department of Agriculture is running another contest under the management of the poultry division, and excellent results have been obtained.

Owing to the high cost and also the unreliability of the labor to be had, it has been found that the greatest success obtained on a ranch is where all the work is done by the owner himself.

Several of our poultry breeders are selling day-old chicks. One amongst them sold many thousand last season, most of which were kept within the Province.

All branches of poultry culture may be engaged in with good markets. Water-fowl, especially ducks, find a good demand amongst the Chinese population. Turkey-raising works well in many parts of the Province, but turkeys and water-fowl are lines poorly advanced in British Columbia as yet, although they offer a good opening in several districts.

SONG OF LIFE.

- A little work, a little play To keep us going—and So good-day!
- A little warmth, a little light Of love's bestowing—and So, good-night!
- A little fun, to match the sorrow, Of each day's growing—and So, good-morrow.
- A little trust that when we die We reap our sowing—and So, good-bye.

-Du Maurier.

Some people's only idea of being sincere is to be privileged to say disagreeable things.

Fruit and Farm

	(Formerly the Fruit Magazine.)				
А	Monthly Journal Devoted to the Interests				
	of the Man on the Land				

Subscription: In advance, \$1.50; in arrears, \$2.00; single copies, 15c.

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FRUIT AND FARM,				
309 Empire Block Vancouver, 1		Vancouver, B.C.		
Vol. V.	OCTOBER, 1913	No. 1		

TRACTORS ON TRIAL.

The experience of the farmers of Saskatchewan, as expressed in letters by prominent agriculturists in that province, seems to point to the necessity of caution in adopting what has come to be described as "mechanical farming."

It is but a few years—not over five at the most—since the advent of the tractor on some of the larger western ranches was heralded as forecasting a new agricultural day and one in which the horse would have little part or place. Time, the great tester, has to some extent minimized these earlier predictions. No less an authority than the Minister of Agriculture for Saskatchewan, himself a practical farmer on a large scale, states that mechanical farming is still on trial, and that the test of several years has revealed some drawbacks not at first anticipated.

Primarily traction power has the defect—that its up-keep depends on fuel derived from sources outside the farm. This fuel, too, has become increasingly expensive; in some cases too expensive for use. The tractor has a tendency as well to "pack," wet clay soils making them heavy to work. Other drawbacks are mentioned almost as formidable.

It must not be supposed that these difficulties are not surmountable. We believe they will all yield to treatment based on progressive experience. But just at present the farmer is learning the old lesson of the wisdom of going slow.

THE OKANAGAN APPLE SHOW.

In a letter to the promoters of the second annual Okanagan Apple Show, the Minister of Agriculture expressed the hope that the show would be visited by representative business men of the Coast cities, as was done last year, when a special car of members of the Vancouver Board of Trade toured the valley and visited the show.

It is, not, too, much, to, hope, that, especially after the completion of the direct line to Okanagan Valley from the Coast, that this apple show will attract increasing numbers of buyers. Last year's effort was a creditable inauguration of what should be a regular series of such exhibitions, and we are glad to see that the Government is extending assistance to insure its permanence.

FALSE ECONOMY.

Some remarks of a Government official on the subject of spraying seem to have been accepted by many growers with a literalness that we feel sure was never intended.

In agriculture and horticulture, as in every calling, there are usually more avenues in which money can be spent than there are sources of revenue. The wise husbandman exercises a proper discrimination and omits the more pressing requirements. But thorough spraying has become such a necessity in the modern orchard that the grower is indeed ill-advised who ventures to discard it from motives of economy.

Conversations with fruit inspectors and others lead us to the conclusion that already this season in some districts the baneful results of this false economy are evident. Slackness in this connection will result in a deterioration of the fruit crop that will be a very bad advertisement indeed for our growers.

WAGES OF FARM LABOR.

A recent bulletin issued by the Bureau of Statistics of the Department of Agriculture indicates that the money wages of farm labor of the United States increased about three and twotenths per cent, during the past year and seven per cent, during the past two years. Since 1902 the increase has been about thirty-four per cent. It says:

"The wages of farm labor had an upward tendency during the decade of the seventies considered on gold basis) they were almost stationary during the eighties, and declined from 1892 to 1894, since which year they have been steadily tending upward. Wages now, compared with the average of wages during the eighties, are about fiftythree per cent. higher; compared with the low year of 1894 wages now are about sixty-five per cent. higher.

"The current average rate of farm wages in the United States, when board is included, is, by the month, \$20.81; by the day, other than harvest. \$1.14; at harvest, \$1.54. When board is not included the rate is, by the month, \$29.58; by the day, other than harvest, \$1.47; by the day, at harvest, \$1.87."

The same authority shows that wages vary widely in different parts of the United States, being highest in the far west and lowest in the south. South Carolina pays without board, only \$17.10 per month for her farm labor, while Nevada pays \$56.50; Mississippi pays \$19.00; Montana \$53.80; Alabama pays \$19.50; Idaho, \$51.60. These are the widest extremes. All the Northwest pays high wages and the fact is made plain that the farmer as well as the railroad companies and other corporations have to help meet the general increased cost of living by paying more to the people who work for them.

The Department of Trade and Commerce reports that several large shipments of British Columbia potatoes and onions have gone out on the new steamer Marama to Fiji and New South Wales, and the inspector's reports with reference to the potatoes is very encouraging. One firm in British Columbia expects to ship forty tons of onions to Australia by the next steamer, to be accompanied and followed by apples in large lots. It is to be remembered that apples and some other early fruits have exactly different seasons in British Columbia and Australasia, and there is no reason why a very large trade should not be developed in these, between the two countries.

"Let us go into this department store until the shower is over."

"I prefer this harness shop," said her husband. "You won't see so many things you want."

Reported Waste in Okanagan is Denied

The following despatch respecting the Okanagan fruit situation has been received from Mr. W. Beaver Jones, Kelowna, B. C.:

Kelowna, B. C., Sept. 12.—Certain sensational reports eminating from interested parties regarding this year's fruit crop in the Okanagan are grossly inaccurate and misleading. "Thousands of peaches, tons of luscious fruit, ripe and delicious, lie rotting in Okanagan orchards," states a despatch.

From close observation in many parts of the valley, coupled with undisputed authentic statements of packers, peaches this year will be scarce. The highest prices are this year being paid for this class of fruit, and yet the supply falls far short of the demand. Some peaches are on the ground undoubtedly, but what is the cause of it? Peach growers, in a large number of cases this year, after their last season's experience, when owing to the phenomenally abundant crop very poor prices were offered for the fruit, did not trouble to pay any attention to their trees. with the result that in Penticton a large quantity of peaches too small for any market are now lying on the ground. If the trees had been looked after peach growers this year would have reaped a rich harvest as the general crop is small and the prices consequently high.

Thinning, spraying, pruning and irrigating are just as important with a peach crop, if not more so, than any other fruit.

Pears are very scarce, summer apples equally so. The plum crop this year has been the finest ever shipped out of the Okanagan. The present fine weather is coloring up the late fall and winter apples magnificently.

In certain districts, especially in Summerland, fire-blight which had not been properly looked after last year has done considerable damage, but growers who have used precautions in combatting the disease as instructed by the Provincial Government inspectors have entirely eradicated it, or have it under control. Fire-blight, owing to the measures adopted, never made any headway in the Kelowna district.

The general crop this year will not come up to the extravagant estimates of some ill-advised persons who in their ignorance and without proper experience, predicted a very large crop two years in succession. This, experience shows, never occurs.

The world-wide demand for Okanagan fruit should make prices eminently satisfactory to the grower this year. Never before have so many orders been received from places as far distant as South Africa, China, Australasia, West Indies, Germany, Great Britain and, curious to relate, Eastern Canada.

As is usually the case, the crop world-wide, being smaller this year, and the Okanagan in proportion, the returns will be far better this year than last. Taken altogether, the fruit crop this year, especially as far as Kelowna is concerned, is an eminently satisfactory one.

George Horstead, secretary of the Nelson Agricultural and Industrial Association, has received a letter from the secretary of the Canada Land and Apple Show, which is being held in Winnipeg from October 10 to 18, asking that Nelson district arrange to make a display of apples and pears at the first annual show.

A company is being formed, with the endorsement of Lord Angelsey of England, which has for its purpose the establishment of a fruit cannery at the Angelsey Estates, Walhachin.

What Does it Cost to Start Poultry Raising?

By J. T. Bartlett, Eburne, Lulu Island, B. C.

What does it cost to embark in the poultry business? Our attention was called to this question forcibly by a land dealer's advertisement in a recent issue of a Vancouver newspaper. For \$975 this man offered the prospective settler a ready-made poultry farm, a four room house, 250 hens, chicken pen and poultry run, and as much land as was needed. His figures were tempt-The 250 hens-so he stated-ing. would average 150 eggs a day the year round-3,125 dozen, which would bring the farmer \$1,200. All this from eggs alone.

"This would be chiefly profit," he continued, for the sale of chickens and worn-out hens would bring you in all you need to buy feed and leave you enough money to live like a prince. You will surely raise 2,000 chickens a year and get at least 75 cents each from the wholesalers. That's fifteen hundred dollars, surely enough to meet all your expenses. And this is figuring on a basis of 250 hens only. You increase your income every time you increase the number of your birds, and you can just as easily keep 1,000 birds as 250."

This enticing picture of the pecuniary returns in the poultry business we may place in the garret with its many brothers and sisters which have tempted the son of man for the past ten years. It is the initial outlay, \$975, with which we are concerned. Fashions change in the hen business as well as in all others, and where a generation ago the farmer's boy learned his first bookkeeping with the twelve hens and a rooster which his mother gave him at Christmas, today the habit is for the grand splurge. Men and women draw

out nice nest eggs from the bank, forsake their accustomed occupations, and expect to derive an immediate, steady and sufficient income to meet living expenses from a poultry plant.

What does it cost to go into the poultry business on such a scale that the steady income secured will be sufficient to support a family?

Conditions in British Columbia undoubtedly differ from those prevailing in other provinces, and the figures I shall give are on that understanding. Generally speaking, the \$975 which the land dealer mentioned, is less capital than most poultry ranches in this province have behind them, but the current practice in land selling, whereby the purchase price is spread over a term of years, makes the initial outlay in reality considerably lower. Despite this, however, the cost of the land is the principal factor.

On Lulu Island, only a few miles from Vancouver, I know of two families supporting themselves practically wholly from their poultry. Each of them purchased two acres of land three years ago. It was not particularly good land. The drainage was bad and the land was peaty. They paid \$400 an acre, but on terms, which meant that though the outlay on land eventually was \$800, the initial expense was but \$100, with the balance scattered over several years.

Made Good.

Both men knew little of keeping poultry, but, contrary to all principles of the profession, they made good from the start. One of them, who was blessed with surplus capital, took into partnership a man who had formerly been a poultry instructor, and who knew the business from A to Z. The other could only study his poultry magazines and books and care for his flock diligently. Each man built a shack. One of these cost \$200 and the other \$250, not calculating the labor of the owners. Each man spent \$150 in poultry houses and runs, and about \$200 for stock. This amount of money procured them about 250 White Leghorns.

Thus one man expended \$650 and the other \$750 in getting started, and each had further payments amounting to \$700 to make on their land. Both had burned their bridges behind them, and it began to appear as though getting started in the hen business was a serious undertaking.

They pulled through the first winter somehow, but they did not live like princes. They do not live like princes now, for they are only ordinary poultry keepers. But they live lives of independence. They are no longer wage slaves. They are even unaffected by the financial stringency. Their profits are about \$20 a week, and they have about three hundred hens.

The start of these Lulu Island poultry ranchers is typical of most of the poultrymen in the Fraser Valley today. Most of them will tell you that with \$1,200 a commencement can be made.

Market Co-operatively.

Over on Vancouver Island, in the Cowichan Valley, which is to British Columbia what Petuluma is to California, they do things in a different way. This district is probably one of the largest egg-producing centres in all Canada. The entire output is marketed co-operatively. All eggs are stamped and guaranteed.

In the Cowichan Valley, states Mr. L. F. Solly, one of the leading egg men of that section, the amount needed to make a start is from \$3,000 to \$5,000. This is how he divides it:

10 acres (5 cleared)\$	2,000
Dwelling, stable and woodshed	600
Furniture and horse	400
Poultry houses, granary	400
Sundry expenses	500

\$3,900

Under the last item, "Sundry expenses," Mr. Solly includes the cost of fencing, purchase of day-old chicks, eggs for hatching, poultry feed for 300 pullets, and living expenses for six months. He figures on a start being made in the spring.

"It is a mistake," he states, "to rush into the business in a large way. It is wise to increase the number of birds handled from year to year as experience is gained in all the numerous, but important details of the work.

Cost of Feed.

Somewhat more valuable than the statements of the land dealer abovequoted, is the information given by Mr. Solly with regard to probable profits. He has found that at Cowichan it costs \$2 a year to feed a bird, allowing for depreciation on buildings; that the eggs she lays will bring in \$4.20; and that the average profit per fowl will be approximately \$2.20.

"Profit on 300 pullets should make living expenses," he says, "and to increase the capital money can be obtained on mortgage with which to erect further buildings and to increase the number of birds. It being assumed that 1,000 laying birds would be worked up to in three or four years, an income of \$2,000 could be made after paying for the help of one man. Egg farming is the most profitable branch of poultry keeping, and one of the most important items in starting a poultry farm is to obtain the best possible utility strain of the breed selected, rather than to aim for fancy stock, as it is heavy producers, rather than feathers alone, that are wanted."

When it is considered that the capital required, ranging from \$1,000 to \$5,000, often eats up entirely the resources of the inexperienced man entering the poultry business, one is filled with wonder, not at abandoned hen farms in the environs of Vancouver, New Westminster and Victoria, but the paucity of their number. The inexperienced man entering any business has only a fighting chance of success, and poultry keeping is pre-eminently a vocation for brainy people. Failures in minor matters are certain to confront the new poultryman with his 250 hens through the first months, and he will be a lucky individual if his receipts balance his expenditures.

If he has capital with which to weather the first six months—better still, a year—no matter what fortune may have in store for him, the prospects of his ultimate success will be greatly enhanced. The poultry business is "good" in British Columbia. If a man has the ability—and capital—he will realize a reward.

CARE OF THE DRAUGHT HORSE

Following are the drivers' rules of the Boston Work-Horse Parade Association:

1. Start at a walk and let your horse work very easily for the first half hour.

2. A heavy draught horse should never be driven faster than a walk, with or without a load.

3. Look to your harness. Avoid these faults especially:

Bridle too long or too short.

Blinders pressing on the eyes or flapping.

Throat latch too tight.

Collar too tight or too loose.

Traces too long.

Breeching too low down or too loose 4. Drive your horse all the time. Feel his mouth gently. Never jerk the reins.

5. Take the horse out of the shafts as much as possible; and if you drive a pair of four, unfasten the outside traces while the horses are standing; they will rest better that way.

6. Teach your horses to go into the collar gradually. When a load is to be started, speak to the horses and take a firm hold on the reins so that they will arch their necks, keep their legs under them and step on their toes.

7. Water your horse as often as possible. Water in moderate quantities will not hurt him, so long as he keeps moving.

8. Blanket your horse carefully when he stands, especially if he is at all hot. Repeated slight chills stiffen and age a horse before his time.

9. Bring your horse in cool and breathing easily. If he comes in hot he will sweat in the stable, and the sudden stopping of hard work is bad for his feet.

10. In hot weather or in drawing heavy loads, watch your horse's breathing. If he breathes hard, or short and quick, it is time to stop.

11. Remember that the horse is the most nervous of all animals, and that little things annoy and irritate him. Remember that he will be contented or miserable according as you treat him.

ALBERTA TO TEACH AGRICUL-TURE FREE.

The first meeting of the Alberta board of agricultural education which will, together with the minister of education, outline the scheme of teaching to be followed in the schools of agriculture which have been erected on the government demonstration Alberta farms in Alberta, was held recently, Dr. Tory, president of Ontario university, presiding, and Hon. Duncan Marshall, minister of agriculture, being present. Three schools have been built out of a grant made by the legislature last session, at a cost of \$36,000 each. Hon. Duncan Marshall stated that the operating expenses will be met out of the Dominion Government grant.

It is the view of the minister of agriculture that at the commencement no fees for tuition shall be charged but the parents of boys and girls attending shall pay their own boarding expenses.

Each of the schools is situated on a farm 320 acres in extent and a plot of 20 acres will be set aside on each farm as experimental plots. Boys will be taught blacksmith work and carpentry and there will be a domestic science course for girls. The care and operation of farm machinery will also be taught to boys.



As promised last month, the chief item of interest in this article will be bulbs and bulb culture.

Although bulbs may be planted with varying degrees of success from now right through the winter when weather permits, the proper time to plant is during the month of October.

The large variety of species at our command enable us to plant so that we may have something bright in our gardens from the time that the winter's snows and hard frosts disappear, and to sustain their display until the other flowers of spring and summer join in, and even to continue right through to late fall.

Aside from bulbs, so great is the variety of plants at our command, collected from all parts of the world, that the enthusiastic gardener can always have something cheerful in the garden; aye, even when the snows of winter lie deep upon the ground. This may form the subject of a future article; but to get back to our present theme. The first of our bulbs to flower, and therefore the first to be planted, is the snowdrop. Although the snowdrop is welcome in almost any position, the place where it shows to best advantage is in grass. It has usually completed its season of growth before the lawn requires to be mown, and there is no need to dig your lawn up to plant them; the tiny bulbs can be dibbled in with an ordinary garden dibber, without any disfigurement whatever.

Formal designs may be traced out if desired; but personally, I prefer to see them growing in scattered clumps, with a background of everygreen shrubs, just as one would expect to find them in their natural habitat.

The crocuses are equally well adapted for the same kind of planting as the snowdrop; indeed a green setting of some kind is almost essential to supplement their own pretty, but small, leaves.

Another bulbous plant specially adapted for grass culture is the Star of Bethlehem (Ornithogalum). The leaves of this plant precede the flowers by so much that they are almost withered before its umbels of bright stars are unfolded.

Two bulbous plants which follow close on the trail of the snowdrop are the Glory of the Snow (Chionodoxa) and Scilla, both highly desirable. The above bulbs will adapt themselves to almost any kind of culture, provided they are given a reasonable depth of fairly rich soil.

Many people like to have their flower-beds about the house and on the lawn filled with spring flowering bulbs, and for this purpose the tulips, hyacinths and daffodils are best suited.

There is no need for me to name varieties; these can be picked out from the lists of the various merchants.

As soon as ever the summer occupants of the beds are over they should be removed, the ground manured with well-rotted stable manure and dug the full depth of the spade. When suitable manure is not available, and the soil already well supplied with with humus, I would advise a dressing of bone meal, 2 oz. per square yard, to be dug in before planting, and a top dressing immediately after planting with 1 oz. of muriate of potash per square yard; the latter is soluble and will be washed down to the roots by rain.

The tulips and daffodils may be planted with a full pointed dibber, but the hyacinths will require the services of a trowel. To give a good show en masse, the two former may be planted 3 to 4 inches apart and 3 inches deep, the hyacinths 4 to 6 inches apart and 3 inches deep.

They must all be well firmed down when planting, otherwise there is a danger of them throwing themselves out when they start rooting.

When it is intended that the bulbs should occupy the same ground for some years, it is well to enrich it with a lasting substance like bone meal, as on this much of their future vigor and beauty will depend.

Tulips, hyacinths and daffodils are also most suitable for indoor gardening, and now is the time to prepare for this interesting department. These bulbs can be successfully grown in receptacles without drainage, such as china bowls; but great care must be exercised in the watering, so as not to let the water become stagnant.

Procure some half-rotted sphagnum moss, not peat, from the nearest swamp, or, failing that, your nurseryman, and fill up the bowl so that the bulbs will be just level with the rim; pack fairly firm, place the bulbs in position, and fill up level.

For a bowl 6 inches in diameter, five or six tulips may be planted, eight or ten daffodils, and three or four hyacinths. If the moss is moist, no more water will be needed meantime.

Place the bowls in a dark, cool place, in the basement, for instance, to retard top growth and encourage rooting, and study to keep them supplied with just as much water as the moss will easily absorb. When they have made about an inch of growth from the bud give more light and air, and in about a week place in the sunniest and warmest corner in the house.

To grow bulbs successfully by this method requires practice, and I would not advise the novice to go in extensively for it, but I would certainly advise an experiment of a bowl or two.

A safer and easier way is by the old method of flower-pots, where errors of watering have a chance to be corrected by the drainage.

The best size of pot to use is that which best suits the position the plants are intended to occupy when in flower. First place a shallow layer of drainage, then rocks or broken pots, in the bottom; then a little turfy material, and fill up with fairly rich sandy soil from the garden, so that the tips of the bulbs and the level of the soil will be about one-half inch below the rim of the pot, to allow for watering.

Their after treatment is the same as advised for the moss method, only they may be placed out of doors and covered over with soil until the pots are well filled with roots.

Be very careful with the watering, never allowing them to become too dry or too wet.

The still older method of growing hyacinths in glasses is familiar to everyone, and is perhaps the most artistic mode of cultivation of this exquisite flower. Fill the glasses with water so that the bases of the bulbs are just touching, and put in a few pieces of charcoal to keep the water sweet; stand the glasses in a col, dark place until the glasses are well filled with roots and the tops have started; then gradually move to the sunniest window in the house. Never attempt to rush any of your bulbs before they are well rooted; if you do, they will resolutely refuse to flower.

Returning again to our outside bulbs, to succeed the tulips we have the Spanish and English irises; both are exquisite in color and shape of flower, and ought to have a place in every garden. They are not at all fastidious as to soil or situation, and look well massed in beds by themselves or planted in clumps in the perennial border.

After the irises, the lilium group take up the thread and give a succession of bloom into late fall. Although they will cheerfully put up with a lot of hardships and give a good account of themselves in the most unlikely places, still to do them best they ought to have a deeply worked, moist, rich soil. This summer I have seen splendid results obtained by burying a barrowload of peat under each clump, and a few handfuls of bone meal would, I know, help to sustain their vigor in future years.

The following are what I would specially recommend, and in their order of flowering: L. longiflorum; L. concolor; L. elegans; L. candidum; L. tigrinum, single and double; L. auratum, and L. speciosum.

As soon as dahlias and begonias are blackened by frost, cut back the tops, lift, and place in an airy shed to dry before finally storing for the winter.

Fuchsias and lobelia cardinalis may be lifted and potted or boxed and placed in a frostproof house with a fair amount of light for the winter.

If you wish to try and winter your geraniums, the sooner they are lifted and potted or boxed the better; but unless you have a greenhouse in which to store them I don't advise you to, as lifted geraniums are troublesome subjects with the best facilities.

I must apologize to those interested for not touching on fruit and vegetables, but I hope to give them their due amount of space next time.

Cheap Paint that Will Not Come Off.

Here is a recipe for a cheap paint:

Take two bushels of fresh stone lime, or good fresh slaked lime will also do, but the first is preferable. Put the lime in a watertight barrel, and put in enough water to thoroughly slake it. Add 25 pounds of beef tallow and stir occasionally until the tallow is thoroughly incorporated with the lime. Less than this quantity can be mixed by observing the proper proportions of lime and tallow. For coloring matter, earth colors must be used, such as yellow ochre, venetian red or burnt umber. With either spruce or golden ochre you can get a beautiful soft cream tint, and by using more ochre a buff tint. Venetian red will give a creamy pink, and more red will give a dull pink which, in some cases, will dark. Mix the coloring matter with

look well. Burnt umber will give all the shades of drab you want by adding more or less as you want it light or water in a separate vessel, taking care that it does not go lumpy. This can be prevented by adding a little water at a time and stir thoroughly until you get it about the consistency of cream. From 50 to 75 cents worth of ochre will be sufficient to make the mass a nice light buff; but as ochre varies in strength, the tint can be secured only by testing as you mix. As the color will always be darker in its mixed state than after it is applied and dries out, test a little first on a piece of board until you get the depth of tint wanted. A pretty combination on a building is a buff body, and for trimming add umber to the buff until you get a contrasting shade of creamy drab. The mixture will need thinning with soft water until it works freely under the brush. Be careful not to thin too much. Apply with a whitewash brush or flat paint brush.

This is a cheap and durable paint and is valuable for outbuildings where rough grade lumber is generally used, which would require a lot of oil paint. More especially is it valuable in painting old and weather-beaten buildings. The combination of lime and tallow forms a waterproof coating which fills the pores of the wood and arrests the action of the weather upon the wood. To make a good job, cracks and holes in the siding of buildings should be filled with the paint in its paste form, and if filled as they are reached and immediately painted over before getting dry, will not show spots or streaks.

George IV, on his visit to Dublin in 1821, met at a reception Sir Philip Crampton, Ireland's greatest surgeon. "In what branch of the service is that magnificent-looking man?" asked his majesty. The gentleman to whom the question was put was too polite to hint that the King was mistaken in supposing that the distinguished surgeon was a naval or military officer. "Sire," 'he replied, "he is a general of the lancers."

Value of Attractive Labels on Fruit Packages to Establish Brands

By E. H. WARTMAN Dominion Fruit Inspector, Montreal, Que.

True, we are living in an age of art and technicalities in our fruit trade, where descriptive labels on our beautiful fruits have become known as "trade marks" well established and bringing untold wealth to the owner who has been honest in all his representations. The old black stencil on anything so beautiful and tender and inviting as fruits seems rather out of place in this nineteenth century. The plain black may be suitable for boxes of bolts or kegs of nails, or molasses casks, or a hearse; but surely it is too dead a color and unsightly on fruits or flowers. Nothing, in my mind, is better for fruit packages than a bright descriptive label of the contents. Where the colors of the fruits are bright red, yellow or green, let these colors be very prominent on the packages, which will develop a quick and lasting trade. The attractive labels from the East, Spain, Italy, Greece, on oranges and lemons are particularly attractive. When sixty to eighty thousand of these packages are unloaded in steamship sheds in Montreal from one steamer and piled up regularly, you will be struck with the beauty of this picture.

From the South—Florida, West Indies and West and Southwest Oregon, Idaho, California, Washington and British Columbia—we also see beautiful descriptive labels.

Many carloads of California fruits go through Montreal for Glasgow, and when piled in sheds look very attractive. One California firm, viz., A.

Black of Santa Clara, has labels phenomenally beautiful; so much so that one would really think the fruits pictured thereon were real specimens of green or yellow or blue plums, and yellow and green pears. Our large dealers in many cities in Canada, where they have large show windows to accommodate a half car of these fruits. would find that the labels make, in connection with these displays, a very attractive showing. Those who have seen such displays have carried away in their minds indelible impressions, and both dealers and consumers, when leaving these sights, say that we are living in a wonderful age.

To design a good attractive label may take some time and study, but when accomplished, it is a steppingstone to fortune. What shall I say about boxes and barrels of our own grown fruits stencilled in black? No pains taken in putting it on, simply blotted or smeared over a lot of letters hardly readable. This kind of marking is no credit to any shipper. However, some have clean-cut stencils, accompanied by some nicely-cut figure, such as a cluster of fruit or a beaver or three stars. These may be very good for the coarser packages.

Our fruits, when well matured and uniform in grading, are worthy of the most artistic labels than man can devise.

There are many of this character in use today, and still there is room for many more designs of beauty on labels to be placed on our Canadian fruits that are sent to various lands. Those who admire our fruits as they see them from day to day in boxes, barrels and baskets, or on the trees, should be able to see in them real beauty and to produce something pure and simple in the way of a trade mark to perpetuate and increase our trade in our Canadian fruits from year to year.

FARM BOOKKEEPING GETS RID OF MORTGAGES.

If the farmers of America were as careful as other business men in keeping exact records of their business transactions, their income and liabilitics, there would be far less business for the money lenders, far fewer farms mortgaged to the last fence line, and more automobiles in the country than in the cities.

Believing strongly in the necessity for farm bookkeeping, Dean J. A. Bexell, of the Oregon Agricultural College School of Commerce gives the future ranchers, orchardmen and stockmen in his classes thorough training in the keeping of farm records.

"It is doubtless true that the farmer is becoming a factor to be reckoned with in the business world, that the average farmer knows vastly more about scientific farming than his father did; he understands more thoroughly the value of proper cultivation, of fertilization, of rotation of crops, and of diversified farming; but it cannot be said that he owes his success to improved business methods," says Prof. Bexel!. "He has been successful, rather, in spite of his ignorance in this respect, and because of the lavish generosity of Mother Nature.

"The business of farming assumes two distinct phases: the productive phase and the exchange phase. The one aims to extract the treasures from the soil; the other to place them in the hands of the consumer. It is important not only to raise abundant crops, but also to sell the products to advantage.

"The importance of the exchange phase is often lost sight of. A farm may be forced to yield to its maximum; and yet the net result may be a loss at the end of the year. As a general economic proposition, it might be said that largs crops often result in serious loss to society as a whole. If the net value to the consumer is less than the labor and capital expended on the crop, society is the loser by the difference. Hence the importance of a thorough understanding by the farmer, as well as by the merchant and manufacturer, of the laws and methods of exchange or commerce.

"That farming is a science has been emphasized so much that the fact that it is also a business is often lost sight of. It is a real business, and one which pays the United States close to eight billion dollars annually. It has been demonstrated repeatedly that no legitimate business pays better than farming. It may be a little more uphill work at the start, since most farmers begin business with small capital, but it is incomparably safer in the long run, and will insure a competence for old age with greater certainty than any other occupation. But let it ever be borne in mind that the condition for success is that farming must be conducted on business principles."

A Scotsman who had worked for many years on the railroads among the Highlands of Scotland went to the United States in his later years and settled on a section of homestead land on the plains of the far west.

Soon after his arrival there was a project for a railway through the district. The Scotsman was applied to as a man of experience in such matters.

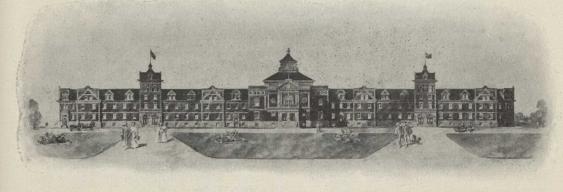
"Hoot, mon," he said to the spokesman of the delegation, "ye canna build a railway across this country."

"Why not, Mr. Ferguson?"

"Why not?" repeated Ferguson, with an air of effectually settling the whole matter. "Why not? Dinna ye see the country's as flat as a floor, and ye hae nae place whatever to run your toonels through?"—Youth's Companion.

The New Home of the Manitoba Agricultural College

When Manitoba Agricultural College first opened its gates to students in the science and practice of agriculture, in November 1906, its site at St. James', Winnipeg, was deemed adequate to provide ample accommodation for all who might attend for a number of years ahead, but so extremely popular did the new institution become their life work. Accommodation is provided for 600 students in agriculture and home economics during the winter months, and for an equal number during the various courses held in the summer. The teaching staff numbers about 35, and consists of men and women of the highest standing and attainments in their various departments,



Girls' Residence

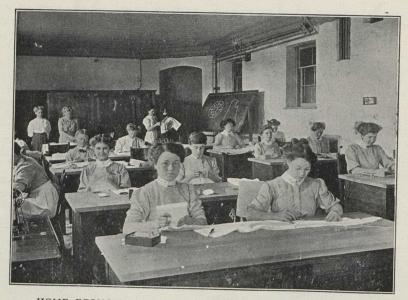
Auditorium AGRICULTURAL COLLEGE, WINNIPEG

with the progressive young farmers of the west and so rapid was the increase found necessary to acquire more land, and erect additional buildings. Owing to the prohibitive price of land in the neighborhood, however, the government decided to move the entire colin attendance, that it very soon was lege to a more commodious site, south of the city, and use the St. James' premises for other purposes.

The magnificent group of buildings shown here have been erected at a cost of over a million dollars, on a beautiful loop of the Red river, and are unsurpassed anywhere in the Dominion. All the buildings are of brick, stone, or reinforced concrete, and the Manitoba government has spared no expense to provide and equip a college where young men and women from country homes may be splendidly trained for headed by President W. J. Black, B. S. A., to whose wise and able direction and unsparing devotion must be attributed in no measured degree the high place which Manitoba Agricultural College has won in the affectionate regard of the western people. When the news is flashed over the wires that the "College boys" are first in the International Grain Judging Competition at Lethbridge, or have won distinction at the Chicago Livestock Show, the whole province is thrilled, and rejoices proudly as one family.

Boys' Residence

During the five winter months two courses are held. One in Agriculture for young men and one in Home Economics for young women. The principal course in agriculture covers three winters of five months each. During the first year much time is devoted to the study of principles, and in the other



HOME ECONOMICS STUDENTS AT WORK IN SEWING ROOM-Manitoba Agricultural College.

two years application is made of these principles to the various phases of farm life. The course leading to the degree of Bachelor of Science in Agriculture covers five winters. In March last twelve students graduated, being the third class on whom degrees were conferred.

Visitors to the College are always welcome, and it would well repay travellers going through to the east to stop off at Winnipeg long enough to take the car out to St. Vital and visit the Agricultural College amid its picturesque surroundings on the banks of the Red River.



MANITOBA AGRICULTURAL COLLEGE-Students Receiving Instruction in Traction Engineering.

The Salvation Army's Farm Settlement on Vancouver Island

Those who have watched with interest the progress of the little farming settlement which was started a short time ago by the Immigration Department of the Salvation Army in the Comox-Atlin district of Vancouver Island will be pleased to know that the success of this experiment is now assured.

The Coombs Colony consists of some fifteen farms, each one containing twenty acres. Five acres are cleared on each farm before it is occupied, a four-room house and barn erected and a certain amount of fruit trees planted. Ten years are allowed in which to pay off the purchase price of the holding, the terms of which are reasonable. A number of the settlers have had farming experience in the old country, but those who may lack this knowledge are taught practical farming at the Experimental Farm: which is under the direction of Adjutant Thompson and Resident Manager An acre was planted Ensign Crego. this year with one of the best varieties of strawberries, which turned out exceedingly well and fetched over \$800. One settler has planted three acres with one hundred dollars' worth of fruit trees, and looks forward to a good return within a few years. All small fruits and nearly every kind of vegetable can be grown with success and the farmers are said to be well satisfied with their purchases and to be all doing well. Those who have no capital at all are, of course, somewhat handicapped by being unable to give as much time to their own farms as they would wish, it being necessary for them to obtain daily work in order to They are considerably cheered live. by the splendid fields of rye which were grown this year and are all looking forward to great achievements next year. The provincial Government has made a road from Nanaimo to Coombs at which point the Esquimalt and Nanaimo Railway Company have built a station.

SOUTH VANCOUVER SCHOOL BOARD WOULD HAVE PRIN-CIPLES OF AGRICULTURE TAUGHT TO SCHOLARS.

The resolution which the South Vancouver Board of School Trustees proposes to introduce at the Convention of School Trustees, to be held at Victoria this month, reads as follows:

"That this convention, having in mind the enormous agricultural possibilities of British Columbia and realizing the supreme importance of such development to the general wealth of the province, while not in any sense disparaging the encouragement given to immigration, is jealous on behalf of the prospects of the rising generation, whose education is under our charge, and herein resolves that the Government Education Department be urged to introduce into the school curriculum such elementary principles of agriculture as shall turn the minds of the young toward the great possibilities afforded in scientifically cultivating the soil, and allow to be set aside portions of the school grounds for experimental purposes.

"The convention is convinced that such teaching would elevate agricultural pursuits in the minds of the community and tend to maintain in the province a contented, happy and prosperous society peculiar to British Columbia and a credit to the Dominion and to the Empire in which we as a province fill so important a part."

Upbuilding of Stock Industry

In its policy for the development and conservation of the natural resources of British Columbia, the Department of Lands, of the Provincial Government, has not failed to recognize the great possibilities of the upbuilding of the stock industry through the utilization of the pasturage of the unoccupied public lands. Already there has been sufficient investigation to show that the vast natural stock ranges of British Columbia offer exceptional opportunities for the successful development of a large stock in dustry with a great benefit to the Province. At present only a very small part of this forage crop is used, and the problem has been to devise means by which stockmen might be encouraged to locate in British Columbia, and thus to convert this natural resource, now going to waste year by year, into beef and mutton, leather and wool.

One of the chief difficulties inherent in this problem, but which has been successfully overcome, was to work out a plan which, while allowing the ranging of sheep and cattle, on a large scale, would protect the range itself from injury by over-grazing, and above all, prevent range monopoly by large owners, to the disadvantage of our settlers and pre-emptors. This problem necessitated, not only broad consideration of the methods of utilization of the public range adopted by other countries and their results, but also a careful consideration of the local conditions, and the adaptation to the needs of this province of the methods proved to be most successful elsewhere.

Hon. W. R. Ross, Minister of Lands, foresaw that the administration of grazing under the leasing system would offer serious disadvantages in locking up large areas against settlement and other forms of use; and the actual sale of grazing lands would, on the one hand, invite monopoly, and

on the other, require so large a capital investment by stockmen as to retard the development of the industry. He finally decided that under the permit system only, could full protection of the public interest be assured, since under this system the number of stock can be limited to the actual grazing capacity of the range, monopoly can be effectually prevented, and full provision can be made for keeping the grazing lands open for settlement and for the utilization of timber and of any other resources needed in the settlement and development of the country.

The application of the permit system will involve the division of the range into natural grazing districts suitable for sheep, cattle, or for both; and the fixing of the number of head which may be allowed to graze in each, without impairing its productiveness and carrying capacity. Wherever necessary, for the protection of water supply or of game, stock will be excluded. The keynote of the policy inaugurated by Mr. Ross for the administration of grazing is the protection of the actual settler in the use of the range. In the issuance of grazing permits first consideration will be given to small owners of stock, and to owners of improved ranch property. As Mr. Ross indicates, however, the extent of the unused range is still so great that after fully providing for the needs of the settlers' stock, there will remain ample accommodation for large herds of sheep and cattle.

Under the liberal policy established, settlers will be allowed to graze a reasonable number of stock free of all charge. For large herds, however, a grazing fee will be charged, which in the beginning will be merely nominal, the policy of the Government being to permit the industry to establish itself fully before making a change, in accordance with the actual commercial value of the grazing privilege.

The administration of grazing will necessarily be closely bound up with the resources. For, while there are limited areas of treeless range in the Province, the great bulk is forested, excellent natural forage for sheep and for cattle often forming the ground cover beneath the trees. Consequently, Mr. Ross has decided to utilize the trained force already available to effect this new conservation policy. This will add another and most useful function to the work of the Provincial Forest Service, which has already 30 fully demonstrated its efficiency and worth in applying in practice the principles of forest conservation laid down by the Minister of Lands.

It is significant of the timeliness of the policy established by Mr. Ross for the development of the stock, industry, and of its practical possibilities in British Columbia, that applications are already being received, looking to the location by stockmen of grazing grounds for bands of sheep running as high as several thousand.

THE SECOND ANNUAL APPLE SHOW.

After a lengthy discussion it was decided at a meeting of the Vernon Agricultural Society that the second annual Okanagan apple show should be held in Vernon on Wednesday and Thursday, October 22nd and 23rd. It had been the intention of the promoters of the apple show that each town in the Okanagan Valley should in turn hold an exhibition, so that the expense would not fall on any one town two years in succession. It was, however, resolved at a meeting of the Associated Boards of Trade held in January last, that owing to the great success which Vernon had made of the first apple show held in the valley in 1912, it should be accorded the honor of the 1913 exhibition. The Provincial Government, in addition to the regular grant of \$900, have made a special grant of \$1,000, as the sum in the hands of the directors of the show was altogether insufficient to

meet the expenses involved in the holding of an exhibition which would be a credit to the city and district. Last year the citizens and fruitgrowers, and the corporation, made generous donations toward the expenses, but it would not be possible for them to contribute on the same scale two years in succession. It was the opinion of several present at the meeting that the towns down the lake should make donations. It may be necessary to cut the prize list somewhat, but everything possible is being done to make the 1913 exhibition as good in every respect as it was last year, as all concerned are aware that the Okanagan Valley has now reached such a stage of fruit production, and world-wide reputation therefor, that every possible attempt should be made to uphold an annual exhibition of the products for which the valley is so deservedly famous.

Raising vegetables, grains and fruits by electricity is the latest in scientific farming.

The "electric method" of forcing an abundant yield is being used by Samuel Insull, president of an electric company, on his farm near Libertyville, Ill. Those who visit the Lake county fair in Libertyville may see Mr. Insull's "electric" fruits, vegetables and grains. W. E. Miller, who has charge of Mr. Insull's exhibit at the fair, consented today to tell "just how it is done."

"Any one who knows anything about electricity knows it is a great fertilizer." Mr. Miller said, as he pointed with pride to the collection of cabbages, fruits, grains and grasses which comprise the Insull exhibit. "Through wires in the ground an electric current is run at intervals. As a result the vegetables and fruits and grains that are raised in this electrified soil are wonders of their kinds.

When a man doesn't know just what to sav, he generally says it anyhow and then regrets it.



Mr. Dobie Replies.

Victoria, B.C., Sept. 3, 1913.

To the Editor:

About a month ago I had a letter from a farmer at Langley in which he stated that he had made a test of superphosphate, using red litmus paper, and found that the paper turned blue, showing that the sample was alkaline, and he was greatly concerned for fear the fertilizer was so strongly alkaline that it would prove injurious in the soil. Now comes Mr. H. M. Eddie's letter in your September number, in which he states that his test turned blue, litmus red, and therefore he thinks the fertilizer was terribly acid. Surely these gentlemen should know that the litmus test is an exceedingly delicate one, and as a guide to the amount of either acid or alkali in a fertilizer such a test is utterly valueless. If Mr. Eddie will take a sample of any well made superphosphate and have it analyzed by a competent analytical chemist he will find it to be almost neutral, and, if free acid is found, it will be in such very small quantity that it cannot possibly do any injury. Mr. Eddie quotes some figures to prove "the usefulness of nitrate of soda in conjunction with farmyard manure, and the superiority of the latter exclusively over artificials exclusively." These figures prove nothing further than that the particular soil where the test was made gave such results, and for every such result obtained another test under different conditions of soil and crop will be found to give results quite contrary.

That Mr. Eddie is interested in horticulture is shown by the fact that he has gone to the expense and effort necessary to become a Fellow of the Royal Horticultural Society, and it is safe to assume that he is interested in the success of growers generally. But surely he must know that to make sweeping general statements is always dangerous. After having spent the best years of my life in the study of soils and fertilizers, and after making and superintending hundreds of experiments in all parts of British Columbia and elsewhere on every variety of soil, I would not think of attempting to lay down hard-and-fast rules, because the farmer will frequently be called upon to use his own judgment, and no one knows the soil and its history as well as the man who has lived on it and worked it for years.

We cannot fail to feel keenly our limitations when we consider that vastly wiser and abler men have devoted their lives to a study of this great subject, and in the end have felt that comparatively little has been accomplished. All we can do is to work on faithfully, cherishing in all humility the hope that our efforts may aid, be it ever so little, in arousing interest in, and spreading the knowledge of plant foods, the sources from which they may be derived, and their practical application to soils. It should be indeed ample reward to feel that in some small measure we have helped to not only maintain but increase the fertility of the soil, thus ministering to the wants and comforts of "generations yet unborn."

Yours very truly,

M. H. DOBIE.

What Our Readers Say About "Fruit and Farm."

"Thank you for the copies of "Fruit and Farm" just to hand, with which I am much pleased."—John Dilworth Harrison, "The Briars," Longfield. Kent, Eng., August 2, 1913.

"We are in receipt of your letter, and beg to say that we think your publication has greatly improved." Pacific Box Co., Ltd., Vancouver, B.C., August 8th, 1913.



"We have heard great reports in regard to the magazine which you publish concerning fruit growing and other agricultural pursuits, and would be pleased if you would forward copy and price per year when we will send money along." Ward & Leonard, Orchardists, Moonah, Tasmania, 26 June, 1913.

"I enjoy reading your Fruit Magazine very much."—E. H. Wartman, Dept. of Agriculture, Montreal, Aug. 15th, 1913.

"The writer has not seen the magazine for a year and a half, and must congratulate you on the amount of reading material you have collected for the September issue."-O. B. Appleton, Procter, B. C., Sept. 11, 1913.

"I like the magazine as it is firstclass, and greatly improved, and I hope its publishers will prosper." — John O'Brien, Lorane, Oregon, Sept. 14, 1913.

TWO GREAT VALLEYS.

Speaking of his impressions of British Columbia after such a long absence, Sir Gilbert Parker said: "I think the Nicola Valley and the Columbia Valley are both extraordinary, each in its own way. The Columbia Valley offers magnificent opportunities for what we call close settlement or intensive culture. I do not believe the rather spectacular advertising of that district has been overdone. There is a wonderful stretch of bottom land on either side of the Columbia River which, while requiring irrigation, will not require that heavy irrigation which is necessary in the great fruit-growing districts of Mildura in Australia or in the Pasadena district in California. should think a good deal of the land would not require irrigation at all. Indeed there are settlers now growing splendid crops there without irrigation.

Small Cultivators.

"With properly organized settlements of small cultivators the Columbia Vallev ought to obviate the necessity of Vancouver importing thousands of dollars' worth of vegetables, fruit and other products which belong to small farming. The Nicola Valley is different, different in physical characteristics and in climate conditions as I conceive them. It has splendid uplands rich in nutritious constituents for cattle feeding. One thing which struck me in both valleys was the fine condition of horses and cattle. Both valleys present remarkable opportunities for mixed farming, and I see no reason why they should not contain a prosperous population. I should think that the Nicola Valley would be as successful for dry farming as is Arizona.

"This province offers amazing opportunities for success for a pastoral and farming population. I am convinced that the attention of British investors will be increasingly directed to British Columbia during the next ten years. There is a class of settler which this province requires which the prairie provinces do not attract-the man who wants to go in for mixed farming and who has an initial capital of \$4000 or \$5000. Then there is needed the small man with perhaps no capital, but who would be given an opportunity by big companies to acquire a small piece of land. He can build with others in communities a thriving business in fruit-growing and garden products for the ever increasing markets, not of British Columbia alone, but of the provinces east of the Rockies."

A military gentleman who could swear better than he could play golf was flattered one day to find quite a crowd of well-dressed strangers following him round. "I hope," he said gallantly, "that I can play well enough to reward you?"

"Oh, it isn't that, Major," replied one. "We came out to listen."

An Octogenarian Driver in B.C. Race

"Look at that old man. Surely he isn't going to drive in this race!"

The same exclamation fell from scores of onlookers at different fall fairs last month, when in response to the judges' bell, a white whiskered jockey quietly drove past the stand, and signalled for recognition.

Undoubtedly no other tracks in the world present a parallel to this—a man of 84 summers driving in a crowded field, with the self-possession, alertness and skill of a horseman in his prime. No wonder that as he came past the grand stand the crowd rose en masse and accorded him the ovation of the day.

This veteran driver is J. W. Hollingshead and he makes his home at Ladner, B.C. He loves the turf and horses, to the exclusion of almost every other interest. Born in the Genesee valley he has followed the races from his earliest youth. He rode in the early trotting races before the sulky had supplanted the saddle. In his far eastern home in the middle west, and for a quarter of a century in this province, he has been a consistent lover of the horse and an unfailing devotee of the sport of kings.

His interest in racing extentds back of the race-course to the breeding stables. To him and to the product of his paddocks, British Columbians owe many a good day's racing. He has bred some of the best trotting strains ever produced locally—the famous King line represented in his present stables by Great Northern King, B. C. King, Jemima King and Dandy King. Palistine, his pet, broke its leg a year or two ago and had to be destroyed.

In this fall's races Mr. Hollingshead himself drives his old favorite B. C. King, now thirteen, and which in spite of superior competition still runs an honest race. The veteran octogenarian driver with his snowy beard and stooped figure, still has as firm a seat and holds as true and steady a rein as many younger men.

He allows none of his drivers to use the cruel over-draw, which so many horsemen deem indispensible to securing a maximum speed. One of his drivers, in conversation with the writer, expressed the opinion that he could get several seconds off his animals' record if its owner would permit him to employ the over-draw, but the latter wouldn't hear of it.

In connection with Mr. Hollingshead's good health and vigor, it is interesting to note that he is a great believer in milk and rice, as staple articles of diet, and that he neither smokes nor takes stimulants.

After one of his races at Vancouver the writer visited Mr. Hollingshead in the racing barns and found him engrossed in a deal for hay and grain with a broker. He is astir still with the sun and shames many younger men by his industry and by the attention he pays to every detail of his business.

Fifty-four grade Holstein cattle, of selected breed, imported from Hamilton, Ontario, by the Provincial Government, were sold to eager buyers at Vernon recently, and the sale netted the government close to \$6,000.

The sale was formally opened by Hon. Price Ellison, who, in his speech, advocated the culture of alfalfa, even to the exclusion of timothy hay. Mr. Ellison also dwelt at length on the beneficial effects to British Columbia and the Okanagan Valley of the greater interest in mixed farming.

What is the Actual Selling Value of a Cow?

By Geo. P. Gront.

This question is often asked by the farmer and the man who does not ordinarily deal in cows. It is a question well deserving an answer, and should demand much thought and consideration on the part of a man who attempts to make a reply. The value of a cow should depend largely upon what she is capable of doing at the pail. If she is a good producer, she is worth more than an ordinary cow or scrub, all will admit that, but just how to estimate roughly the selling value of all cows has been problematic. In a recent talk before the Jackson's Farmers' Club, the writer attempted to answer the question of values on cows regardless of breed, and will attempt to put on paper as full a reply as was given them.

The Commercial Value.

The commercial value of a cow now and possibly for all time to come, should be based upon first, her individuality. She must be sound, a sure breeder, and between the ages of three years and eight, as a first consideration granting this, her value will depend upon her record or possibly her estimated record if the buyer has a speculative turn of mind.

In times past, the value of a cow has been largely an estimated value, and with this estimate, the buyer often took into account the looks more than any other one thing. This, in so far as the buyer is able to read the relation of form to production, is a most excellent way of judging. The more modern way of fixing the price would be to name it upon a cow's ability during her lactation period. This necessitates testing of a herd, but no thoroughly practical dairyman would think of conducting a dairy without doing this so the testing of itself is a new thing. My method of estimating the value of a cow would certainly be an incentive for all farmers to weigh and sample the milk from their herds.

The average Minnesota scrub cow is worth about \$48.00 for the dairy, if she is fat she is worth more for beef than for dairy purposes. This cow produces about 160 lbs. of butter in a year according to Prof. Haecher and Commissioner Winkjer. This is arrived at by adding 1.5 to the butter fat for over-The average price paid for butrun, ter is 30 cents the year round or thereabout. If the average cow produces 160 lbs. of butter in a year, which will sell for 30 cents, she will produce in gross profit \$48.00. If the cow is capable of making 320 lbs. of butter in a vear, she is worth double this amount or \$96.00. If she is sound and can do this she is worth the sum mentioned regardless of her looks, but the chances are very good that, in order to make as good a showing as this, she had had at least one cross of good blood in her veins.

The practical man with the cows will at once admit that this will catch the selling values very near in most cases. But when a man asks over \$100 for a grade cow the buyer usually thinks the seller is unreasonably high in his prices. Let us stop to consider that, if a grade is capable of producing 460 lbs. of butter, you have very little more food of maintenance to feed her than you need for the 160 lbs. cow and still have only one cow to care for and milk. The 460 lbs. butter cow should be worth \$138.00 to the buyer, and the seller ought to receive more for a cow of this kind on account of her skill in breeding, and to pay the actual expense of testing his herd. The commercial value then, regardless of any sentiment connected with the sale of a good dairy cow, should be based on her yearly production. A buyer can afford to pay as much cash as she will return gross profit in a year. If a grade cow has enough good top crosses to cause her to produce 550 lbs. of butter, she should be worth in any common dairy, where she is not to be turned off for beef, \$165.00. If she will produce 550 lbs. butter in one year, she should produce a reasonable amount every year. Aside from her increased value because of her individual ability over that of the average scrub, this ability is transmitted to her heifers, and they, in turn, are more valuable to keep in the herd.

What is the Real Value of the Pure Bred?

The commercial value of the pure bred is a difficult matter to decide. It will never be answered accurately because there are animals whose pre-potent powers can never be estimated by rule. In general, however, a pure bred is worth four times as much as a grade, and we get at this valuation by the selling value of the bull calves. Many breeders are not selling their pure bred females so no returns can be figured on them only in the building up of their herd, because until either they or their progeny are sold, they have no greater value so far as production is concerned than a high producing grade The real additional value because of the pedigree, comes when stock change hands.

A dairy cow lives to the approximate age of $10\frac{1}{2}$ years. She drops her first calf at $2\frac{1}{2}$ years, so that she should give her owner eight calves during her life time. Half of these are bulls, which, from a grade cow, have little or no commercial value, but, if from a pure bred cow, they can be sold according to the record of the dam. If she is one of those 350 lbs. of butter cows. as she must be in order to be worth \$400.00, the average of her bull calves, if sound, would be worth \$100.00 each. Four of these are worth \$400.00, and the owner has the heifers to pay the interest, risk and investment. If a

pure bred has made an honest record of 600 lbs. butter in a year, she is worth in round numbers \$700.00, and the average estimated value of her bull calves would be the same amount until it is learned by actual trial that they do not transmit their inherited ability to their daughters.

You ask, if we do not give the sire credit for his inherited ability at production? Most certainly, we go on the supposition that a cow is always bred to a bull with at least as good blood lines as she herself has. This should be, and nearly always is, the case in common herds.

A heifer at one year old is worth about half the value of her dam, not more, because it requires a year's feed and care to bring her into milk and the risk in buying heifers is much greater than when buying cows that have at least one good calf.

Estimating the Value of a Young Bull.

To return to the matter of estimating the value of a pure bred bull calf either to sell or place at the head of a herd.

This article has based all valuations on yearly records, but seven and thirty day records are also of value in estimating what a cow may be capable of doing during her lactation period, and especially so if this record for seven days is made ten or eleven months after calving.

In estimating the commercial value of a bull calf, the record of his dam is of first importance, then the records of at least two of the sire's A. R. daughters from different cows. These should be added together and an average found. To this average add the record of the calf's dam, and average again. If the sire of the bull calf in question is not old enough to have tested daughters, an average of the sire's estimated inheritance should be struck by adding the record of his dam and either two of the grandsire's A. R. daughters records or the record of his dam, and go one step further back for tested daughters. It would thus be seen that the first dam's record counts half in fixing the young bull's value, while the dam of the sire only counts one fourth.

Record prices of thousands for pure breds are only warranted as a rule for a splendid individual backed by a long line of record dams and producing sires which gives reasonable promise that the young bull must get producers. If when a bull comes to maturity, a large percentage of his heifers are much better than their dams, the bull is priceless in value if kept in a good herd.

To Recapitulate.

1. The value of any dairy cow, granting she is sound and not too old, should be based upon her ability at the pail.

If she produces 160 pounds of butter in a year at 30 cents, she is worth \$48.

If she produces 260 pounds butter in a year at 30 cents, she is worth \$78.

If she produces 360 pounds butter in a year at 30 cents, she is worth \$108.

If she produces 460 pounds butter in a year at 30 cents, she is worth \$138.

If she produces 560 pounds butter in a year at 30 cents, she is worth \$168.

If she produces 660 pounds butter in a year at 30 cents, she is worth \$198.

2. The estimated value and selling price of a yearling heifer is half that of her dam as figured above.

3. The estimated value of a pure bred cow is four times that of a grade based on the above figures. By this way of figuring, the 660 lbs. pure bred is worth \$192.00. As a matter of fact, the 160 lbs. pure bred is not worth anything if that is all she is ever capable of making.

4. The estimated value of a pure bred bull calf is the average of the sum of his dam's record in pounds of butter taken with the average production inheritance of the bull's sire; for example, if a well marked and good individual bull calf is out of a 400 lb. fat dam or 480 lbs. butter, as we have been figuring, and his sire has two A. R. daughters whose average record is 500 lbs. fat or 600 lbs. butter, or his dam has a record of 500 lbs. fat, and the grand sire two A. R. daughters with an average of 500 lbs. fat, and 600 lbs. butter, we add the 480 lbs. and 600 lbs. together, divide by 2, and we have 540 lbs. of butter, multiplied by 30 cents gives \$162.00, the estimated selling price of the bull calf.

5. Some animals whose prepotency has been demonstrated are priceless in building up a good herd.



A new industry for the fruitgrowers of the Okanagan Valley has been opened up by the experiments of Assistant Fruit Inspector W. H. Lyne, who has demonstrated that it is possible to make sun-dried apricots in the Okanagan equal to the best dried fruit imported from California.

This discovery, it is expected, will greatly assist the fruit-growers who have in the past frequently suffered losses through fruit ripening too fast for successful marketing. The apricots and peaches for the fresh fruit market have to be gathered while they are still on the green side. This allows for the fruit to ripen in transit.

It frequently happens that the fruit is left a little too long on the trees, and it then is not worth picking. In one case nine tons of packed fruit had to be destroyed because of being too nearly ripe when picked.

In the future all such ripe fruit can be split and pitted and sun-dried in the orchards, realizing for the owner almost as much profit as if he had got his fruit into the market in prime condition. The process is simple, a short exposure to sulphur fumes in order to bleach the fruit and prevent it turning black while drying, being the chief element. For the rest, from five to nine days' exposure on trays to the hot rays of the sun is all that is required to put the fruit into the sun-dried condition. Peaches can be similarly treated, though being a larger and juicier fruit require longer exposure.

Inspector Lyne, who has had considerable experience as a fruit expert in California, is very pleased at the result of his experiments, as the ability to sun-dry the fruit crop in emergency will save the fruit-growers from their chief source of danger and loss.

New Co-operative Marketing Association

Sixty representative fruitgrowers in West points from various Kootenay went on record at a meeting in Nelson town hall, as favoring the organization of an entirely new co-operative marketing association on the lines of that formed this year in the Okanagan district, under the provisions of the new Provincial Aid to Agriculture Act, by which the Government gives assistance to the extent of a loan of up to 80 per cent. of the subscribed capital stock.

To take the matter up and formulate plans for the organization of the new association, a committee, consisting of Dr. N. Wolverton, J. J. Campbell, Frank Tarry, J. C. Harris, Leonard Appleton and Gordon Hallet, was formed.

Mr. Hallett was elected to the chair and Raymond T. Hicks, secretary of the Kootenay Fruitgrowers' Union, acted as secretary.

Wants District Large.

Although no definite decision was reached as to the territory to be embraced by the new association, it was urged by W. E. Scott, Deputy Minister of Agriculture, who addressed the ranchers on the co-operative marketing and purchasing question, that the district be made as large as possible, and he suggested that the various sections of West Kootenay and Boundary might all join together. The greater the territory covered, he pointed out, the lower would be the overhead charges and the better the opportunities for marketing on a large scale.

After referring to the splendid quality of fruit produced in Kootenay, Mr. Scott emphasized the need of an efficient co-operative marketing association, stating that although the output up to the present had not been great a large acreage was now coming into bearing. To very bad business management and to lack of proper organization and co-operation he attributed most of the failures of marketing organizations in the past.

Explains Proposed Agency.

The new marketing organization in the Okanagan district, which had been formed this year under the new aid to agriculture act, had proved successful, said Mr. Scott, in placing before the meeting a proposal that a similar association should be organized in West Kootenay and Boundary districts. In each section of the district embraced by the central organization local associations would be formed, each receiving loans fro mthe government on a basis of subscribed stock.

Fruit from these local associations would be marketed, as in the Okanagan, by a central agency, conducted by an executive composed of members of the various local associatians. When district marketing agencies had been formed throughout the province the ranchers would be in measurable distance of the central provincial selling agency for which all were working. But it was absolutely necessary that the district organizations, governing the local associations, should first be formed and in working order.

To compel every member of the local associations to ship all his produce through the organization to which he was attached it had been found necessary to bind him by a contract which could be enforced in the courts. If this were not done some of the farmers would break away from the organization, sell individually and prevent the attainment of the objects of the co-operative agency. To the lack of central organizations which would dispose of the produce of the local associations he attributed some of the failure in the past; the small associations had been cutting each other's throats, said the deputy minister.

New Line to Open Coast.

While the prairies were the big market for the British Columbia fruit growers, the cities of Vancouver, Victoria, New Westminster and Prince Rupert were large consumers and would form a more easily accessible market for interior growers on the completion of the Kettle Valley line. There was no fear of over-production in British Columbia, as the consumption today was greater than the total output. Against the advantages of the United States growers, who had slightly cheaper labor and supplies and better marketing facilities, the fruit growers of this province had the benefit of a protection of 13 cents per box and also had lower freight rates from most points in British Columbia to the prairies than those enjoyed by the ranchers to the south.

More attention should be paid, he said, to reducing the cost of production, the expense of caring for the orchards, and by co-operative purchasing of supplies.

Honest packing and grading were essentials to successful marketing. Under the scheme proposed for the new Kootenay and Boundary association the fruit would be packed by the local associations and would be subject to a rigid inspection by the central agency.

With regard to the finances of the agency and the local organizations, Mr. Scott explained that the capital would be kept intact as overhead charges would be met out of a levy of so much per box for handling, the charge being fixed in accordance with the expenses. None of the capital would be used for running expenses. Warehouses would be built or acquired by the local associations, all the central agency required being an office. The local associations would contribute the funds for the operation of the central selling agency.

FIGHTING THE CABBAGE FLY.

Dominion Entomologist Is Making Practical Experiments at Agassiz.

In order to test the efficacy of treatment for the extermination of the cabbage fly under conditions similar to those which a farmer must face, Mr. R. C. Treherne, the Dominion entomologist at Agassiz, is growing cabbages and turnips in patches of two acres each. Experiments are being carried on daily.

So far, the cabbage fly has proven invulnerable to all of the usual methods of treatment to destroy the eggs, which are deposited on the ground near to the stalk of the growing plants. The roots and later the plant itself is attacked by the swarm of young flies. The only successful treatment discovered so far is to wash the plants with an emulsion of carbolic soap as soon as the young flies are hatched.

The cabbage fly is regarded as the most serious pest which the truck farmers of the Vancouver and Delta districts have to contend with.

Alfalfa Fireguards.

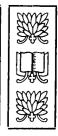
Much of the loss to crops, buildings and other improvements, caused by railway fires in cultivated sections of the Prairie Provinces, could be avoided if farmers would raise some noncombustible crop on a strip of land adjacent to railway rights-of-way. Alfalfa is suggested in this connection, since this crop will not burn, and a narrow strip will form a thoroughly efficient fireguard. Where clover can be grown successfully, it will answer equally well. The growing of potatoes, beets, or other root crops, will serve the same purpose, where local market conditions will permit. This would be a step in the much-to-be-desired direction of diversified farming .--- C. L. in "Conservation."

The Woman's Page

Conducted by Kathleen Ferguson.



The lady who conducts this column is so well known to many British Columbians that she requires little introduction to our readers. The author of a number of recipe books herself, she has shown great skill in adapting her technical knowledge of household science to British Columbia conditions. In this column she will give reasonable hints to our lady readers to fit the season and its fruits and fishes, and its vegetables. Kathleen Ferguson is now a mistress of her own house, and has an opportunity to practically test everything she submits to the readers of Fruit and Farm.



On Christmas Cookery.

The title of the page this month will surprise many of my readers, as doubtless Christmas seems as yet a very long way off, but I know by experience how quickly it comes upon us, and for many reasons it is so much wiser to think of it in time as far as housekeeping is concerned. To begin with, if we leave the Christmas cooking until near Christmas there is such a rush, and so many things to be done that it becomes almost an intolerable burden. Whereas, if we begin to think of it now we have plenty of time at our disposal. The summer amusements are over and the evenings are shortening; altogether life takes a much quiter aspect, so that no better time could be chosen for Christmas cookery. Another pursuit to remember is that eggs. a very important item, are now cheaper than they will be later on, though, of course I know that many have preserved them, at the same time, for various reasons there are many who cannot do so, and each month now we shall have to pay more for them.

Suet is another very important item of Christmas cookery, if we leave it until later on everybody is rushing for it, and we have to take whatever we can get instead of having the best and richest beef suet, which is that found round the kidney; and also butter will be cheaper and all other ingredients fresher and better. A little time each day or evening given to preparing currants, raisins, etc., will not be felt, and very soon all our Christmas food will

be stored in a dry cellar or larder, so that if the housekeeper meditates on all these points she will find that I am right and that now is the time to look ahead. Another well known point is that rich cake and plum pudding improve by keeping and the food will taste better if made beforehand. In latter days we are much helped by being able to buy raisins stoned and currants cleaned, at the same time a little additional cleaning does the currants no harm, and I think it well to buy some of the good table raisins and stone them at home and mix them with the others, as the stoning by machinery takes away some of the juicy inside of the raisin.

Having put all these points before you, and having I hope convinced you of the wisdom of beginning Christmas cookery now, I shall give you recipes which have been found good and also not too extravagant. One point I wish to impress on my readers is that the addition of brandy or whiskey is not a necessity, though it does improve the flavor and also the food keeps better when it is added; but so many object to spirits in any shape or form that I wish to say to them leave it out by all means; but I mention it as it comes in the recipes and some people like the addition of spirits to Christmas fare.

Mince Meat—Take ¾ lb. of beef suet chopped, ¾ lb. of raisins, stoned; 1 lb. of currants, cleaned; 1 lb. of apples, peeled and chopped fine; 1-8 oz. of powdered mace and powdered cinnamon, mixed; 1-8 oz. powdered

cloves, 3/4 lb. of fine sugar, 1/4 saltspoonful of salt, juice and rind of one lemon, 1/4 lb, mixed peel chopped fine, 1 glass of brandy and port Mix all these ingredients mixed. well together in a bowl, stirring well, then put the mixture into jars and cover, and from time to time, about once a week or so, stir the mince meat in the jar so as to mix all the flavors. At Christmas this mixture is put into pastry cases and baked to form mince pies. Buy at any hardware store about 12 mince pie tins for 10 cents. Make any pastry you wish. I generally prefer the rough puff or flaky pastry. Have a cutter a little larger than the mince pie tin and cut out rounds of pastry. Having rolled it about 1/4 inch in thickness, grease the tins and place a round of pastry on it, into the centre put a good spoonful of mince Put another round over the meat. top, wetting the edges, and press the two rounds together. Bake for about ten to 15 minutes in a hot oven until a nice brown color. If you have a little white of egg at hand brush over the top and shake a little coarse sugar over it, but this is not necessary. These mince pies can be eaten hot or cold and will keep a long time and can be reheated when want-Where there is a large family ed. simple pastry can be used and a quantity made together and kept air-tight in a biscuit tin or jar.

Plum Pudding— $\frac{1}{2}$ lb. beef suet chopped fine, 1/2 lb. raisins stoned, 1/2 lb. currants, 1/2 lb. sultanas, 1/4 lb. mixed peel chopped, 1/4 lb. bread crumbs, a little salt, 1/4 lb. flour, 1 lemon, 1 level teaspoonful of allspice, $\frac{1}{2}$ lb. of dark moist sugar, 4 eggs, 1/4 pint of milk, 1 glass of brandy or whiskey, $\frac{1}{2}$ nutmeg grated, 2 oz. of almonds sliced. Chop the suet by first shredding it, very fine, and removing any bits of skin which adhere to the knife, by first shredding it it is much more quickly chopped, which many do not think of. Having shredded the suet, stone the raisins, clean the currants and sultanas, chop the peel and almonds if almonds are liked, some

people prefer the pudding with almonds only on the outside. Mix the flour and suit in a basin, add salt, bread crumbs, currants, raisins, sultanas, peel, sugar. Mix all well together, grate in half a nutmeg, rind of a lemon and add almonds, if liked. Beat up the eggs, mix them with the milk and brandy, add this to all the other ingredients, mix the pudding well, stirring with a large wooden spoon; the thorough mixing of a plum pudding is very essential. Turn the pudding into a large greased pudding bowl, tie a cloth over the top of the bowl, put the bowl into boiling water and allow the water to boil quickly from five to six hours. Then hang the pudding with bowl and cloth as you take it out of the water in a dry place. On Christmas day boil it again for two hours before serving it. Some people like the old fashioned way of putting the pudding straight on to the pudding cloth, having first greased the cloth and shaken a little sugar over it, it then comes out in a round shape. such as we see in pictures; almonds are sliced and stuck all round the outside, and a bunch of holly is stuck in the top. Some pour a little whiskey on the dish and light the whiskey as the pudding is being carried to the table; it is certainly a pretty sight and children above all delight in seeing the pudding surrounded by flames.

- Sauce for Pudding (1) A favorite sauce, though very rich, is called Brandy Butter or Guards Sauce. Work with a wooden spoon half a pound of fresh butter to a crean, add to it 4 ounces of icing sugar and one or two tablespoonfuls of brandy, work all again to a cream. Put it on ice if possible until hard, cut it into slices or rounds, or any shape liked, or just serve piled on a small glass dish. A little does each person, it is so rich.
- **Cornstarch Sauce**—Take $\frac{1}{2}$ pint of water, 2 teaspoonfuls of sugar, and boil together for a couple of minutes, then stir in two level teaspoonfuls of cornstarch blended in cold water.

and add a little flavoring or a little brandy. Milk may be substituted instead of water, and if an egg is added and whisked into the sauce until it becomes frothy it makes a most delicate sauce.

- Rich Christmas Plum Cake-Take 1/2 lb. flour, 1/2 lb. dark brown sugar, 1 lb. sultanas, 1/4 lb. candied peel chopped, 1 nutmeg grated, 1/2 lb. butter, 2 oz. of sweet almonds sliced, 6 eggs, 1/2 lb. raisins stoned, 1 lb. currants, 1 level teaspoonful ground mace, 1 level teaspoonful ground cinnamon, 1/2 wineglass of sherry, 1/2 winegless of brandy. Mix the sherry and brandy together and put the spice to steep in it overnight. Beat the butter and sugar to a cream, add yolks and flour alternately, lastly stir in fruit, etc., add spice, etc., and also the whites of the eggs beaten to a solid froth. Bake slowly in a moderate oven for three or four hours until a skewer run into the cake comes out clean. Allow the cake to get cold and then ice the cake well, almond icing and a couple of coatings of hard icing; put it in a tin, box or cake tin, until near Christmas, then put a fresh coating of icing and decorate the cake.
- Almond Icing-Take 1/2 lb. ground sweet almonds (they can be bought ready ground), 6 oz. of fine sugar, 2 teaspoonfuls of vanilla essence, 1 teaspoonful of essence of sweet almonds, a squeeze of lemon juice, 1 tablespoonful of sherry, 1 tablespoonful of brandy, 2 yolks of eggs, or one whole egg if economy is sought. If 2 yolks are used the icing is of a richer color, and the whites can be used for the hard icing. Put all the above ingredients into a bowl and knead them all together with the hands into a round ball, place this on top of the cake, flatten it down and smooth it with a knife dipped in cold water. Allow the icing to get quite stiff, then put on a coating of Royal or hard icing.
- **Royal Icing**—1 lb. icing sugar, a squeeze of lemon juice, 3 whites of eggs, mix sugar and lemon juice and white of eggs together, beat well

with a wooden spoon to give the icing a glossy appearance, the more vou beat the glossier it becomes. Spread it thinly over the cake with a knife dipped in cold water, and let the coating get dry and hard before applying a second one. It is a good plan to brush over the cake with a little white of egg and allow this to dry, it keeps the crumbs from coming through the icing. At Christmas time put on the last coating of icing and decorate according to taste. If you have not the regular decorating pipes, make a pipe out of stiff paper, rolling into a cornucopia shape; it does quite well for decoration. It is so difficult to get sugar a really white color that I think a pale pink coating for the last one looks well, with white decorations. I think with a little care anyone can have a pretty cake, and one should take trouble to have extra dainty cakes, etc., at Christmas. It is a good old custom and should not be allowed to die out.

Christmas Turkey-Though you will not cook the turkey until Christmas Day, my lesson would not be complete without giving you some hints for doing it. First of all try and get a turkey that has not been in cold storage, this of course in a city is almost an impossibility, but try to do so if you can. If you have to get one from cold storage thaw it well before cooking it. Keep it in the kitchen for a couple of days to get all the frost out of it. Pluck, singe, draw and truss the turkey as you would a fowl. In a city you can get this done for you. Stuff the turkey, put it into boiling water and boil from one hour to 1¹/₂ hours according to the size of the turkey. Boil it slowly, in fact, simmering gently is what it should be. Serve with celery sauce, and also serve cranberry jelly. To have the turkey well flavored add to the water in which you boil it plenty of vegetables, such as onions, leeks, celery, carrots and a bunch of herbs, a few peppercorns, a blade or two of mace, half a dozen cloves; then when you

remove the turkey you have good white stock for soup.

- Stuffing for Turkey varies. Some like sausage meat; this the butcher sends prepared. If not skin 1 lb. of sausages, add some bread crumbs and fill the turkey with it. In England only the neck is stuffed; in Canada the bird is stuffed in the body, which I think much more sensible as it improves the flavor of the bird and everyone can have a good helping of stuffing. Ovsters are used for stufffing, also chestnuts baked and mash-This must be just as the ed fine. housekeeper wishes. Some like the ordinary fowl stuffing of bread crumbs, chopped suet, mixed herbs and eggs to wet it. The liver of the turkey should be boiled and chopped and added to the stuffing.
- **Celery Sauce.**—Boil some celery, having first washed it and scraped it and removed any stringy matter, putting into cold water and allowing the water to come to the boil. Then remove the first water and put it into fresh boiling water with a squeeze of lemon juice. Boil until

tender then chop very fine; make the ordinary white sauce, add the chopped celery, pepper and salt and serve hot. Many like the celery passed through a wire sieve to have it very fine. The white sauce is made with 1 oz. of butter, 1 oz. of flour, stirred together in a saucepan, and half pint of milk added slowly and boiled for three minutes and stirred to prevent lumps.

I think now that I have given enough Christmas advice and I do hope that my readers will find some useful hints. As this has been a long lesson I am not adding any laundry notes this month.

I have been wishing that readers would send in questions to be answered; is it diffidence, or is it that they do not feel the need of doing so? It is helpful to all readers, and would make a pleasant addition to this page. Nothing is charged. You enclose your question to the editor who sends it on to me, and I give the answer in the following number. Some reader open the ball by sending a question for the November issue.

Cowichan Women's Institute

A meeting of the members of the above institute was held on Tuesday, 9th inst, at the home of the secretary, Miss A. Hadwen. The president, Mrs. Hayward, was in the chair. The minutes of the last meeting were read, and then a discussion took place as to the advisability of renting a club room for the winter until the quarters in the new agricultural building shall be ready. The motion was carried, and the ways and means of furnishing the room, etc., arranged by forming a committee to deal with the matter. A committee was also formed to deal with the matter of having domestic economy introduced in girls' schools, and arrangements made to appeal to the minister of education, through the medium of a circular signed by all the institutes of the Island, willing to cooperate in the movement, as it is thought that if pressure is brought to bear the matter may be taken up by those in whose power it is to help the movement. After all discussions were over a delightful tea was served, and a happy party chatted pleasantly on several matters of interest, many valuable ideas on educational matters being exchanged.

Our Short Story

THE RETURN.

By Madeline M. Oyler.

I don't know what started that particular train of thought as I sat in the window of my club on that May morning; perhaps it was the bright sunshine that brought back thoughts of old friends and old days, but old memories, when they are once started, are insistent. "Don't you remember?" they say, and "Have you forgotten?" And one scene of bygone days gives place to another, and yet another, for none of them will be forgotten.

What times we used to have down at Barfield, my old home, before all the girls were married, and when the old people were still alive, before we were all scattered, and when I had not become a dull old club fogey. What jolly house parties there were: sometimes a dance, at others theatricals. How we boys all admired Ruby Benson, and what fun Ella Purcell was. Well, well! Ella, much to everyone's surprise, became a missionary, and went to China; and the grass on Ruby's grave has been green many a long year now. What a good singer Clifford Belford was. He went on the operatic stage afterwards, I remember. Then Then there was Barty Walrond, one of the best of fellows; he and I had been pals for many years, till he entered the Indian Civil and went abroad. Then gradually our correspondence lessened and lessened, and finally ceased altogether. How fond I had been of his sister, pretty Mary Walrond, in those far-off days. If she had willed it-but there; she didn't, and I dare say she has married someone else many a long year. Silly old memories! Haunting old memories! What folly to dwell on them: far better to go out into the bright June sunshine and forget all about them. And with this laudable intention I put on my hat and strolled off down Piccadilly.

It was a heavenly morning, glorious

sunshine, with a soft, gentle south wind. All the houses and window boxes looked new, fresh, and clean. Ladies were in their gay summer dresses: quite a day to feel young and happy; but my thoughts kept returning to those persistent old-time friends, especially the Walronds. Where was Mary now? I wondered. And Barty; I should tremendously like to meet the old chap again. At that moment I became conscious of the intent gaze of a passer-by. It impelled me to look at him, and when I looked I could hardly repress a cry of astonishment. It was Barty Walrond!

Just the same Barty as of old; just the same swinging walk, the same blue eyes and broad shoulders, and yet not the same. Well, ten years does age a man, especially in the Tropics.

"Hullo!" I said. "You of all people. I'd just been thinking about you." And the next moment we were walking down Piccadilly together, talking as if a gulf of years had not separated us, as if we had met today after seeing each other but yesterday. Some friendships are like that.

"Come and lunch at my club," I said. "We're quite near, you remember?"

"Rather," he replied. "But I'm afraid I can't lunch with you today, but I'd like to come in for a few minutes and talk."

So we turned in, talking as we went up the steps.

"Half a minute." I said; "I've just got to leave a message with the porter. I'd a man coming here to see me this morning, but I'm not going to waste my time on him while I've got you to talk to."

"All right," he said, and stood there while I told the porter, and then we went up to the smoking-room.

"I thought perhaps you'd remember old Pearson," I said. "Surely he was porter here in your time?" "I don't seem to remember his face," Barty said.

At the door of the smoking-room we met Stelling.

"You're coming round tonight, aren't you?" he asked.

"Yes; 8:30, isn't it?" I answered.

"Who was that?" asked Barty, when we were comfortably installed in chairs by the window.

"His name is Stelling; a capital Bridge player. I often go round to his rooms for a rubber," I said. And then we talked of old days.

"And Mary?" I asked, when there was a pause. "What has become of Mary?"

A cloud crossed his face.

"She married a Scotchman named Macdonald," he replied. "An awful good sort, thoroughly Scotch. Their kiddies—they've got two boys—wear kilts and so on. They were awfully happy, but last week the poor chap was killed in a motor smash. It was frightfully sudden. Poor little Mary!"

"Poor little Mary," I echoed softly. "Where is she?"

"They've a little house in Chelsea, but their home is in Fifeshire. They've got a ripping old place there. Mary and the children are there now. That is where the accident was. But the unfortunate part is I can't go to her; my doctor won't hear of it. I've been in bed for a fortnight, and this is the first time I've been out for three weeks."

And then for the first time I noticed how ghastly Barty was looking. In the excitement of meeting him and talking I had not remarked how thin and emaciated he had become. His whole body looked shrunken, and his eyes were hollow and very bright. He had always had a rather restless, excitable manner, but now it had altered, and he had a quiet, nerveless way of speaking, almost as if it were an effort and he found it wearisome, in spite of his very obvious pleasure at seeing me.

"I suppose there is nothing I can do?" I suggested. "If there is, you know how pleased——"

"Thanks very much, old chap," he replied gratefully. "It's like you to suggest it; but just at present she wouldn't see you or anyone else. She's frightfully cut up about it. But later, if I don't get well again quite so quickly as I should like to, it would be an awful relief to know there was someone who would help her. She has always been used to having someone to turn to." And there was an anxious, almost pleading look in his eyes as he said this.

"Of course I will," I said heartily. "Nothing would give me greater pleasure. I suppose she'll be coming down to London?"

"In a few weeks, probably; when she's got over the shock a bit. I can't tell you what a relief it is to me to have met you, because I know if you sav you'll help her you will. You have lifted a great weight off my mind."

And then we talked of other things. "Where are you now?" I asked.

"Oh, I'm in rooms near Cavendish Square. Manfield—you remember old Manfield, who used to be our butler in the old days? Well, he has got a house, and takes in people. I was lucky in finding he'd got a room for me when I got home, for I've got to be in town for some time under a special doctor."

"Well, I must be off," he said after a while, consulting his watch. And, getting up as he spoke, "I am very glad to have seen you; uncommonly glad. I wanted to see you once again."

"I hope we shall see each other very often, now you are so near," I said. "How does Manfield look after you? It seems to me you want feeding up and looking after. Does Mar-Mrs. Macdonald know you are seedy?"

"No; I didn't tell her before I came home. And then, when she had all that worry, I couldn't bother her. So I shall just wait till she comes now."

"Well, take care of yourself till then. She won't want to find you ill," I said as I saw him off.

Somehow I could not get Barty out of my head now that I had noticed how shockingly ill he was looking. I wished Mary—fancy Mary being Mrs. Macdonald, with kiddies in kilts!—I wished Mary was in town. I did not like the look of him at all. Even when I was in the middle of playing Bridge that evening my thoughts still reverted to Barty, ond I resolved to go round and look him up the first thing in the morning. He had given me his address.

The next morning—it happened to be a Thursday; I remember very well —I strolled down to my club to inquire about a letter on my way to Barty's rooms. While Pearson was looking it out for me I remarked:

"Did you remebmer Mr. Walrond, Pearson? You were here when he used to come here with me, weren't you?"

"Yes, sir, I remember Mr. Walrond very well, sir. A nice gentleman we always thought him."

"Oh, you were here, then," I said. "He didn't seem to think he remembered you when he came in with me yesterday."

"Oh, was he here, sir?" asked Pearson with interest. "I am sorry I didn't see him."

"Why, yes," I said. "Don't you remember the gentleman who came in with me yesterday morning. He stood and waited while I spoke to you."

The man shook his head. "You were by yourself then, sir," he said positively. "There was no gentleman with you." He seemed so certain, and spoke with such conviction, that I did not pursue the topic, but went on up to the smoking-room. At the door of it I again met Stelling.

"Hullo," he said. "Coming round tonight?"

"Very pleased to," I answered. "By the way, Stelling, did you notice the chap I was with when I spoke to you here yesterday morning?" I waited most anxiously for his reply.

"But you were alone," he said in a surprised tone.

"Alone?" I asked. "Are you quite sure?"

I was conscious that he was regarding me curiously.

"Why, of course I'm sure," he said. "You were quite alone. I could swear it. What made you say that?"

"Oh, nothing," I answered carelessly. "I only wanted to know what you thought." And I went on and sat in the window where I had sat with Barty yesterday. What did it mean? I asked myself. Had I been thinking of him so much that I had materialized him for myself, as no one else seemed to have seen him? There seemed no tangible proof of his having actually been with me in the flesh. Both Pearson and Stelling insisted that I had been alone yesterday, when I could have vowed Barty was with me. Was I losing my reason? I wondered.

I sat and pondered awhile. Was it possible that the whole incident had existed in my imagination from beginning to end? And then I remembered the address Barty had given me, and I searched feverishly in my pocket-book for it. Yes, I had got it, but that, too, was in my own writing; no tangible proof that Barty had actually given it to me. If I had imagined Barty, it was quite possible that I might have also imagined Barty's address. However, that point I could at least settle, and without loss of time I took a taxi to the address I had copied down at Barty's direction.

It was a comfortable, prosperouslooking house, with window boxes filled with gay flowers. As I went up the steps two children and a nurse were coming down them. I glanced casually at the children as I passed, and experienced a sort of slight shock. They were both dressed in Scotch kilts!

I rang at the bell. It was answered by a serious-looking man, evidently the butler.

"Mr. Walrond?" I asked.

The man hesitated.

"Is he ill?" I asked, seeing his hesitation. "Or perhaps he is away."

"Mr. Walrond died on Tuesday evening," the man answered.

I gazed at him in astonishment.

"Tuesday evening?" I repeated. "Haven't you made a mistake? Surely you mean yesterday, Wednesday evening."

"No, sir; he died late on Tuesday evening."

"Was-was he alone? Had he no relations here when he was taken ill?"

No, sir. We telegraphed for his sister, Mrs. Macdonald, when he was taken worse, but she got here too late. She is here now, sir; but she will not see anyone. Who shall I say called?"

"It doesn't matter, thank you," I replied dully. "Good evening." And I made my way slowly down the steps and walked on down the street, heedless where I went, for I was confronted by a strange problem. If Barty had died on Tuesday night-and the man seemed most positive that he hadhow could I have met him and talked to him on Wednesday morning? Added to which two people at the club whom I had talked to when I was with him denied having seen him, and insisted that I was alone, all of which pointed to the fact that having seen him at all was merely a hallucination on my part; but, if this were the case, how did I know his address, and that his sister had married a Scotchman named Macdonald?

The only solution that presented itself to me was that Barty for some reason had been permitted to come back, after death, just to see me for a few hours. But why? What reason could there be for it? Was it possible that, as he was so fond of Marv, he could not rest with the thought of her. bereft of both husband and brother in the same week, on his mind, knowing how much she would need help and comfort? Did he feel that if he could just put me into touch with her he could rest in peace? I wonder. But it is difficult to tell, and these happenings, which to us in this life seem so strange, may perhaps, when our eyes are opened, prove to be very, very easy of solution.

CANNING FRUIT IN THE OVEN.

The United States Department of Agriculture's bulletin No. 203, on "Canned Fruit, Preserves and Jellies," by Miss Maria Parloa, tells how to can fruit by cooking it in the oven.

This method has in its favor the following points: (1) It is quick and easy, (2) the fruit remains whole and is exceptionally beautiful in form and color, (3) the goodness remains in the fruit and the syrup is not too rich.

The jars are boiled for fifteen minutes. Into them, while still hot, the clean fruit is packed and over the fruit a boiling syrup is poured. Miss Parloa recommends the use of a syrup gauge and gives exact measurements and data; but to the ordinary housekeeper the differing densities, proportions, etc., combined with the use of a new instrument, are somewhat confusing, according to a contributor to the "Woman's Home Companion," who says:

"After considerable experimenting, I have found that for ordinary canning, when a sweet but not very rich juice is desired, the following proportion is approximately right:

"For a given and actual amount of cleaned fruit allow half as much sugar and the same amount of water as sugar to make the syrup. For instance, when your strawberries are hulled and picked over vou have 12 full quarts of fruit, by measure, then make a syrup of six quarts of sugar and six quarts of water. The water may be poured on the sugar either hot or cold, and it should be stirred until the sugar is thoroughly dissolved. Boil for about 15 minutes. It is a safe rule to be sure to make plenty of syrup of these proportions; for if any is left it may be sealed up and used with the next batch of fruit, or it may be boiled down and eaten with pancakes. The syrup may be made on the day before the canning and can be reheated while the jars are boiling.

"I purchased at a hardware store a piece of asbestos cut so that it exactly fits the oven floor of my range. This I slip in just before I begin to fill my jars. When the jars are filled with the fruit and syrup has been poured in up to the neck of the jar I set them into the oven (which is fairly hot), not covered, and not touching each other. The oven is then closed and they are left in for ten minutes, or until the fruit is soft. The jars are then removed and if not full filled to the brim with boiling syrup and sealed in the usual way.

A willowy girl is a skinny girl who is pretty. A skinny girl is a skinny girl who is not pretty. "Yes, sir," said Jenkins, "Smithers is a man who keeps his word; but then, he has to."

"How is that?" asked Johnson.

"Because no one will take it."

There has been a good deal of protest against Yale's plan to pay Mr. Taft \$5,000 a year and its football coach \$4,000. We contend that \$4,000 is enough for a football coach.

An Indianapolis clothing store recently displayed this sign, advertising some clothing at reduced prices:

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"Conscience," said Uncle Eben, "is only a still, small voice, an' half de time when it tries to speak up it finds dat de line is busy."

Teacher—"What is a vacuum?" Boy—"I know, teacher, I have it in my head, but I can't just think of it."

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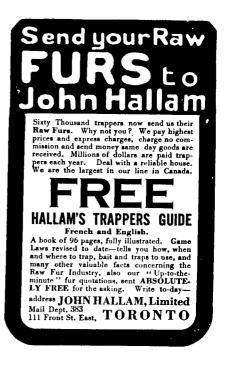


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NOTICE OF CANCELLATION OF RESERVE.

NOTICE is hereby given that a reserve, the notice of which appeared in the B. C. Gazette of December 27th, 1907, is cancelled, insofar as it relates to lands formerly held under Special Timber Licences Nos. 32710, 38000, 40345, 10419, 40346, 40127, 31332, 11693, 40347, 40349, 40129, and 33317, all in Kamloops Land District, and the said lands will be open to entry by pre-emption at the hour of nine o'clock in the forenoon on Friday, October 17th, 1913.

> ROBERT A. RENWICK, Deputy Minister of Lands.

Lands Department, Victoria, B. C. 15th July, 1913.



NOTICE OF CANCELLATION OF RESERVE.

NOTICE IS HEREBY GIVEN that the reserve covering lands formerly held under expired Timber License, No. 37459, notice of which appeared in the B. C. Gazette on the 27th of December, 1907, is cancelled.

The said lands situated on Lasqueti Island and covering portions of Sections 11, 12, 14 and 15, will be open to pre-emption entry at 9 o'clock in the forenoon on Monday, October 20, 1913; all applications to be made for legal Subdivisions of said Sections 11, 12, 14 and 15, Lasqueti Island which are within the boundaries of lands formerly covered by said license.

R. A. RENWICK,

Deputy Minister of Lands. Lands Department,

Victoria, B.C., 12th July, 1913.



NOTICE OF CANCELLATION OF RESERVE.

NOTICE IS HEREBY GIVEN that the reserve existing on lands embraced in Township 24, Rupert District, notice of which, bearing date June 12, 1912, was published in the B. C. Gazette on June 13, 1912, be cancelled to permit of the pre-emption of said lands under the provisions of Section 10 of the "Lands Act" on and after 9 o'clock in the forenoon of Friday, October 17, 1913; all such pre-emption entries to be made in accordance with existing surveys varying in area with a maximum of 40, 80 or 160 acress to each pre-emption, as the said lands may be subdivided by survey.

R. A. RENWICK,

Deputy Minster of Lands.

Lands Department, Victoria, B.C., 9th July, 1913.

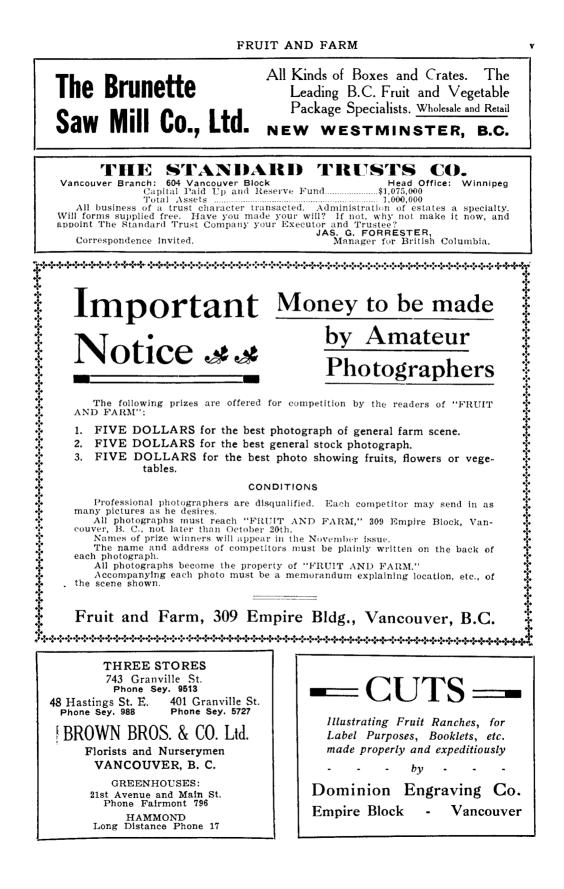


CANCELLATION OF RESERVE.

NOTICE IS HEREBY GIVEN that the reserve covering lands formerly held under expired Timber Licences Nos. 38195 and 38196, situated in the vicinity of Powell Lake, New Westminster District, is cancelled, and that the said lands will be open for entry by pre-emption on Monday, the 3rd day of November, 1913, at the hour of 9 o'clock in the forenoon.

R. A. RENWICK, Deputy Minister of Lands. Lands Department, Victoria, B. C., 30th July, 1913.





How the Dental Trust Imposes on Rural British Columbia

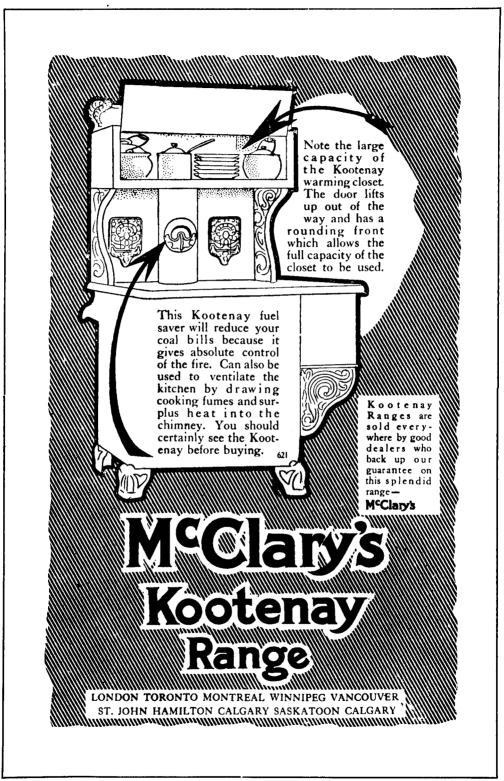
How the Dental Trust Imposes on Rural British Columbia Thousands of British Columbia people are suffering from the factics pursued is by the Dental Trust of this Province, and a long-suffering public is already in revolt against the methods of this wickedy settish combine. The mail sections of the Province comes a cry of distress and an appeal for mometent practitioners, and yet the secret society combine which the Trust dentists established the so-called College of Dental Surgeons are deaf to the appeal. Their policy of absolutely barring the gate to the best talent of the British Empire and the united States, in order to monopolize the profession in this Province is costing and people thousands of dollars and suffering that cannot be computed. The problem is a simple one. For instance, the people of a dozen good sized the trust dentists make or their services. The contention of Dr. Lowe is that every competent dentist who has been duly states should, after an investigation of the scharacter and diplomas has been made. If he wishes to advertise his business, and the rates he charges for his pro-furest dentists, however, take the begoit of the spractice. He builted be to be absolute darkness concerning the rates for work and the methods pursued. The A. M. Kowe invites the guest in work and the methods pursued. The wishes to advertise his business, and the rates he charges for his pro-furest dentists, however, take the oppoint viewpoint, and insist that the public be the should after an investigation of who consults him. For the reason that is absolute darkness concerning the rates for work and the methods pursued. Dr. A. M. Lowe invites the fullest investigation into his practice. He believes is taking the public into his confidence and making known the services he is pro-fusion al services, it is all the better for the positist him. For the reason that is absolute darkness concerning the rates for work and the methods pursued. Dr. A. M. Lowe invites the fullest investigation into his practice. He believes i

grafting Trust dentists, whose methods are such that they do not dare brave the light of publicity. The people of British Columbia have the choice before them. Are you for tyranical, bulldozing Trust methods, or are you on the side of the people—human-ity's side? Dr. A. M. Lowe is making the fight for justice and right, and the people of British Columbia should join with him in this battle of the people against the most vicious Trust of modern times. DR. A. M. LOWE

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See working exhibits in show window, Duncan Bldg., and B. C. Electric show room. Economical to instal and simple. Any size and style: hand and power.

Special Hydraulic Rams for irrigation.

Water Wheels and Turbines.

Get free estimates. We make every plant a success.

Scores of testimonials.

NOTZEL ENGINEERING & SUPPLY COMPANY

208 Duncan Bldg., 119 Pender St. W.

Vancouver, B. C.

Farm Lands

- IN -

Central B.C.

For Sale on Long Terms

These lands are on, or close to. the main line of the Grand Trunk Pacific Railway. We guarantee our field notes.



Suite 622, Metropolitan Building VANCOUVER, B. C.

Paid-up Capital.....\$1,500,000.00

Books for All Readers

For the convenience of its readers "FRUIT AND FARM" is starting a Book Department. All books in the list mentioned have the postage prepaid and will be sent to our readers promptly on receipt of order. All remittances must be by money order or postal note to the order of "FRUIT AND FARM."

Fruit Ranching in British Columbia, Bealby How to Grow an Orchard in B. C., Bealby The Practical Flower Garden, Ely	\$1.15 .55 2.15
Principles of Fruit Growing, Balley	1.60
The Spraying of Plants, Lodeman	1.33
How to Keep Bees for Profit, Lyon	1.60
The Beginner in Poultry, Valentine	1.62
Farm Poultry, Watson	1.42
Sheep Farming, Craig & Marshall	1.64
Horses and Practical Horse-Keeping, Barton	3.71
Co-Operation in Agriculture, Poweli	1.63
Farmers' Business Handbook, Roberts	1.42
How to Choose a Farm, Hunt	1.87
Farm and Garden Rule Book, Balley	2.18
Rural Hygiene, Ogden	1.68
A Woman's Hardy Garden, Ely	
A Self Supporting Home, St. Maur	1.87
Bush Fruits, Prof. Card	1.90
New Creations in Plant 1 ife. Henwood	1.68
New Creations in Plant Life, Harwood	1.88



Synopsis of Coal Mining Regulations

Coal mining rights of the Dominion, in Manitoba, Saskatchewan and Alberta, the Yukon Territory, the Northwest Territories 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 Agents 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 per 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.

Nurserymen Fruit Growers Manufacturers

E invite inquiries from all who contemplate issuing *Catalogues*, *Price Lists*, *Booklets*, or printing of any kind,

from letter-heads to editions de luxe. Send specifications of your work, and we will send an estimate by return mail. Prices made independent of any printers' board of trade. . . . A responsible house stands behind our printing. ::

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News-Advertiser

Vancouver - - B.C.



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Complete House Furnishers

Wholesale and Retail

Estimates furnished free. Look for our exhibit at the Vancouver Fair. 81 Pender W. Vancouver

> If you need farm help; if you want to buy a farm; if you want to sell a farm; if you want to exchange anything; if you want to locate a lost relative; if you want a job, or, in fact, if you want anything, simply write your ad just the way you want it to appear in the paper and send it to us. It will cost you only 15 cents per line, and you can send stamps right along with ad.

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The Famous Central B. C. Ranch Now Offered for Sale

3 TO 25 ACRE TRACTS AT \$200 PER ACRE-Terms Arranged

The Nicola Valley Polo Club has secured a location here and is putting in a great number of improvements. As this acreage is selling rapidly it is advisable to write us at once and secure Booklet and Map.

ROBERTSON BROTHERS LTD., Sole Agents 330 SEYMOUR STREET, VANCOUVER, B. C.

Phone Seymour 201

Cable Address :- Robertson, Vancouver.

xiii

Classified Department

TERMS: 15 cents per line per insertioncount 6 words to the line. Name, addresses and initials counted. No advertisement less than 50 cents; cash with order.

- ADVERTISER invites correspondence from persons having for sale about ten acres of good fruit and vegetable land now under cultivation. Must have good marketing facilities. Send full particulars and best terms to C. H. M., office of this paper.
- SUPERINTENDENT of Stock Farm, thoroughly experienced (Veterinary Diploma), with highest references, desires position. Apply G. R. Bowyer, office of Fruit and Farm.
- REBUILT TYPEWRITERS—Just right for the progressive fruitgrower, rancher and farmer. Every machine guaranteed. Prices from \$25 up. Also want local agents for "The Fox Typewriter." Write us for terms. L. J. Cowie Mfg. Co., 338 Hastings St., Vancouver. B.C.
- SNAP-26 acres of flat, rich land in the famous Kootenay Lake district; 5 acres cultivated; 100 fruit trees; 5000 strawberry plants, currants, gooseberry, raspberry and blackberry bushes; good pasture for a cow; three-room log shack; root-rouse and outhouses; chickens and rabbits. Five minutes' walk from school, store, P.O., wharf; mall three times a week; boat calls every day. \$150.00 per acre; two-thirds down, balance 1 and 2 years. C. S., P. O. Box 1387, Vancouver, B. C.

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It contains everything in the sporting goods line and at prices that will save you money. I will send it to you **FREE** if you drop a card. Just say, Send me the #REE catalogue of Sporting Goods.

HARRY GODFREY

The Sporting Goods Man

132 Hastings St. W.

Vancouver, B.C.

A. P. Slade & Co.

Wholesale Produce and Fruit

VANCOUVER

VICTORIA



THE VERNON FRUIT CO. LTD.

have sold their Vernon business; but the marketing branches will continue with the whole force of the company now devoted to this department.

> A BRITISH COLUMBIA COMPANY MARKETING BRITISH COLUMBIA FRUIT.

Calgary, Edmonton, Camrose, Medicine Hat, Regina, Moose Jaw, Saskatoon, Winnipeg Connections.

THE GREATEST MARKETING COMPANY OF THE WEST.



A. J. WOODWARD, Sole Agent

667 Granville St., Vancouver, B.C.

615 Fort St., Victoria, B.C.

"I Really Enjoy My Wife's Little Dinners, Now"

And it's all because we've got a dandy new range. Do you know—for the longest time I thought wife was losing the knack of her old-time good baking, when it was all the fault of an old worn-out range with loose bolts and open cracks that you could stick a knife into. No wonder wife had poor luck with everything she put in the oven. Because we were saving the price of a new range, we thought we were economizing—all a mistake, though—our new *Great Majestic* is easily earning its cost in the fuel-saving alone—and such baking and roasting!

You see, the *Majestic* is put together with rivets so that its joints and seams are practically air-tight—and they stay so forever. The body is lined with a *thick* sheet of *pure asbestos board*—placed behind an open grate so you can see it.

This combination is the sole secret of the wonderful improvement in my wife's baking and roasting—since we purchased a





Wooden Water Pipe

Galvanized Wire Wound and Continuous

Stave Pipe

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Water Works, Power, Irrigation, Electric Conduits Mining, Dredging, Etc.

WITHSTANDS 250 POUNDS WORKING PRESSURE

Not Affected by Frost, Corrosion, Electricity or Acid. Water Works Installed. Prompt Attention to Inquiries. Write for Prices.

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