

BRITISH COLUMBIA



MAGAZINE

Vol. IX., No. 3

MARCH, 1917

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Hernandez
Canada



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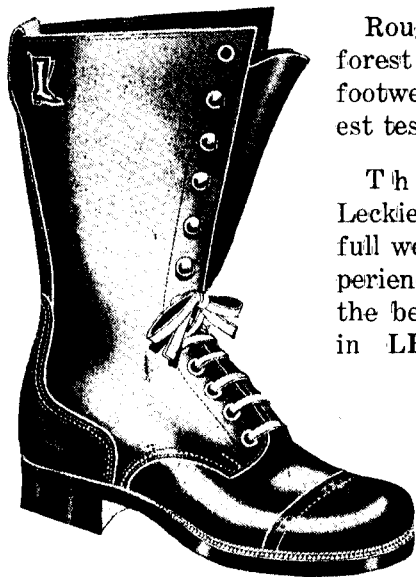
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BRITISH COLUMBIA

Fruit and Farm Magazine

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

Vol. IX.—No. 3

Vancouver, British Columbia

\$1.00 per year
in Advance

Provincial Dairymen in Annual Conclave.

Encouraging Progress in Marketing Dairy Produce.

By T. A. F. WIANCHO, Provincial Dairy Instructor.

The eleventh annual convention of the B. C. Dairymen's Association was held in the city of Nanaimo on Thursday and Friday, January 25 and 26. Prominent dairymen were present from almost every dairying district of the province, and from the opening of the first session till the close of the last on the second day the keenest interest and goodfellowship was shown, and it was conceded by many to have been one of the most successful events of its kind held in B. C.

Hon. John Oliver, minister of agriculture, sent his regrets at his inability to be present, and in the absence of President Wm. Duncan, the president's address was read by S. H. Shannon, Cloverdale, chairman, extracts of which are here given:

"The progress that is being made towards the more economical marketing of dairy and other farm products is very encouraging. That spirit of individualism which, up to a certain point, is to be commended, should not be carried too far. During the progress of this convention we will hear from some of the men, both on the mainland and on the island, who are taking a leading part in uniting us for our mutual benefit, and who should be congratulated on the progress that is being made.

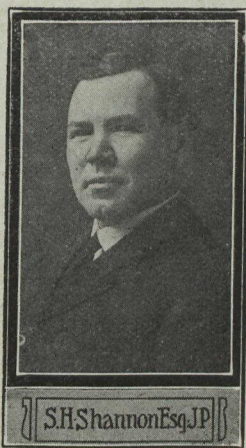
"This is not an opportune time to give an expression of opinion as to the merits of any particular breed of dairy cattle. Such an expression in a convention of this kind would call forth a discussion which, while it might not be profitable, would certainly be lively. This, however, may be said, and cannot be too much emphasized; the breed that will give the best returns at the least cost is the breed we should have. Further, whatever breed we have, let us breed something worth while; let the sire be pure and pedigreed and the best that we can afford, and if we cannot afford to own a good sire, let us take advantage of the assistance towards that end offered by the government.

"The loss to the province caused by breeding from what should have been veal years ago would be difficult to estimate.

"The work done by the cow-testing associations is becoming more and more appreciated, and in these days the man who fails to take advantage of the means of knowing whether the individual cow is making him a profit or simply eating up his high-priced feed is, to say the least, lacking in business ability and weak in details."

Directors' Report.

The report of the directors showed the association to be in a sound financial position, and that the funds were wisely and judiciously spent. The beginning of the year was somewhat discouraging, owing to



President.

severe weather conditions and the scarcity of dairy feeds. Spring conditions were also less favorable than in 1915 owing to cold wet weather and lack of early pasture. Heavy rains during early July resulted in much damage to the hay crop and this will be severely felt during the present feeding period.

The increase of total dairy produce is not as marked as expected, and any increase due from yield of young stock was largely offset by the weather conditions already referred to.

The average prices for butter during the past year were the highest ever reached in B. C., resulting in good prices to the milk and cream producer.

Outlook Promising.

The directors expressed the belief that after the war is over there will possibly be a temporary drop in the prices of dairy products, but this should not, in their opinion, be of so serious a nature that dairymen will be induced to decrease their herds, but to continue to make dairying a permanent feature of their farming operations. Past experience has proved that there is no other line of agriculture which will, for a period of years, pay better than dairy farming, and the directors expressed the hope that high prices together with better climatic conditions next season will stimulate dairying to a much larger production.

The total membership of the association for 1916 was 224, which was an increase of twenty per cent more than in 1915. All of the directors, and about 95 per cent of the members, are actual dairy farmers, the balance being creamery men and others

closely connected with the industry. In this respect the B. C. Dairymen's Association shows a very marked contrast to the associations of our sister provinces.

Appreciation was expressed of the assistance given the association by the B. C. department of agriculture to further the dairy interests of the province, and of the effort of the department to stamp out bovine tuberculosis, and the hope was expressed that the government would vigorously continue this important work.

Interesting Address.

During the first afternoon session Prof. P. A. Boving, of the field husbandry department of the University of British Columbia, gave a very instructive address on "Succulent foods, with special reference to corn and roots," and Prof. J. A. McLean, of the animal husbandry department of the university, took for his subject "Some essentials of dairy cattle feeding," and pointed out the importance of the dairy farmer growing as much as possible of the proper kind of feeds on his own farm, to provide plenty of succulent feed, and feed grain in accordance with the individual needs of each cow.

Dr. S. F. Tolmie, B. C. representative of the Dominion Live Stock branch, spoke on "Contagious Abortions," and pointed out the essentials in preventing the spread of this dreaded disease.

Evening Session.

The evening session was devoted to an address by Geo. H. Barr, chief of the dairy division, Ottawa, on the "Care of Milk and Cream." Many ladies and school children attended to get the benefit of this talk on a subject which has such a very important bearing on the health of our people. Prof. Boving followed with an address on the "Importance of a Right Start in Seed-growing; Some Breeding Problems," and gave it as his opinion that British Columbia will become one of the important seed growing centres of the continent, owing to peculiar climatic and soil conditions which are found here.

Second Day.

Mr. C. Marker, dairy commissioner, Alberta, reported on the butter competition, and complimented our makers on the excellence of their exhibits. Continuing, he emphasized the importance of grading and paying for cream on a quality basis.

Mr. Barr, in his talk on the "Importance of Cow-testing," brought out some very valuable discussion and expressed appreciation of the work done by the four cow-testing associations in B. C., whose work is particularly valuable in that they also take food costs into consideration.

Mr. W. E. Scott, deputy minister of agriculture, urged upon the dairymen to increase production during the coming year to meet the empire's needs. "Increased Production" must be our slogan. Every pound of beef, pork, mutton, milk, etc., produced is helping towards the successful prosecution of the war.

Mr. W. H. Tierney, official organizer of the Washington State Dairymen's Association, urged upon the dairymen the importance of efficient organization in the production and sale of all farm products and cited many instances of the results of united efforts in this direction on his side of the line.

Resolutions.

Among the important resolutions passed were the following:

Resolved that in the opinion of this convention the suspension of the compulsory testing of cattle for tuberculosis is false economy and that the honorable the minister of agriculture be urged to recommence the systematic testing of the dairy herds of the province at the earliest possible moment.

Resolved that we, the British Columbia Dairymen's Association in annual convention assembled, earnestly urge upon the Federal government the importance of maintaining the present regulations prohibiting the importation, manufacture or sale of oleomargarine in the Dominion.

Resolved that the B. C. Dairymen's Association request the Dominion Railway Commission to grant to the province of British Columbia the same express rates on cream shipments as are now in effect in the province of Alberta, with a published tariff for a distance of 200 miles.

COMPETITIONS.

Butter Competition.

This competition, open to B. C. butter-makers, consisted of two classes:

I. Creamery Solids, not less than 50 lbs., salted.

II. Creamery Prints, not less than 50 lbs., salted.

Prizes: First, \$20; second, \$15, third, \$12; fourth, \$10; fifth, \$8; sixth, \$5.

Considering that we have but 27 creameries in the province, and that a large percentage of them operate in connection with city milk plants and only handle surplus milk during the summer months, the exhibits in both classes were very satisfactory in numbers. In the Solids class, nine, and in the Prints Class, ten creameries were represented.

Mr. C. Marker and Mr. George C. Barr placed the awards.

Creamery Solids—1, Salmon Arm Creamery Association, Salmon Arm, 95.8; 1, Nanaimo Creamery Association, Nanaimo, 95.5; 3, Vancouver Creamery Co., Ltd., Vancouver, 95.3; 4, Meadowbrook Creamery, Vancouver, 95.0; 5, Salt Spring Island Creamery, Salt Spring Island, 94.8; 6, Kelowna Creamery Co., Ltd., Kelowna, 94.5.

Creamery Prints—1, Kelowna Creamery Co., Ltd., Kelowna, 96.0; 2, Salt Spring Island Creamery, Salt Spring Island, 95.7; 3, Salmon Arm Creamery Association, Salmon Arm, 95.5; 4, Meadowbrook Creamery, Vancouver, 95.0; 5, Vancouver Creamery Co., Ltd., 94.5; 6, Nanaimo Creamery Association, Nanaimo, 94.0.

A silver medal awarded for the best average score in both Prints and Solids, was won by Salmon Arm Creamery Association.

Milk and Cream Competitions.

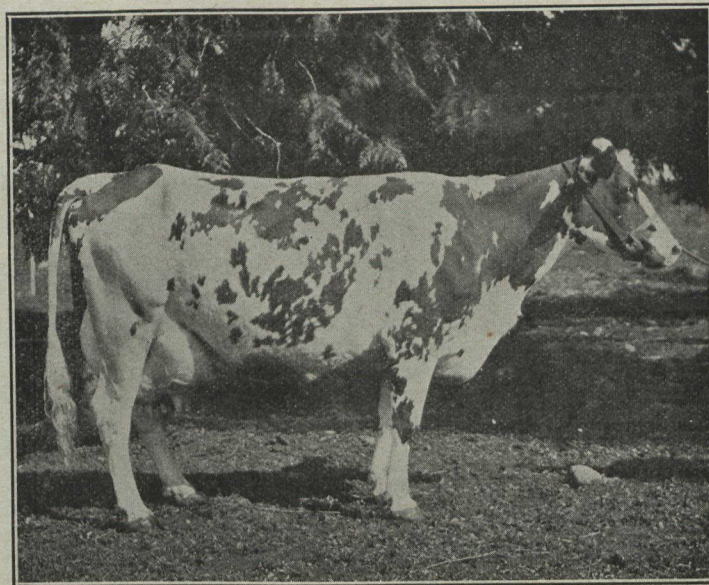
This was the fourth series of B. C. D. A. milk and cream competitions. Three classes were provided for, viz., Approved Milk, Market Milk and Market Cream. Keen interest in these was manifest by the fact that many of the competitors have entered in every competition held so far, and that the standard of quality in the exhibits has steadily increased.

For the cow three years old and over producing the highest amount of butterfat: First, \$10; second, \$6; third, \$4.

All cows competing completed their records during 1916.

OFFICERS FOR 1917.

The officers for the ensuing year are: Hon. president, A. C. Wells, Sardis, B. C.; president, S. H. Shannon, Cloverdale, B. C.;



Ayrshire Cow "Grandview Rose", bred by S. Shannon, Cloverdale, completed her test and produced 21,423 lbs. of milk, giving 900 lbs. of butter-fat, in 365 days. She is due to freshen in April and is the first Ayrshire in Canada to go over 20,000 lbs.

Prizes in each class: First, \$17.50, second, \$15; third, \$12.50; fourth, \$10; fifth, \$7.50; sixth, \$5.

The score upon which these classes were judged was as follows: Bacteria, 35 points; flavor, 20 points; impurities, 20 points; acidity, 5 points; richness (fat, 10; S. N. F., 5), 15 points; bottle and cap, 5 points. Total 100.

Approved Milk Class—1, J. M. Steves, Steveston, 95.9; 2, John Laity, Port Hammond, 95.5; 3, Thos. Davidson, Port Hammond, 95.25; 4, A. Laity, Port Hammond, 94.0; 5, J. J. Dickinson, Nanaimo, 93.25; 6, E. and T. Raper, Victoria, 93.05.

Market Milk Class: 1, J. L. Burns, Port Hammond, 96.75; 2, R. Laity, Port Hammond, 96.5; 3, F. Sinclair, Agassiz, 96.25; 4, Grimmer Bros., Pender Island, 96.0; 5, S. W. Keith, Chilliwack, 95.9; 6, A. Brehaut, New Westminster, 95.0.

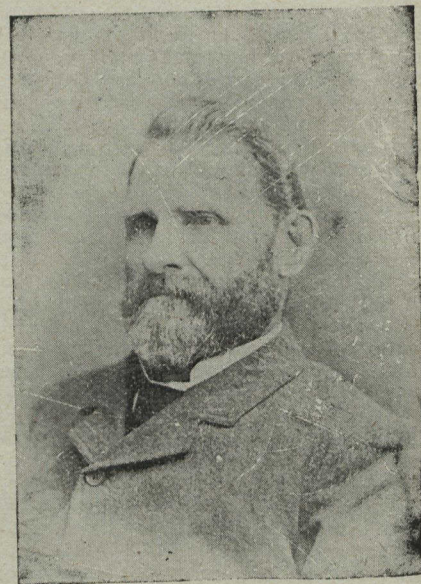
Market Cream Class: 1, J. L. Burns, Port Hammond, 96.5; 2, H. Vicars, Ladysmith, 95.0; 3, R. Williamson, Cumberland, 94.75; 4, Wm. Hampton, Port Hammond, 94.25; 5, E. and T. Raper, Victoria, 93.75; 6, F. Sinclair, Agassiz, 90.25.

It will be noticed that in the Approved Milk Class the total scores are lower than in the Market Milk Class. This is due to a high standard set in the bacterial count in the former.

Cow-Testing Association's Special Prizes.

Prizes were given in each of the cow-testing associations, Chilliwack, Comox Valley, Langley-Surrey, and Delta, as follows:

For the two-year old cow producing the highest amount of butterfat. First, \$10; second, \$6; third, \$4.



Hon. Pres. A. P. Wells, Sardis, B. C.

vice-president, P. H. Moore, B.S.A., Alderley Farm, Royal Oak, Vancouver Island, B. C.; acting-secretary-treasurer, T. A. F. Wiancho, provincial dairy instructor, department of agriculture, Victoria. Directors: Lower Mainland—J. M. Steves, Steveston; J. W. Berry, Langley Prairie; P. Chaplin, Agassiz Islands—G. S. Harris, Moresby Isle, near Victoria; N. N. Grimmer, Pender Island; R. U. Hurford, Courtenay. Upper Country—M. Hereron, Kelowna; A. W. Hunter, Armstrong; E. Jamieson, Koch Siding, Kootenay.

CHILLIWACK COW TESTING ASSOCIATION.

Two-Year Old.

Name of Cow and Breed.	Owner.	Address	Milk.	B. Fat.
1 Mabel, Gr. J.	A. E. Dumville	Sardis	8,436	571.9
Cherry, Gr. J.	S. W. Keith	Chilliwack	8,690	371.9
2 Bess, Gr. J.	M. Clarkson	Chilliwack	8,047	356.4

Three Years Old and Over.

1 Brindle, Gr. J.	A. E. Dumville	Sardis	13,811	659.8
2 Foxy, Reg. J.	C. Hawthorne	Chilliwack	15,469	647.7
3 Nancy, Gr. J.	G. T. Richards	Chilliwack	11,271	527.9

LANGLEY-SURREY COW TESTING ASSOCIATION.

Two-Year Old.

1 Dinah, Gr. Ayr.	Shannon Bros.	Cloverdale	11,048	398.2
2 Fortune, Gr. Ayr.	Shannon Bros.	Cloverdale	9,465	341.4
3 Whittie, Gr. J.	Haggarty Bros.	Murrayville	7,451	310.9

Three Year Old and Over.

1 Lily, Gr. H.	Max. Hastie	Clayburn	10,767	563.3
2 No. 8, Gr. H.	L. H. Delesalle	Matsqui	15,415	519.9
3 Ruby, Gr. J.	B. A. Harrison	Langley	9,909	478.0

DELTA COW TESTING ASSOCIATION.

Two-Year Old

1 Belle, Hol.	Alex. Davie	Ladner	10,199	373.9
2 Perfection, Hol.	Alex. Davie	Ladner	10,312	359.9
3 Blanch, Hol.	Alex. Davie	Ladner	10,326	324.9

Three Years Old and Over.

1 Lady Bountiful, Gr. H.	A. D. Paterson	Ladner	13,027	515.4
2 Dairy Maid, Gr. H.	E. B. Nobles	Ladner	13,992	515.1
3 Cherry, Gr. J.	E. B. Ladner	Ladner	9,814	474.4

COMOX COW TESTING ASSOCIATION.

Two-Year Old

1 Nancy, Ayr.	G. O. Game	Comox	8,694	370.9
2 Annie, Gr. J.	H. Gurney	Sandwick	4,940	293.7
3 Tiny, Gr. J.	H. Gurney	Sandwick	5,912	287.0

Three Years Old and Over.

1 Boss, Gr. J.	Wain & Son	Courtenay	10,378	447.3
2 Rose, Gr. J.	Wain & Son	Courtenay	10,023	444.5
3 Tiny, Gr. J.	R. U. Hurford	Courtenay	8,401	435.6

Canadian National Record of Performance.

Prizes: A cup (first); and a silver medal (second); for the animals in each breed (Ayrshire, Jersey, Guernsey, and Holstein) obtaining the highest records of fat above the amounts required for qualification in their particular sections in the C. N. R. P.

All animals completed their records in 1916.

Ayrshire: 1, name, Rosebud's Pearl, reg. No. 34188; owner, Jos. Thompson, Sardis, B. C.; 3 yr.; production, 481; required, 266; excess, 215. 2, name, Grandview Grace, reg. No. 4226; owner, Shannon Bros., Cloverdale, B. C.; 2 yr.; production, 382; required, 220; excess, 162.

Jersey: 1, name, Brampton Mariposa, reg. No. 3597; owner, Grimmer Bros., Port Washington, B. C.; 3 yr.; production, 558; required, 274; excess, 284. 2, name, Lady Paulne, reg. No. 4266; owner, Wesley McIntyre, Sardis, B. C.; 2 yr.; production, 491; required, 220; excess, 271.

Guernsey: 1, name, Western Queen, reg. No. 834; owner, Banford Bros., Chilliwack, B. C.; 4 yr.; production, 661; required, 293; excess, 368. 2, name, Andrey of Dentonia; reg. No. 984; owner, Dr. A. Knight, Sardis, B. C.; mature; production, 592; required, 320; excess, 272.

Holstein: 1, name, Nora Canary; reg. No. 23205; owner, J. M. Steves, Steveston, B. C.; total production, 479 lbs.; required, 268 lbs.; excess, 211 lbs. 2, name, L. F. Snowball Althea, reg. No. 25729; owner, L. F. Solly, Westholme, B. C.; total production, 408 lbs.; required, 267 lbs.; excess, 141 lbs.

DAIRYMEN TO CONTROL CITY MILK TRADE

Farmers Take Over Distribution as Well as Production of Commodity.

For months the leading dairymen of the Fraser Valley have been patiently working away among the farmers of the district

seeking the formation of an organization that would give them what they claim was an absolutely necessary control of the milk production of the valley if the farmers and dairymen were to continue to do business at a profit, and at the same time give the people a reasonably good service.

The result of these patient endeavors, it is claimed, has been that fully 90 per cent of the milk producers of this district have signed up with an association which has been formed, and which will be known as the Fraser Valley Milk Producers' Association, under conditions which will make it to their advantage to sell their product only through the association, the officers of which have established offices in the city and completed a deal for the purchase of the Richmond dairy, in Vancouver. They have also leased the Chilliwack and Sardis creameries and next month claim that they will be in active direction of the milk supply of the city.

The dairymen in the Fraser Valley have long realized that there was too great a disparity between the price paid them and that which the consumer was compelled to pay, and they were willing to accede to the proposals of the organizers of this movement for the centralization of the milk business.

At meeting after meeting they were told that it was the great amount of duplication in the distribution of milk—the rigs of half a dozen or more dairies passing down the same street—which brought so little return to the farmer for his milk and which made it cost so dear to the consumer.

Wanted to Sell Direct.

Originally the idea was to eliminate the wholesaler altogether and sell direct by their own organization to the consumer. In the milk business, as in every other form of produce, the farmers of the valley have regarded the wholesaler with suspicion. They certainly thought he took the "cream" of the milk trade, but it appears that for the present, at any rate, they in-



Synopsis of Coal Mining Regulations

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

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

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

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

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

The lease shall include the coal mining rights only, rescinded by Chap. 27 of 4-5 George V. assented to 12th June, 1914.

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

W. W. CORY,
Deputy Minister of the Interior.

N.B.—Unauthorized publication of this advertisement will not be paid for.—83575.

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

tend to deal with him in the city of Vancouver.

It is known that the Milk Producers' Association has approached other dairies for options on plants and businesses; it is reported they have secured an option on another large dairy company. If they secure this second dairy it is believed that they will themselves undertake the distribution of milk throughout the city. One of the ideas of those active in the organization is that only one rig should be sent down a certain street and only one delivery a day made along it. Naturally the association is treading carefully on new ground at the beginning of such an important movement, but confidence has been frequently expressed by their spokesmen that they can reduce the price of milk to the consumer and at the same time give the farmer a far larger return.

Butter-making and the manufacture of ice cream will also figure among the activities of the association. The plants of the Chilliwack and Sardis creameries are co-operative concerns, belonging to the farmers of the Chilliwack Valley, and have at different periods been engaged in butter-making. The Richmond Dairy also have a butter-making plant, and during the summer, when there is a surplus of milk, all three plants can be utilized for the manufacture of butter. The control of the three plants will also better enable its operators to grade their cream and put on the market butter of that uniform type which the consumer now demands in choice butters.

Five thousand gallons of milk come in daily over the Fraser Valley line of the B. C. E. R., and very large supplies come in over the Canadian Pacific Railway, as the electric railway, of course, only taps the country south of the Fraser. In addition to the large quantities of milk which also come in from Agassiz, Maple Ridge and Pitt Meadows, on the north side of the Fraser, a large supply also comes from the Delta over the Ladner ferry and then by motor vehicles. Ever since the Ladner ferry was established a growing supply of milk has been coming to Vancouver from the Delta.

The great bulk of all this milk the new organization claims to control.



Feed Your Calves at Half Cost

A properly constituted Calf Meal is equal to and better than cow's milk for raising calves, because it takes the place of milk, thus saving 50% of your feed bills.

Lilly's Calf Meal

is thoroughly cooked under 60-lb. steam pressure. It is all food, easily digested, fresh and sweet with that nutty flavor so relished by calves.

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Write for Our General Catalogue

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**Raise your calves on
Blatchford's Calf Meal
and SELL THE MILK**

100 pounds make 100 gallons
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Blatchford's Calf Meal prevents scouring, insures early maturity, costs only one-third as much as new milk and raises the finest calves. Send for booklet "How to raise the finest Calves with little or no milk"

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Waukegan Illinois**

For Sale Exclusively by
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LAND FOR SALE

Oregon & California Railroad Co. Grant Lands, title to same vested in United States by act of Congress dated June 9, 1916. Two million, three hundred thousand acres to be opened for homesteads and sale. Timber and agricultural lands. Containing some of the best land left in United States. Now is the opportune time. Large sectional map showing lands and description of soil, climate, rainfall, elevations, etc., postpaid, one dollar.

GRANT LANDS LOCATING CO., BOX 610 PORTLAND, OREGON.

The Central Farmers' Institute

Opposed to Exportation of Female Stock---Ask that Oriental be Debarred from Land Title.

As the result of extensive deliberations in session at Victoria last week, the Advisory Board, Central Farmers' Institute, was enabled to lay before Hon. John Oliver, minister of agriculture, a great many recommendations which were received as practical and beneficial, and which will without doubt figure in legislative action for the good of the agricultural industry of this province. Farmers' institutes from every section of the province had forwarded recommendations and suggestions, and the ad-

visory board, organized to do away with the expensive method of regular conventions, passed upon the varied resolutions received, tabling those deemed impractical or not in accord with the new government's expressed policy of strict economy.

In receiving the finished report of the advisory board, Hon. John Oliver promised the fullest consideration to all matters submitted and expressed pleasure to find that the work of the farmers' institute is so closely allied with the agricultural depart-

ment's objects with regard to agricultural affairs generally.

Many of the recommendations placed in the hands of the ministers were of vital importance. Following is a summarized statement of the leading recommendations handed to the government:

A resolution asking the provincial government to enact such legislation as will debar Orientals from acquiring titles to agricultural lands within the province.

A resolution asking that the provincial



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stand the stumps. Clear them out. Change your profitless, tax-eating stump fields into cultivated farm land. Clear your land the quickest, cheapest and best way. Rip out your stumps with a

Kirstin One Man Stump Puller

It gives you a giant's power. A little push of a few pounds on the handle gives a pull of tons on the stump.

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an acre from a single setting. One man can carry it, set it, and work it with ease—horses are unnecessary.

Your money back unless it pulls the stumps from your land. Try it ten days. No strings to this promise.

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government will exert its influence with the Dominion government in an effort to have either an order-in-council or war measure enactment passed prohibiting the exportation of female breeding stock (except full-blooded) during the term of the war.

A resolution urging that there shall be amalgamation of all organizations in districts where there are bodies formed with purposes identical with agricultural interests, forming one body which shall be representative upon such matters and prevent over-lapping and duplication of energies to one end.

A resolution urging the government to extend the policy demonstrated favorably in the Nechako Valley, and to provide various well-boring outfits which shall dig at stated prices per foot for farmers who cannot afford to pay approximately \$4,000 for well-borers.

A resolution suggesting that the government provide farmers' institutes with hand type stump pulling contrivances, payment to be made to the government upon the installment plan by the institutes.

A resolution endorsing the extension of school holidays in certain fruit-growing districts where, it was reported, a 25 per cent. increase in crop is expected this season, and where home resources of labor, such as woman and high school pupils, are to participate in harvesting the crop.

A resolution expressing the opinion of the board that the natural resources of the province should be conserved by the government for the benefit of the whole people.

A resolution that there shall be made up a Farmers' Honor Roll, containing the names of all those agriculturalists who have enlisted for service in overseas forces—lists of names to be forwarded to the department of education by the various farmers institutes.

A resolution expressing the satisfaction of the board that a practical farmer has been placed at the head of the department of agriculture.

A resolution providing for possible amendment to the Agricultural Credits Act and stipulating that where money is loaned to farmers or settlers for land clearing purposes that a regularly appointed person of experience in clearing be employed by the farmer or settler in order that the best possible results be attained from the outlay.

A resolution for the better enforcement of the noxious weed laws, providing that in the unorganized districts the provincial police, fire wardens and road superintendents shall act for full enforcement—and further that everywhere the individual shall endeavor to insist upon this law's enforcement and work to better advantage in lessening the evil of its spread.

A resolution stating that in view of present conditions throughout the country the board deems it inadvisable at this time to take any action in the matter of establishing experimental farms, although the board is heartily in favor of the proposition.

A resolution endorsing the department of agriculture's action in appointing an inspector of potatoes and farm produce, with headquarters at Vancouver. The board was advised that this inspector's activities had resulted in marketing to the best possible advantage several hundred carloads of potatoes and other produce across the border.

There were several other resolutions of minor importance presented to the minister for consideration, also, and the board ad-

journd after a three-day deliberation. Pending the arrival of Mr. D. D. Munro of Terrace, Deputy Minister of Agriculture William E. Scott presided. Subsequent action, however, resulted in Mr. Munro being elected permanent chairman and Mr. John R. Brown of Vernon as permanent secretary. Exclusive of these board officers, the members in attendance were: Messrs. James Bailey, Sardis; Alex. Hamilton, Pender Island; Robert McBride, South Vancouver. Adjournment was taken subject to the call of the chair.

Before concluding their deliberations, the members of the advisory board of Farmers' Institutes went on record in the form of a resolution expressing their thorough appreciation of the appointment by the hon. the premier of a practical farmer, in the person of the Hon. John Oliver, to the portfolio of agriculture, and a copy of the board's resolution is to be sent to the Hon. Mr. Brewster.

Duncan D. Munroe of Kitsun Kalem was responsible for a number of important suggestions among the foregoing.

Chief among his new ideas was one calculated to give double benefits to government and new settler alike, in the matter of land clearing. Under the present system, he said, speaking from years of pioneering experience, inexperienced settlers can apply to the agricultural credit commission for a loan for clearing purposes, and the loan is given subject to an appraiser's report as to valuation. The point in the present system, said to be faulty, is that it provides the government no security, for the inexperienced man may totally waste the money received and obtain the poorest stumping results because of his inexperience. Mr. Munroe argued that the government wants to loan money whereby experienced usage will enable the settler to make a good living, and not to possible speculators or men who might have to relinquish the lands after receiving government loans.

What he proposed to remedy the condition was that the department of agriculture should appoint district supervisors who should be men of undoubted experience in land clearing, and that when settlers in that particular district receive credit commission loans, instead of hiring ordinary help, which is often inexperienced, the settler shall hire the district clearing supervisor, who shall be paid out of the loan for his services. The idea was accepted as a decidedly plausible and practical manner of overcoming what was regarded as one of the weak spots of the agricultural credit commissions act.

A new and important policy of land settlement will be laid before the government, urging that the government select acres of good lands in various portions of the province for homesteads, leaving the balance of unalienated lands closed until such time as the selections made shall have been colonized. In other words, the plan means the settlement of areas by concentration, voiding the necessity of new roads to out-of-the-way places, and systematizing the transportation problem without in the least interfering with general settlement of British Columbia, and by co-operation, increasing development. Under the plan advanced no other lands would be permitted to be taken up until the colonization of the selected lands had been completed and the areas exhausted for that purpose. The board also endorsed the idea of co-operative land settlement, as it applies to returned soldiers.

STUDENTS END SHORT COURSE IN AGRICULTURE

University Hopes Later to Open a Four-Year Course of Studies.

The 27 students composing the class for the first short course in agriculture given at the University of British Columbia closed their three weeks with the experience meeting. The students, most of whom are practical farmers and fruitgrowers, gave ten to 15-minute talks, relating incidents and deductions gained from private work. The class was drawn from all over British Columbia, including the Okanagan, the lower mainland and Vancouver Island, and was larger than was expected when the course was announced last fall.

The course included lectures on the sciences related to horticulture. President Westbrook gave three lectures on the bacteriology of canning; Dr. Clark lectured on chemistry, Dr. Davidson on physics, Dr. Hutchinson on biology, and Dr. John Davidson on practical botany. These and the lectures given by Dean Klinek and his assistants, Mr. Boving and Mr. Clement, on agronomy, plant diseases, soils, landscape gardening, principles of fruit-growing, and other phases of actual horticulture were illustrated by demonstrations and experiment.

The provincial and dominion departments of agriculture sent Mr. R. C. Treherne, Dominion entomologist; Mr. J. W. Eastham, provincial plant pathologist; Mr. R. C. Abbott, provincial markets commissioner, and Mr. R. M. Winslow, provincial horticulturist, to assist the university. The university will reciprocate during the next two months by lending members of the agricultural staff for the courses in agriculture given by the government at various points throughout the province.

Besides lectures and laboratory work, the class visited farms, poultry runs, orchards and gardens around Vancouver, as well as the university farm at Point Grey. Three returned soldiers were enrolled, without fees.

Next year the university will open a four years' course in agriculture leading to a degree. Later it is hoped that a two-year course may be given, but the funds for necessary equipment are lacking as yet.

Other short courses planned for next winter are animal husbandry, agronomy, that is, the management of soils and crops, poultry, and possibly agriculture.

FARMERS ASKING RELIEF

Call Upon Minister of Agriculture to Increase Pest Bounties.

A deputation of farmers comprised of Frank Gordon, reeve of South Saanich, Thos. Walker, of Gordon Head, Geo. Sangster, of Victoria, W. Patterson, of Koksilah, and H. C. Aitken, of Duncans, waited on Hon. J. Oliver, minister of agriculture to discuss matters pertaining to cheaper marketing of produce between British Columbia and Alberta, and also urging upon the government the necessity of increasing the bounty on panthers, so as to encourage the people to hunt and kill these destructive animals which are causing such a loss of young stock to the farmers of the province, more especially on Vancouver Island, where these animals are very plentiful. Another matter discussed before the minister was the protection to the farmers' sheep flocks against stray dogs. The delegation wished the government to give them a greater latitude in protecting their stock against the right to shoot all untagged dogs at sight. The minister promised the delegation a careful consideration.



Save money on stump blasting

You can do it by using the *right kind* of Powder. Your explosive should have a heaving and lifting effect, shattering the stumps just enough to break them up. Thousands of farmers in British Columbia have used all kinds of explosives for stump blasting. They have found that they can save money, time and labour by using

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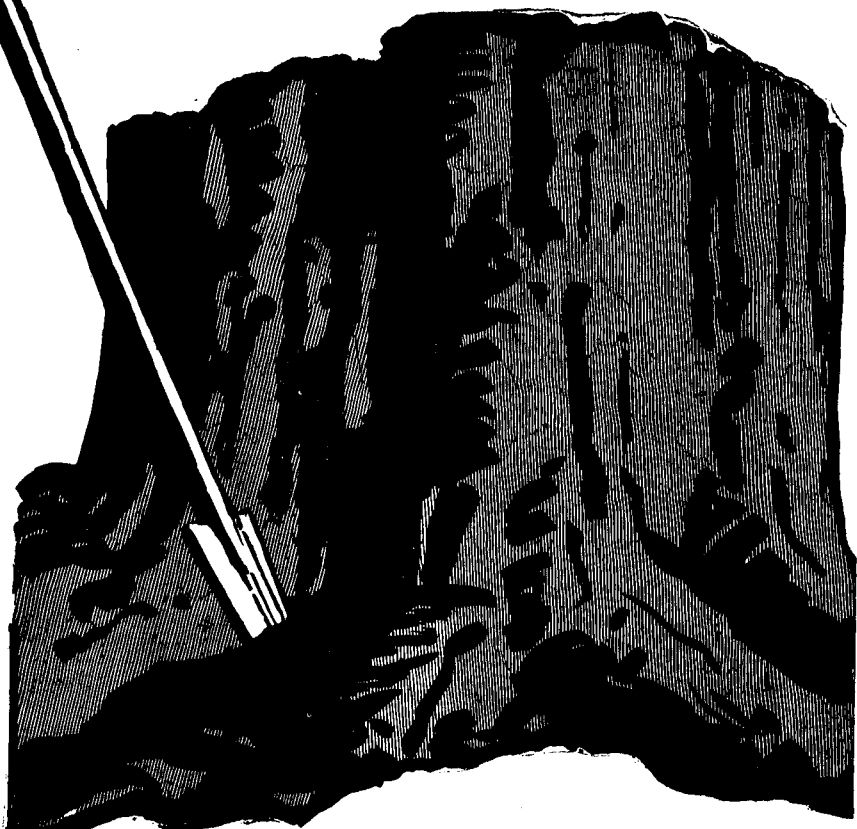
—made in Canada for 32 years. Prepared especially to meet Canadian conditions. It cracks, splits and heaves the stumps. At the same time it lifts and loosens the roots for easy handling. Because of its wider-spread force, it removes stumps more economically than powders or dynamites that merely shatter and pulverize.

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Orchardists Debate Their Problems

Ask For Removal of Embargo on Chinese Labor---Other Restrictions.

The twenty-seventh annual meeting of the B. C. Fruitgrowers' Association opened at Victoria on February 13th, with Mr. Thomas Abriel of Nakusp in the chair.

In welcoming the delegates, Hon. Mr. Oliver pointed to the necessity of British Columbia producing more and thus curtailing the dependence which she has hitherto had upon other provinces for her necessities. He admitted that the shortage of labor had proved a serious thing, but he believed the more diversified production would to a very great extent reduce the high cost of living. He cautioned against too great specialization, and insisted that instead of leaning too strongly on the government the people of the province must be more resourceful and do more for themselves. He urged that the slogan, "Production, Economy and Thrift," should be the guiding principle.

In his address to the association the president, Thomas Abriel, Nakusp, explained at length what was done last season at an expenditure for a few cents under four thousand dollars. Government grants were supplemented by contributions from growers of small fruits of \$1 an acre and from shippers of \$1 a car. Mr. Abriel suggests that the shippers increase their contributions to \$3 a car, and in support of this he said:

"We are living in an age when we must advertise or let the other fellow do the business. There are many illustrations on every side as to what the people to the south of us are doing in the way of advertising their fruits. To hold your markets you fruitgrowers of British Columbia must advertise, and unless this advertising keeps pace with the growth of your increased production it would be of small use. This is a matter that I trust will receive attention by those who are interested in the fruit industry. This advertising idea should not be thrown into the waste-paper basket, for if you do this your industry will fail. Your fruits may look beautiful today and things may be fair, but if British Columbia fruits are to be kept abreast of your competitors—and it should be your motto to keep them in advance—you must advertise, and to advertise you must have dollars."

In dealing with the question of protection for the apple-grower and the objection to this on the part of the people of the prairie, Mr. Abriel spoke of the visits C. E. Barnes of Walhachin, and he had paid to farmers' gatherings in Manitoba and Alberta respectively, and the cordial feeling which they had found. He said on this point:

"We have a duty to perform in binding closer together the western provinces. We have obtained that for which we contended, that is, more adequate protection for our industry. Now it is our duty to market our fruit so that it will be true to grade in every particular. After this is done, we should sell at a price that is fair both to consumer and producer. If we would do this and do away with the idea of ever trying to take advantage of protection, we would have willing helpers in trying to build up a greater Canada. It is not right to take advantage of protection, nor is it good business to do so, and I am very glad to note that our growers have not taken advantage in any way of the increased duty during 1916."

Mr. Abriel, referring to the number of fruitgrowers who are on active service, said: "I am sure every member will join with me in testifying to the unselfish spirit which has prompted a large number of our fellow fruitgrowers to don khaki for their king and country. When we think of these fine fellows who have gone to fight our battles—some of whom have already laid down their lives—and the day close at hand when Belgium will be liberated, we feel that our sacrifice should be still greater, and any small pleasure that we can curtail, giving the money value to war purposes, should be our duty. You will readily agree with me that such small sacrifices are not to be compared with what is being done for us every day, where our boys are making the supreme sacrifice by the thousands; so to be proud of what they are accomplishing for us while we are at ease, I will ask you, one and all, to do your little bit, and let the little bit be more in the future than it has been in the past."

Mrs. Birch, Saanich, moving the acceptance of the address, congratulated the president on its altruistic spirit and the fearless manner in which he alluded to protection, which had proved a live issue at last convention, when there was a manifest free trade feeling. Protection on apples did not seem to meet with the approval of the prairie people and the expressions of the president should meet with general approbation from the association.

Thomas Kidston, Vernon, seconding the

motion, stated that the prices received by the growers were much too low, and not as good as in 1910. Fruit was about the only natural product which had not been greatly raised in price by war conditions.

Good Work During Year.

The annual report of the executive committee showed that during the past year there had been seven meetings of that body. At present the association had 650 members, Victoria district leading with 85 members. Detailed statements of expenditure, etc., were submitted, showing that on

When It's Blossom Time for Apples

Use broadcast 200 lbs. Nitrate of Soda per acre this Spring at or soon after Blossom Time.

Nitrate of Soda is all immediately available. It takes Nitrate of Soda for Apple Results.

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WM. S. MYERS, Director
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FOR SALE—Strawberry Plants

Magoon and Paxton Strawberry Plants for sale.

H. H. GRIST, R.M.D. 4. Victoria.

The Vernon Fruit Co., Ltd.

1908.

1917.

The old reliable company that has always made good.

Remember

We are a British Columbia
Company

The only company in the west
handling only British Columbia
Fruits and Products

Head Distributing Office:

CALGARY, ALBERTA

February 1 a balance of \$1653 was on hand.

A report of the special committee on standardization of packages was submitted at the morning session and a committee on credentials selected.

At the afternoon session chief interest centred in a resolution moved by Mr. Kidston, Vernon, and which, as finally adopted, read as follows:

Whereas the agricultural districts of the province have of necessity and in the best cause been drained dry of their white labor, which even, ante bellum, was never sufficient;

And where as not only is it necessary that normal production be continued but extraordinary production be attained;

And whereas the result of the shortage of white labor has been the opportunity of the Oriental, who has been in such demand as to dictate his own terms; a position which he has taken full advantage of, and now, realizing his power, is likely to take fuller;

And whereas the fruitgrower cannot at present prices, which are less than in the past and have not risen correspondingly, in fact not at all, to war price of other commodities;

And whereas, unless the situation is relieved, the result to the fruitgrowing industry as a whole will be disastrous, as shortage of labor not only means loss of the year's crop or part thereof, but want of necessary labor very seriously and permanently damages the trees;

Therefore be it resolved, that the embargo on the importation of foreign white labor be removed during the war and that the Chinese be allowed to enter the province free of head tax, for agricultural labor, with permit to remain for a limited period only.

Potato Exports

An interesting report was submitted by Mr. R. C. Abbott, Fruit and Vegetable Markets' Commissioner, at Vancouver, who dealt almost wholly with the export situation as regards potatoes. Shipments of potatoes to the States during the last year totalled 473 carloads, or 142,000 sacks. To the east there was shipped about 200 cars, or 62,700 sacks. The export trade was, Mr. Abbott stated, the only solution of the question of a profitable price to the grower.

Mr. Abbott pointed to the necessity of seed selection if the best quality of potato were to be secured and asserted that if British Columbia can produce the quality she could be exporting from 1000 to 2000 cars at \$35 per ton. He prophesied that good prices will continue. He believed \$15 per ton was the lowest figure at which the producer could secure a reasonable profit.

On the point of Chinese labor Mr. Abbott expressed his regret that the efforts for the farmer benefited the Chinese. About 65 per cent of the potatoes exported had been supplied by Chinese. In his opinion there should be a regulation prohibiting the leasing or selling of land to Chinese.

Considerable discussion took place in respect of potato diseases and the best method of eradicating them. To a question Mr. Abbott stated that about 70,949 boxes of apples had been shipped for export from Vancouver, two-thirds of it going to Australia. The records, he said, showed that importations of fruit from the United States in the past two years showed a decrease but he urged that the Interior growers should show still greater care in catering to the needs of the Coast market.

An interesting resume of the publicity work undertaken by him in his capacity of Fruits Markets Commissioner at Calgary

was given by Mr. W. E. McTaggart, who will shortly relinquish that office to accept a position in Winnipeg. The plan whereunder the British Columbia fruit was advertised throughout the prairie section with the result that the demand last year had been enormous, was outlined by Mr. McTaggart, who pleaded for a continuance of the publicity efforts if that market was to be assured to the B. C. growers.

Hearty votes of thanks were passed to Mr. Abbott and Mr. McTaggart.

Resolutions relating to the privilege of unloading in transit and of a minimum of 17,000 pounds per car, were dealt with. Mr. Helm, superintendent of the Dominion Express Company, who was present, stated that there are now being delivered 50 refrigerator cars of improved construction, and these will be ready for the forthcoming season. These would be capable of handling a minimum shipment of 20,000 pounds. He further stated that the new tariff will permit of two unloadings in transit so far as berries are concerned. The new tariff would cover practically all shipping points of the province. In response to a question if the new tariff would also cover cherries, Mr. Helm stated he did not think so, and at the request of the meeting he agreed to take this point up with his company, the growers urging that cherries be included.

Co-operation.

"Co-operation" was the keynote of two excellent addresses delivered before the delegates at the evening session. Mr. R. Mackenzie of Winnipeg, secretary of the Canadian Council of Agriculture, who attended the meeting as representative of the Alberta Farmers' Co-operative Elevator Company; the Saskatchewan branch of the same organization as well as the Graingrowers' Grain Company, the United Farmers of Alberta, the Saskatchewan Graingrowers' Association and the Manitoba Association, gave a most interesting outline of the struggles which the farmers of the prairie sections encountered before their organization was perfected to the point where they, or at least some 190,000 of them, have become members of co-operative organizations, the aim of which is to benefit the farmers economically, educationally and otherwise.

Mr. Mackenzie pointed to the fact that the only source of wealth to the farmer was his land. Unlike British Columbia where there are immense resources of forest, mine and fisheries, the Prairie farmer possessed but his land. Half the population of Canada was on the land and the basic wealth of the country was agriculture. But yet in legislating for this enormous wealth, for this large number of the people of Canada, the farmers have virtually no voice. It was possible to count on the fingers of one hand the farmers in the federal house. Experience had shown, Mr. Mackenzie stated, amid laughter, that there were two kinds of farmers, the farmer who farmed the farm and the farmer who farmed the farmers. Much of the enormous economic waste which is constantly going on could be imputed to the fact that practically all legislation is enacted by one element of the population, the urban as opposed to the rural. The legislators were men whose bringing up and environment was capital; men who did not possess the viewpoint of the rural population and who, therefore, could not enact legislation of benefit to the rural element. The wealth of Canada was gradually becoming accumulated into a few hands. It had been stated that through interlocking directorates 24 men controlled the wealth of the Dominion. These conditions has urged the farmers of the

Prairies to adopt the great spirit of co-operation.

Mr. W. D. Trego, vice-president of the United Farmers of Alberta, spoke briefly along similar lines. He brought, he said, the greetings of 14,000 Alberta farmers to the fruitgrowers of British Columbia. "Equity" was the motto, and "co-operation" the watchword of the Alberta organization and by mutual assistance, helping their neighbors and, as a body, meeting the difficulties which confronted them the United Farmers had materially improved their position. While there was still much to do the spirit of co-operation would carry them on. The farmers were working not alone for themselves but also for the consumers and producers. Alberta would welcome the co-operation of the

FRUIT OUTPUT FOR 1917

It is allowed by those who are in the best position to know that the demand for fruit (fresh and preserved) during 1917 shall be considerably larger than in past years.

• • •

This is your opportunity to increase your output, reap a good harvest and at the same time to

SOW GOOD SEED FOR BIGGER SALES

during the years to follow.

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LET EACH PACKAGE SPEAK FOR ITSELF

Familiarize your brand by label to the jobber, wholesaler, retailer and general public.

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Attractive and Effective Label is the Medium.

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Smythe and Homer Streets
VANCOUVER, B. C.

MR. FRUIT SHIPPER:

Do you know that SWARTZ BROTHERS, 155 Water Street, Vancouver, B.C., sell more fruit for the British Columbia Farmer than any other commission house in Vancouver, B. C.

WHY?

Because it is the home product that the people want. We aim to please our customers and help the B. C. Farmers.

We guarantee returns thirty-six hours after goods are sold.

Give us a trial with your next shipment of fruit and be convinced.

15 Per Cent Charged on All Goods.

Write for particulars.

SWARTZ BROS.

fruitgrowers of British Columbia. Their problems presented many similarities. Their joint work would remove many of the handicaps which now exist in working up a mutually satisfactory business between the two provinces.

Hearty votes of thanks to the two speakers were moved by Mr. R. M. Palmer, Cowichan, and seconded by Mr. Kidston, Vernon, the latter congratulating the executive committee of the Fruitgrowers' Association on the excellent relations which had been established between the British Columbia growers and the farmers of the Prairies, relations which had proved profitable to both and would, as the time went on, be much more so.

The morning of the 14th was given over to a discussion of the standardization of fruit packages committee's report, of which James Rooke of Grand Forks, is chairman. Considerable discussion resulted from the report's recommendation that the American or short box, be adopted, in the recommendation which will be referred to the federal authorities for confirmation to the House of Commons. Growers from all districts spoke and the committee is this afternoon bringing in a resolution embracing the convention's opinions, it being generally conceded that the short box will be recommended.

An instructive address by R. G. L. Clarke chief fruit inspector for B. C. A. H. Flaek, Dominion fruit inspector for the prairie provinces, also spoke briefly.

Mr. Clarke comprehensively reviewed the fruit situation in the province and said that since the outbreak of war fruitgrowers and shipping associations had been working under a great hardship in the shortage of skilled labor, or labor of any kind. The department was well pleased with the ready response made by the men to the Empire's call and were immensely proud of the position this province held, leading all others in the percentage of men enlisted. No section of the country had responded more readily to the call than the fruitgrowing centres.

One pleasing feature, said Mr. Clarke, was the pronounced increase in the exportation of apples to New Zealand and Australia. It was reported in 1913 that the province had made a record of 30,000 boxes. In 1916 this had been increased to 70,000 boxes, besides larger exports to Great Britain and to new markets in South Africa, China, South America and Japan. It was something to be proud of also that in quality, pack and grade the shipments had been well received and favorably commented upon.

"We must prepare to meet the competition we are up against," he said, "local conditions cannot set the standard and we must aim to lead. The competition we have to meet with is the incentive for better work. Patriotism is all right, but the most we can expect is a preference and we must deliver the goods."

Efforts to promote uniform packing in B. C. had met with fair success, he added; efforts which surpassed any similar step in other provinces.

Fruitgrowers of the Upper Country at the afternoon's session were assured by the Hon. Mr. Pattullo, minister of lands, that this matter would be dealt with by the government at the next session of the house, when a bill would be brought down which would afford relief to those in need, as well as to protect the hundreds of fruit growers from drought.

"We must prepare legislation that is concrete, and we now have under consideration legislation, while somewhat experimental, and along new lines, but which will satisfy the farmers and fruitgrowers," said the minister of lands.

Mr. W. A. Pitcairn of Stirling & Pitcairn, Kelowna, and manager of the Coldstream estate, near Vernon, wanted to know if the bill would be brought down in sufficient time to enable the growers to be satisfied that this season's water supply would be assured. To this Mr. Pattullo replied in the affirmative. A special branch of the lands department, he said, would deal with the irrigation matters as they concerned the government.

Discuss Advertising

The directors discussed advertising at their meeting. Plans were laid for the carrying on of another advertising campaign during the coming year, and the financing of such a campaign was deliberated from every angle.

When seen after the directors' meeting, which was private, Mr. C. E. Barnes, the new president of the association, stated that the funds for the carrying on of the work of the association would be raised, with the support of every fruitgrower by each contributing to the association's treasury "one cent per box."

"This will be our slogan," said Mr. Barnes. "By every fruitgrower contributing one cent for every box we will have a fairly well filled treasury and we will have sufficient funds with which to carry on our work for the coming year."

"We must advertise; there is no question about that. I have it on the best of authority that the American apple growers will advertise in Western Canada next year. To what extent they will carry on a campaign I do not know, but this I do know that if we do not advertise we will have lost the support of the apple consumers of Western Canada, which will undoubtedly go to the American advertiser of apples."

Raising Big Fund

"Last season the Northwestern Fruit Exchange of Seattle," continued Mr. Barnes, "raised their advertising appropriation of \$70,000 by levying a tax of ten cents per box for every box of apples shipped in their extra fancy grade. Hood River apples a few years ago dominated the big Eastern markets, but the Northwestern Fruit Exchange by consistent advertising captured the best trade in the east from the Columbia River growers and the latter were losing thousands of dollars. They at once instituted an advertising campaign of their own, and retained the market which they had lost, and they are doing it, but they just initiated their advertising at

The Farmer May Expect

the following results from the judicious use of our Chemical Fertilizers:

- (1) A marked increase in the yield of all crops.
- (2) Larger fruit, vegetables, etc., of better quality.
- (3) Improved shipping and keeping quality of product.
- (4) Increased vigor and healthiness of trees and plants.
- (5) Prolonged bearing life of trees beyond the average of other trees.
- (6) Increase of feeding value in hay, grain, roots, and all fodder crops.
- (7) Increased growth where cover crops are used.
- (8) Fertility of soil maintained.
- (9) Humus supply of the soil increased where the use of fertilizers is aided by intelligent rotation.

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Absolutely Fireproof
American and European Plans
VANCOUVER, B. C.

THE LOTUS "Serves You Right"

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Room with detached bath \$1.00 day up
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Berry Baskets
and Crates.
All Kinds of Fruit
Boxes.

the psychological moment to hold their trade.

"If we do not advertise we shall be placed in the same position as the Hood River growers. No British Columbia fruit-grower will want to see the prairie market taken from him. To hold the market then we must advertise," added the president.

Mr. Barnes pointed out that but a small grant only, could be expected from the provincial government, and none from the federal government during the coming year. As the association is desirous of becoming self-supporting the raising of funds by every grower paying "One cent a box," would finance the operations of the organization, both for advertising, secretarial and other purposes.

Adopt a Slogan

"Let every fruitgrower adopt this slogan, 'One Cent a Box.' By the co-operation of the growers we can make the fruit business of British Columbia so substantial and so strong that we will be able to promote our interests in the most businesslike and efficient manner. It will mean that we will be able to fight our own battles, in maintaining and creating markets and in providing an organization to promote the interests of the association in every way possible," concluded the president.

The officers elected were as follows:
Executive—C. E. Barnes, Wallachin, president; J. E. Reekie, Kelowna, vice-president; Thomas Abriel, Nakusp; R. M. Palmer, Cowichan Bay; W. E. Chapple, Armstrong; L. E. Taylor, Kelowna.

Horticultural divisions and directors—Victoria, W. F. Somers, Gordon Head; Duncan-Nanaimo, R. M. Palmer, Cowichan Bay; Gulf Islands, A. D. Cartwright; Lower Mainland, south of Fraser, Geo. I. Thornton, Sardis; Lower Mainland, north of Fraser, Mission and east, A. T. Northcote, Hatzic; Lower Mainland, north of Fraser, west of Mission, J. C. Metcalfe, Hammond; Lytton to Kamloops, including Lillooet, C. E. Barnes, Wallachin; Salmon Arm, Armstrong, W. E. Chapple, Armstrong; Vernon, north, Geo. Heggie, Vernon; Vernon, south, A. T. Howe, Vernon; Kelowna, north, J. E. Reekie, Kelowna; Kelowna, south, L. E. Taylor, Kelowna; Peachland-Westbank, T. Powell, Peachland; Summerland, R. V. Agur, West Summerland; Penticton, R. S. Conklin; Similkameen, J. J. Armstrong, Keremeos; Kettle River, H. W. Collins, Grand Forks; Arrow and Slocan Lakes, T. Abriel, Nakusp; Nelson and Lower Kootenay, James Johnstone, Nelson; Kaslo and Upper Kootenay, J. H. Hoyle, Queen's Bay; Creston and East Kootenay, J. Compton, Boswell.

The Orchard

By I. M. STENNING.

Down beyond the garden-wall
There's a world of wonder,
Apples in the tree-tops tall,
Apples lying under,
Pyramids of apples shining
In the glow of day's declining.

Strewn around the grey old trees,
In the grass enfolden,
Gifts of sweet October these—
Russet, red, and golden,
All the suns of summer sleeping
In their warm and fragrant keeping.

Tenderly the good day dies
And the moon up-stealing
Watches with her quiet eyes,
Sheds a light revealing
Dewy branches diamond-crested,
Apples all in silver vested.

—Westminster Review.

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Stock Breeders in Conference

Review of the Market by President Paterson.

Addresses by Messrs. T. Reg. Arkell of Ottawa and Prof. J. A. McLean of the University of B. C., together with the election of officers, were the principal features of the opening day's session of the annual conference of B. C. Stockbreeders' Association, which commenced February 15th. There were about 50 stockmen in attendance.

Following is a list of officers elected for the ensuing year: Honorary president, T. W. Paterson, Victoria; president, A. D. Paterson, Ladner; honorary vice-presidents, Dr. S. F. Tolmie and Deputy Minister Scott; vice-president, Alex. Davie, Ladner; honorary directors, R. M. Palmer of Cowichan Bay, H. S. Rolston of Vancouver, D. E. Mackenzie of New Westminster; directors, G. W. Sangster, P. H. Moore, J. A. Turner of Victoria, Capt. J. Erskine of Eburne, E. D. Barrow of Chilliwack, Samuel Smith of Dewdney, George Heggle of Vernon, J. B. Tiffin of Ashcroft, T. B. Ward of Douglas Lake; secretary and treasurer, Prof. W. T. Macdonald.

"Fundamentals in livestock breeding" was the subject of Prof. McLean's address. He is head of the animal husbandry department at the university, and his thoroughly practical talk to the stockmen was replete with suggestions and new ideas for the betterment of conditions in relation to breeding.

Mr. T. Reginald Arkell, chief of the sheep and goat division of the federal department at Ottawa, spoke upon wool growing and marketing. Deputy Minister of Agriculture W. E. Scott and Dr. S. Harwen of the Dominion Experimental Farm at Agassiz, who was to speak on Fern Poisoning, were not able to attend the afternoon session and their addresses were heard the following day.

The morning session was devoted to a directors' meeting, the reading of various communications and proposed resolutions, and the address of the association's president, Mr. A. D. Paterson of Ladner, who was elected again for the ensuing year.

President Paterson said, in part, that the live stock industry, in common with other industries, had been feeling the scarcity of labor very keenly, and this condition in all probability would become more acute until peace had been declared. Aside from this feature, however, live stock men had had a very satisfactory year, and could look forward to the future with every confidence.

Owing to a late spring and very dry summer throughout the greater part of the province, pasture was short and farm crops generally rather light. The fall pasture, usually so luxuriant in the Lower Fraser Valley, was almost entirely missing. Conditions on the range, however, were generally satisfactory. This was especially true of the Nicola and Chilcotin districts, where cattle had been able to winter in very good shape.

The sheep and wool market had maintained a very high level and there was every reason to believe good prices would maintain for some time to come. Recent estimates showed a decided falling off in the number of sheep in the United States and Canada.

Dairy cattle, Mr. Paterson went on, held their own, especially in the case of better breeds. He emphasized the value of cow-testing associations which were doing more than anything else to encourage the im-

provement of dairy herds and the weeding out of unprofitable cows. There had been a good demand for beef cattle, though the prices had not been as high as stockmen had expected them to be.

The hog market recently had been very good, though in the number of hogs produced there had been a falling off since the great advance in the price of grain since the opening of the war.

In spite of a poor horse market the outlook for this branch of the industry probably was never better. Low prices had discouraged breeding, while thousands of head had been shipped to the United States and Europe. The draught horse of good quality was most in demand. Horse breeders had to face the fact that light horses cannot compete with the motor car.

After having given much study to the stock situation, the president said, he was forced to the conclusion that the province is in need of reliable livestock statistics, and this was a matter he would like to see the association carefully consider. He felt sure the agricultural department would do anything which was reasonable in this respect.

Owing to the small amount of money set aside by the last legislature the work of tuberculin-testing of cattle had not been prosecuted as vigorously as was desired, and he expressed the hope that the new government would be more energetic. In the matter of compensation for cattle destroyed he thought the stockmen should be willing to meet the government half way.

Prof. P. A. Boving of the field husbandry

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Chatham, Ontario

department, University of B. C., spoke to the assembled members on "Roots—their culture and feeding value." Dr. S. F. Tormie also spoke on livestock topics.

W. T. McDonald submitted a satisfactory financial statement, which was adopted.

A letter from W. B. Barstow, Cranbrook, complaining of the disregard shown by the railways for the rights of breeders, was referred to the incoming executive.

A discussion took place on the initiative of the Vancouver Exhibition Association, as to the holding of a fat stock and poultry show and sale this spring.

George Sangster, secretary of the British Columbia Agricultural Society, assured the association of hearty support, and promised a good prize list if the show should be held at Victoria.

Representatives of New Westminster, Cowichan and Chilliwack associations supported the idea. It was suggested that a seed fair should be held in connection with the show, and that entries in fat stock and poultry should be restricted to British Columbia breeders.

President Paterson stated that a resolution had been adopted by the directors, recommending that a committee be appointed from among the incoming directorate to go into the matter thoroughly.

The matter was referred to the directors for action.

The railway commission of Canada is considering an application by the Express Traffic Association of Canada for an order permitting it to increase the estimated weight of horses in cars from 10,000 pounds to 12,000. The Dominion livestock commissioner had advised the provincial association in order that the latter might take any action it saw fit.

Mr. McDonald informed the association that this request was being protested against through the Western Canada Livestock Union, and Dr. S. F. Tormie, who is at present in the east, is taking it up with the department.

A resolution from the B. C. Veterinary Association was read. That body protests against any retrograde movement in the B. C. Contagious Diseases Act, asks that the tuberculin test be continued, and enters an objection to any grade cattle being allowed to enter the province which have not been tested.

Captain Hayward, M.L.A., for Cowichan, just returned from the front, received a rousing welcome from the delegates when he appeared. He spoke in most optimistic manner of the certain success which this year would crown the efforts of the Allies; eulogized the cheerfulness and spirit of the men in the trenches and declared that they were men to be proud of. He remarked upon the excellence of the commissary arrangements of the army but regretted that the fine quality of meat served the men did not contain the Canadian article, but was almost exclusively composed of Australian and Argentine beef.

Deputy Minister Scott, in his address, expressed the opinion that Canada was making somewhat of a mistake in sending so many men off the farms away as soldiers. The war had to be fought and won with food bullets as well as with silver and lead bullets, and men were serving the empire just as faithfully and effectively on the farm; they were, in fact, serving the empire better in producing food than in fighting as one of the units on the firing line. Every increase in production was indirectly helping to end the war.

The problem of labor was a serious one. Manitoba would need 17,000 men to put in this year's crop and Saskatchewan and Alberta twice that number. How could the

shortage of labor be met. The only way here was by doing all that could be to organize the home supply and, as in France and Great Britain, the women and boys and girls would have to turn to and help. In Great Britain there were half a million women on the land today. Farmers would have to adopt improved methods and show careful selection in seed and breeding stock.

Mr. Scott strongly advocated the necessity of every dairyman carrying out cow-testing.

In regard to sheep the Deputy Minister stated that the department was in receipt of hundreds of letters from men on Vancouver Island, the Gulf Islands and Comox complaining of the depredations of dogs. Last year he had had a bill introduced, but it was turned down in the house. Hon. Mr. Oliver was very much in sympathy with the sheepmen, and a bill was being drafted for introduction this session which it was hoped the house would adopt, enacting strict regulations and giving adequate protection to sheepmen.

This bill would provide for the creation of sheep districts by proclamation, within which every dog must be licensed and tagged. Any dog could be shot at any time and anywhere. Licensed dogs must be kept on the chain between sunrise and sunset unless accompanied by the owner and under control. Without such strict provisions it would be impossible to have a sheep-raising industry in the province.

On grounds of farm economy and public health, Mr. Scott hoped to see sufficient funds provided to carry on the fight against bovine tuberculosis, which must be got rid of. What had been accomplished already was clear from the fact that on the lower mainland the percentage of reactors had fallen from 15 to 5, on Vancouver Island from 10 to about 3, and, excluding Victoria and Nanaimo, to slightly less than 1, and on the Gulf Islands from 5 to nil.

Mr. Scott made a vigorous advocacy of co-operation, declared against individualism in farming as a mistake, and ended on a note of optimism and faith.

Roderick Mackenzie, Winnipeg, secretary of the Canadian Council of Agriculture, told of what has been done elsewhere in introducing co-operative methods in farming.

Dean L. S. Klinck, of the faculty of agriculture of the University of British Columbia, addressed the convention on the value of co-operation between all classes of farm producers, the public schools, the department of agriculture and the University of British Columbia. He pointed out the numerous ways in which this could be carried out.

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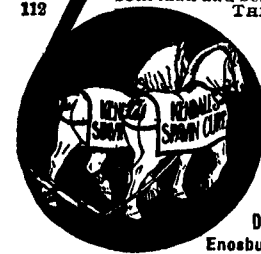
ONION LAKE, Sask., April 22nd, 1915.

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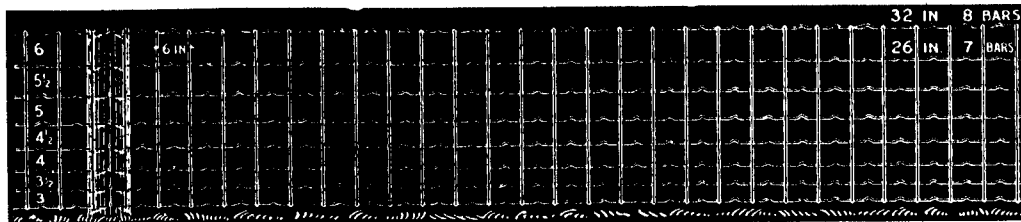
Unable to devote sufficient time to the consideration of resolutions which had been discussed during the two-day session the association left the resolutions to the executive committee of the organization, with the result that the following six resolutions on record as passed by the association have been handed to Hon. John Oliver, minister of agriculture:

"That the live stock commissioner be

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requested to form wool growers' associations where deemed advisable in British Columbia, to take advantage of the aid extended by the Dominion live stock branch.

"That the British Columbia Stockbreeders' Association hold a winter fair and sale during next December, on a date and in a place to be decided later.

"That the secretary be asked to open negotiations with the managers of the three principal exhibitions of the province with a view to holding such a fair and sale, and that the final arrangements for such fair and sale be made by the directors of this association.

"That the executive take up with the government the matter of securing a grant for the association, and after the amount of the grant is decided upon that the directors decide on the grants to be made by the association to the different fairs.

"That the provincial government be urged to vigorously prosecute the systematic testing of cattle for tuberculosis.

"That the British Columbia Stockbreeders' Association strongly endorse the advice of the honorable the minister of agriculture relative to calling attention to the saving of all worthy young stock."

GOOD THING FOR FARMERS.

Fifty-Two Million Dollars Worth of Hay, Oats and Flour Bought—Purchases Were Made Quietly.

During the past two years the department of agriculture has purchased for the British authorities hay, oats and flour to the value of nearly fifty-two million dollars. There has been no publicity, in fact the country has not even known the purchases have been in progress, but without agents or commissions, quietly and unostentatiously, the department, under the direction of Hon. Martin Burrell, have made these enormous purchases. It has saved hundreds of thousands of dollars for Great Britain and has put millions in the pockets of the farmers of Canada.

It was in October, 1914, that the minister of agriculture was asked if his department would undertake the purchase of hay for Great Britain. Mr. Burrell at once complied and organization was perfected. A plant with government compressors was established in Montreal which at the height of season handles six thousand tons a week, employing five hundred men. There are also government compressors in New Brunswick, Nova Scotia and Prince Edward Island.

Compressing Plant Busy.

The compressing plant at Montreal has been in operation almost continuously since it was first started, the only exception being for a short time when the crop of 1915 had been exhausted and before that of 1916 was available. In 1915 when there was a shortage of hay in the east two compressors were sent to Alberta where there was a good crop of timothy hay and were located at Calgary. An extremely low freight rate was secured. Between fifteen and sixteen thousand tons, a few hundred tons of which were upland prairie hay were secured in Alberta. It is understood that this was the first hay which was ever shipped out of Alberta.

At the same time the department undertook the purchase of hay Mr. Burrell was asked to look after the purchase of oats for the war office. This also has grown to be an enormous business. The oats are secured chiefly in the west, and are shipped from Fort William and Port Arthur by lake steamers to Georgian Bay ports, Port Colborne, Kingston and Montreal. Owing to the high water rates during 1916 it has been possible to ship all rail to Montreal or West St. John at practically the same cost as by water.

War Office Pleased.

The war office was so pleased with the manner in which the department of agriculture had handled the purchase of hay and oats that a year ago Mr. Burrell was also asked to undertake the purchase of flour. A flour expert was sent out from London to assist in the matter. The plan followed in purchasing flour was as follows: A standard specification for a straight grade flour to contain not more than 13 per cent of moisture was sent out generally and all mills were invited to deposit a five pound type sample of this specification. If the sample is satisfactory it is registered and put aside as the basis of any future offers that may be made by the mill submitting it. Qualified inspectors are located at the different sea-board points to draw samples from every car, compare these with the type sample and also forward a sample to the Dominion chemist at the experimental farm for moisture determination. Any excessive moisture over the amount allowed in the specifications is debited to the contractor.

A Summary.

The following is a summary of the hay oats and flour to October 1, 1916:

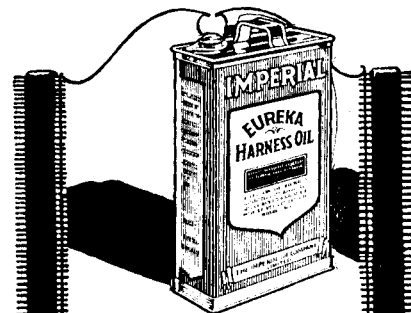
Hay	.....	370,891	.....	.....
Oats	.....	692,789	40,752,320	17,319,736
Flour	.....	203,374	10,846,453	5,694,472

In sending out these quantities overseas 339 transports were fully or partially loaded up to October 1. For the inland movement of the baled hay, oats and flour, it has required about 50,000 railway cars or 1,500 trains of 40 cars each.

In the purchase of these commodities there has been expended to October 1 the sum of \$51,362,282.06.

The organization and general management of this business is in the hands of

Mr. J. A. Ruddick, Dominion dairy commissioner. He is assisted in the outside of the hay operation by Mr. W. W. Moore, chief of the market division of the dairy branch and M. J. L. Grant, of London, England, assists in the purchase of flour.



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The United Farmers of British Columbia

Their Organization Launched Amid Great Enthusiasm.

Growing out of the important gathering of farmers in the Cowichan district last fall, at which many of the vital problems of the British Columbia farmers were considered, there was held at Victoria at the close of the other meetings last month, a convention at which these pressing questions were considered, and which resulted in the formation of an organization which is destined, it is believed, to play a large part in the life of this province.

The new organization bears some resemblance to the Patrons of Industry, which, two or three decades ago, played such an important part in the agricultural life of Ontario, but resembles even more closely those militant farmers' unions which have made such strides of recent years on the prairies.

The new body was careful at the outset to make it clear that it did not propose to embark on an independent political career, but by unity of purpose and of action to bring the necessary pressure to bear upon our public men and upon governments to secure a proper recognition of the needs of those who till the soil.

The Cowichan body was the parent of the movement and a call for the larger convention was sent out under the name of the president, Mr. R. M. Palmer, formerly deputy minister of agriculture, and Mr. W. Patterson, secretary.

The wide scope of the new organization may be judged from the following objects of the proposed association, as set forth in this draft constitution:

To constitute a medium through which farmers in membership may act unitedly where their common interests are concerned. To effect united action and resistance when taxation unfairly affects farmers' interests.

Parliamentary representation. To effect the adoption of a platform and policy free from existing party lines, and the pledging of the membership to support or oppose any candidate in accordance with the platform adopted by the union.

To study and teach the principles of co-operation, and to promote the establishment of co-operative societies and to foster and encourage co-operative effort to the end that the moral, intellectual and financial status of the farmer may be improved thereby.

To further the interests of farmers and ranchers in all branches of agriculture; to promote the best methods of farming business; to seek to enlarge and increase our markets; to gather market information; to obtain by united efforts profitable and equitable prices for farm produce; and to secure the best and cheapest transportation.

To watch, influence and promote legislation relative to the objects specified in the preceding sub-sections (3 and 4) and to any other matter affecting the farmers' business, and to take any legitimate action necessary for this purpose.

To promote social intercourse, a higher standard of community life, and the study of economic and social questions bearing on our interests as farmers and citizens.

To settle disputes between members without recourse to law whenever possible.

To take into consideration any member's case of grievance, hardship or litigation, and to defend our members as far as it may be possible and just.

To carry on any business and to exercise any power of trade the central board or the executive may deem advisable, when duly

authorized by act of the Legislative Assembly or Parliament.

Mr. Palmer outlined the inception of the movement and said that the Cowichan organization had provided a very suitable nucleus for the larger body. While there were already in existence well organized agricultural institutions, none of them could deal effectively with many questions of primary importance, probably because they had not been able to bring to bear that influence and power which their place in the life of the community in both provincial and federal affairs justly entitled them.

The report presented by Mr. Paterson, provisional secretary, set forth the inception of the movement at Cowichan and the steps taken to make it a province-wide one. In the appeal by the provisional committee to the agriculturists of the province it was set forth:

"The call for greater production has come to us, and, along with this, we are deprived of the very means required by the establishment of artificial barriers between us and every conceivable source of labor supply.

"Other industries, far less important and inferior in potential force have organized their forces with material benefit to themselves but without regard for the situation created for the farmer. His position may be briefly summarized thus: Outside organizations control his labor, fix the price he must pay for the goods he buys and dictate the rates which he may obtain for what products he sells.

"A crisis has been reached, when it is apparent to every intelligent observer that the farmers of British Columbia, alike with their neighbors in other provinces of the Dominion, must either unite their forces or go under. The war now raging will give rise to heavy taxation in the near future and every organized body will make an effort to carry less than its share of the common burden.

"To put the case bluntly—the heaviest

taxation will fall upon those who are least prepared to defend their interests. There are already indications that there is to be an effort made to put a supertax on land, and unless the farmer is able to make an effective resistance to unfair taxation his future prospects in farming shall be subject to a severe handicap."

In addition to the parent Cowichan organization there have also been instituted a number of other chapters, at Courtenay, Saanichton, Royal Oak, Metchosin, Malakwa and Edgewood.

Short addresses were delivered by a number of prominent agriculturists. Mr. H. G. Helgesen, of Metchosin, touched especially upon the important topic of farm labor and the necessity of concerted action by the agriculturists of the province to secure relief. While he favored a white British Columbia he believed that an impossibility under existing conditions if the agricultural industry is to survive, and in view of that he believed it would be of advantage to take off the head tax now levied upon Chinese and permit their entry under such government supervision as would confine such labor to farms and domestic service. No doubt the great railway, fishing, mining and other concerns now using Oriental labor would strongly object, but the same situation had arisen in the United States, and the companies then demanding Oriental labor had, when they found themselves barred from its use, adopted white labor with financial success.

Chinese Labor.

Mr. Helgeson's suggestion about Chinese labor aroused heated discussion, one speaker declaring he was willing to shoulder a gun to drive out the Oriental. Others declared that the Oriental should not be permitted to own or lease land and that the introduction of cheap Oriental labor had been the cause of much of the trouble now being experienced by the white farmer. Every cent, it was asserted, paid to an Oriental went to China or to buy mortgages on the white man's farm.

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Chairman Palmer called attention to the fact that at present foreign white labor is excluded and that it was about time attention was paid to that if it was desired to make British Columbia a white man's country.

To a question, Mr. Helgeson declared his remarks on Oriental labor applied to the Japanese as well as the Chinese. No man was more antagonistic to Oriental labor than he, but what he hated to see was the large companies allowed to utilize it while the farmers could not. "Make the companies open up those jobs for the white men, for the men coming back from the front, and let the Orientals be confined to farm labor," he declared.

At times the arguments wandered far afield. Short addresses strongly supporting the movement of a province-wide organization was made by Messrs. C. G. Palmer, Quamichan; R. U. Hurford, Courtenay; G. H. Hadwen, Comlaken; J. R. Brown, Vernon; W. E. Smith, Revelstoke; Leslie Dilworth, Kelowna; Mr. Jackson, Comox, and others. Every speaker made clear his conviction that the time was ripe for the organization of a union to protect and advance the interests of the agriculturists.

The outcome of the discussion was the following resolution, moved by Mr. Dilworth of Kelowna, and seconded by Mr. George Clark, Saanich: "Resolved that this assembly of farmers in convention proceed to form a union to be known as the British Columbia Farmers' Union." The unanimous passing of the resolution was greeted with cheers, and practically all those present who had not already joined, promptly contributed their fees and became members.

Helpful addresses upon the necessity of

and the good results from organization were delivered by Mr. Roderick Mackenzie, secretary of the Prairie Farmers' Unions, and Mr. W. D. Treego, second vice-president of the United Farmers of Alberta. Mr. Mackenzie outlined the system adopted by the great co-operative grain associations of the prairies, pointed to the fact that while practically every form of enterprise has organized, it has remained for the farmers to be the last to adopt measures found necessary by all the other large interests to conduct modern business. In Canada, the railways, financial interests, in fact, every business interest is organized to protect the members of each organization. Thus, a force has been organized to contend with and the farmers must adopt a similar policy. The farmers produce the great bulk of the wealth of the country, from which the organized interests secured their profits and dividends. Organization would give to the farmers not alone financial benefit, but also the higher benefits of an educational and social nature, arouse a greater community interest and make for the moulding of a public opinion which would permit of their taking a greater part in public affairs and of shaping public policy. It would permit of greater success in the work of making good Canadians of the widely diversified nationalities and place upon a higher plane the greatest of all the country's industries.

Mr. Treego urged that the guiding principle of the new provincial organization be "equity." The farmers of British Columbia could hardly demand of the legislature needed assistance unless they were willing that other industries should receive equal treatment. It had been suggested at the afternoon session that Chinese labor should be permitted to the farmers, while the rail-

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DEPARTMENT OF FINANCE
OTTAWA

ways, mines and other concerns should be forced to hire whites. That was hardly an equitable proposition, and certainly did not display the spirit of justice upon which any farmers' organization should be based. Co-operation was the next essential, and that meant not alone co-operating among themselves, but also with those other businesses with which the farmers would have to deal. The square deal in all business relations was imperative if an organization were to survive and prove a success.

On the point of parliamentary representation the section of the draft constitution covering the matter read as follows: "To effect the adoption of a platform and policy free from existing party lines and the pledging of the membership to support or oppose any candidate in accordance with the platform adopted by the Union."

Mr. F. C. Jackson (Comox) was averse to the organization setting itself up as an independent political body. He submitted the following amendment, which was seconded by Mr. Wingate-White:

"(a) To effect a platform and policy independent of existing party lines.

"(b) To use every legitimate means to induce candidates for and members of provincial and Dominion parliaments to adopt such platform and policy.

"(c) At election time to ascertain and to publish the views of all candidates in relation to such platform and policy.

"(d) Where, in the judgment of the central board or of a convention, there is any electoral division no candidate in prospect who commands the confidence of the association as a supporter of its platform and policy, and where, in the judgment of the central board or of a convention it is expedient so to do, to nominate a candidate of its own who will act independently of party organizations in parliament on all questions affecting the association's platform and policy, and to organize and use every legitimate means to secure such candidate's election, with full authority to use the association's organization and available funds for this purpose."

Advice from Alberta.

Mr. R. D. Trego, second vice-president of the United Farmers of Alberta, cautioned against the introduction of politics into the activities of the organization, referring to the experience had by the Alberta body. He advised the elimination altogether of politics and his advice was seconded by others of the delegates, who pointed to the fact that as an organized body the United Farmers of British Columbia would be able to exert a very powerful influence upon the existing political bodies without the necessity of a third party being organized.

Finally, upon motion of Mr. W. E. Smith, Revelstoke, the original section was struck out and the following inserted therefor: "To study and teach economic legislation independent from all existing parties."

Mr. Hans Helgesen, Metchosin, was the only delegate opposing this action, his voice being raised for the independent principle. He declared that "until the power of political partyism is broken we farmers can never hope for anything. Parties have been a plague to the people from first to last."

Considerable discussion also arose over the extent to which membership should be granted to shippers, wholesale or retail dealers in agricultural products, who themselves are growers, but it was finally decided to leave the competency of those seeking membership to the various locals which, it was felt, would be in a better position to deal with each case on its merits.

Hon. John Oliver addressed the dele-

gates, his remarks indicating that he was in sympathy with the objects and purposes of the organization, but he advised the organization to proceed carefully in formulating its working plans, pointing out that in addition to the duties of the office of minister of agriculture, he had also been given those of minister of railways, Hon. Mr. Oliver admitted he did not have what might be considered an ideal situation to face. He had not had time to devote to the agricultural affairs that attention he desired to give. While the agricultural needs of the province required the fullest consideration at his hands, still he did not think that at present they were quite as important as were the railway needs.

"There is now a great pressure in railway conditions here, and this pressure is so heavy sometimes that something has got to give way, and I don't propose that it shall be the Minister," he asserted.

It was 30 years ago, Hon. Mr. Oliver recalled, that he helped to organize the farmers of the Lower Mainland on the lines of the Patrons of Industry in Ontario. He had met with little success but in the intervening years farmers had become generally impressed with the necessity of organization.

On the question before the convention of the advisability of introducing politics in the affairs of the organization, the Minister declared that the convention had been wise in putting agricultural matters first and partyism second. It had been, he declared, a standing disgrace to British Columbia politics that the farmers had not had enough confidence in themselves to send representative farmers to the legislature. Farmers were not fools, nor were the legislators all Solomons. That a university education only can fit a man to represent a community was, the Minister believed, a fallacy all too common. His own experiences told him that book learning and a university course form only a very small part of a man's education.

In conclusion the Minister of Agriculture urged upon the delegates most careful consideration of all steps taken towards organizing, but when they had made up their minds to go ahead to carry their beliefs into concrete action in unanimous manner.

It was the unanimous opinion of the delegates that the element of politics should be eliminated, and instead of an attempt being made to form an independent political organization to, instead, confine the political activities of the Union to the education of the farmer along economic lines and enlist the support of candidates of the existing parties on behalf of such policies as will benefit the industry. Another feature of the new organization will be the full rights of membership to women whose valuable assistance, especially in respect of the social side of the Union, were fully recognized.

The provincial organization will seek to bring into its fold every local organization in the province and provision is made for the organization of such locals and for the grouping thereof into district organizations, each of which will be represented upon the board of directors, while delegates from each local will also attend the annual conventions of the central organization.

Officers were elected as follows:

President—Mr. C. G. Palmer, Duncan.

Vice-presidents—Messrs. J. W. Perry of Langley, R. A. Coupland of Kelowna and P. E. Moore, Saanich.

Directors—Messrs. J. Johnston, Nelson; R. W. Hurford, Courtenay; L. Dilworth,



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Kelowna; R. H. Helmer, Summerland, and W. E. Smith, Revelstoke.
Secretary (pro tem.)—Mr. George Sangster, Victoria.
A meeting of the directors will be held shortly, when further steps towards making effective the organization's plans will be taken.

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Vol. IX. MARCH No. 3

EDITORIAL

HON. MARTIN BURRELL'S APPEAL TO THE FARMER

For two and a half years, War, red and ruinous, has raged through the world, and still no decision has been reached. There is reason to hope that before 1917 closes the struggle for liberty will have been won, or greatly advanced. Amid the varying phases of this titanic conflict the fact stands out more clearly than ever that agriculture is of supreme importance. Extraordinary measures are being taken by the allied countries to increase and encourage production. It is earnestly hoped that every farmer in Canada will strive to increase the food supply of the empire. A still powerful and unscrupulous enemy openly avows its intention to try and sink all ships carrying supplies to England during the coming year. In the tremendous strain yet to come a vital factor will be an ample and unflinching flood of food to England and France. No matter what difficulties may face us the supreme duty of every man on the land is to use every thought and every energy in the direction of producing more, and still more.

THE FARMERS' PARLIAMENT

We give unusual space this month to an account of the different gatherings of farmers, gatherings in which every department of agricultural activity was covered and the work and the problems pertaining to each carefully canvassed and discussed.

On this account we have been forced to crowd out a great deal of important material, but we think it wise that the deliberations of the different bodies should be given due prominence as soon as possible after the meetings have been held.

It is safe to say that at no previous meetings has a higher level of debate been reached or saner counsels prevailed. Some exceedingly tender subjects came before the different gatherings, notably that relating to the admission of Oriental labor, but in the main the delegates bore themselves with restraint.

Hon. John Oliver, the new minister, was felicitated upon his appointment by several of the gatherings and at each he delivered strong, sensible talks to his fellow farmers, speaking out of an experience of about a quarter of a century in this province. His suggestion that the different farm bodies must rely more and more upon themselves and less upon the government in view of the unsatisfactory state of provincial finance was a timely and warranted warning in the wisdom of which all who appreciate the facts will concur.

The note of co-operation was well emphasized by the two visitors from the prairies whose visit was a very welcome one to the delegates, and whose advice was of great value in launching the new union.

THE UNITED FARMERS

The new organization which took form last month in Victoria bearing the name of the United Farmers of B. C. will probably mark an epoch in the advance of organized agriculture in this province. For years similar associations have flourished on the prairies, and one of them at least has attained proportions, and wielded an influence which has given it a formidable place among the political forces of the middle west. In eastern Canada two decades ago similar organizations took form, but did not survive their short but militant invasion of the realm of the trader.

Organized agriculture has gone a long way since then. Its problems are greater and more complex, its difficulties have partaken the character of the advanced age in which we live, but its members are better fitted than were their predecessors to grapple with their problems and avoid the pitfalls which brought disaster in the past.

At their organization meeting the promoters of the United Farmers took pains to avoid an initial peril by pronouncing against participation in politics. While their problems are in some instances political or semi-political in character they can be best adjusted by working through the existing parties rather than by endeavoring to form one in which farmers alone would have a voice. The wisdom of this course will commend itself we think to all who have had any experience in such bodies.

Fruit and Farm wishes the new body a successful career and predicts for it a large place in the farm life of this province.

THE TUBERCULOSIS TEST.

Those who are charged with the duty of administering the affairs of our agricultural department, just at present, are in a similar position to those who long ago were assigned the task of making bricks without straw.

The minister finds himself with a depleted treasury, forced to provide for numberless expenditures which cannot be avoided if efficiency is to be maintained.

In some instances attempted economy by the cutting off of an appropriation may mean a menace to the public health.

Under this head we are inclined to include the suggested abolition of the grant for testing cattle for tuberculosis. Protests have already gone before the department from the B. C. Veterinary Surgeons' Association, backed by the B. C. Medical Association. The universal consumption of meat and milk, the latter the chief diet for children, makes the protection of these two forms of food a duty which the state dare not ignore. The tuberculosis test has demonstrated its reliability as a protective measure. Whatever other grants must be foregone, this one should be retained.

THE MILK BUSINESS AND THE FARMER

An evolution of great interest has been the action of the lower Fraser farmers during the past month in taking over one of the Vancouver creameries and arranging to supplant the middleman in the distribution of milk in the city. It is stated that 90 per cent of the farmers are in the

new organization which if successful will displace the large firms which during the last few years have sprung up in Vancouver and have controlled the distribution of the product.

The complaint of the farmers seems to be that they have not been fairly treated by the middlemen who have given them an unsatisfactory sampling test. They do not propose to lower the retail price and from this standpoint therefore the new movement has no interest for the consumer.

One serious effect of the new departure will relate to the production of fresh butter by one of the large departmental stores in Vancouver which has been in the habit of buying its cream direct from the farmers and producing fresh butter daily. One hundred and fifty thousand pounds of butter were thus produced last year. If the new organization embraces the number of farmers which it is alleged to do this source will be cut off.

PRESERVING OUR STOCK

The strong resolutions asking for the protection of young stock which was passed at the recent farmer conventions emphasized a condition which should have earlier claimed the attention of the authorities. The popular appetite for veal may well be denied in view of the greater urgency of insuring beef for our soldiers. This is a species of Lent which Lloyd George will certainly approve. The prohibition of the export of young breeding stock is in the same direction.

PROVINCIAL BOARD OF HORTICULTURE

The regular meetings of the different farmers' organizations held in Victoria last month were preceded by a gathering of the provincial board of horticulture.

This body, as is well known deals with all forms of orchard disease and has been particularly concerned during the past few years with the problem of the destruction of the codling moth and of other forms of insect pests.

Radical measures have been carried out during the past year in this direction for the purpose of still further protecting the orchards of the province and the board asks the government to make financial provision this year so that this work may be effectively continued.

Chief among the resolutions placed before the provincial minister of agriculture by the members of the provincial horticultural board, was a resolution urging furtherance of the government's effort to control the codling moth pest within this province. The work of the department in the past has placed British Columbia in the enviable position of being free of the great economic pest except for periodical and incipient outbreaks which were promptly eradicated by use of the department's power spray apparatus. It was shown before the board that Ontario's fruit crop suffered to the extent of \$2,000,000 last year from the ravages of the codling moth. British Columbia, it was shown, has so far been able to control the menace by its insistent aggression to the evil. The board endorsed the department's action of inspection of all empty cars from infected districts, and the necessary steps taken for safeguard. The department's work has consisted of quarantine, after having localized any incipient outbreak of the pest, efficient methods of power spraying by capable crews, inspection of the picking of fruit and other steps

calculated to eradicate the trouble whenever it arose.

Another resolution by the board was in appreciation of the work of the department of agriculture's market commissioners, Mr. R. C. Abbott at Vancouver and Mr. W. E. McTaggart in the prairie provinces. According to Deputy Minister of Agriculture William Scott, these gentlemen in their respective capacities have accomplished marvelous benefits for the producers in the way of finding the best possible markets of advantage to growers.

A third resolution urged the department to make additions to the present facilities for the fumigation of corn, rice and grain coming from the Orient. Hundreds of tons of this class of imports are handled in Victoria, and in the case of large shipments coming together, or even in large single shipments, the facilities for fumigation mean delay in delivery to consignees, and there is room for some complaint from the said consignees. The minister of agriculture was asked to take steps to enlarge the facilities for fumigation in order that the system may be maintained without the delay at present experienced in handling the work.

FOR FARMERS' RELIEF

Government Will Distribute Seed Supplied In the Section Along G. T. P. Railway.

For the relief of the farmers of the district along the G. T. P. line from Hazelton to Tete Jaune Cache, in which district last year the farmers experienced the worst year in a quarter of a century through their crops being ruined by frost, the provincial department of agriculture is shipping into that section four carloads of seed chiefly of barley, oats and wheat. By this method the farmers will be able to secure the best quality seed at the lowest possible price repayment to be made to the government next fall after the crops have been secured and sold.

THRIFT AND PATRIOTISM

Both Virtues Have Chance of Expression in Purchasing War Certificates.

The new War Savings Certificates which have been created by the government to encourage thrift and economy and to give everyone an opportunity to assist in financing our war expenditure, are now on sale at every bank and money order post office in Canada. The \$25 certificate sells for \$21.50, the \$50 for \$43, and the \$100 for \$86.

As an investment these certificates offer many attractive features, chief of which are the absolute security and the excellent interest return. For every \$21.50 lent to the government now, \$25 will be returned at the end of three years.

There are two other features which are especially interesting to small investors. First, the certificates may be surrendered at any time, if the buyer should need his money; and second, each certificate is registered at Ottawa in the buyer's name and, if lost or stolen, is therefore valueless to anyone else.

But while they are excellent from an investment standpoint, the certificates should appeal strongly to Canadians because they offer to those who must serve at home a splendid opportunity for a most important patriotic service. The person who honestly saves to the extent of his ability and places his savings at the disposal of the government by purchasing these certificates, may feel that he is having a direct share in feeding, equipping, and munitioning our Canadian soldiers, who are so nobly doing their

TRADE UNIONISTS VS. FRUIT GROWERS

Labor Men Oppose Entrance of Chinese as Suggested by Fruit Men.

Strong opposition will be entered by the Trades and Labor Council to the proposal of the B. C. Fruitgrowers' convention to ask the Dominion authorities to let down the bars for Orientals in order to furnish a supply of labor for the fruitgrowers during their harvesting. Both the Dominion and provincial governments will be urged by the trades council to prevent any reduction in the head tax or change in the manner in which Orientals now enter Canada. Coupled with this will be a protest against the admission of East Indian women to the province.

SHORTAGE OF SEED POTATOES

Ald. Hamilton, chairman of the market committee of the Vancouver city council, states that there is a shortage of potatoes which is likely to produce a serious situation a few weeks hence when seed tubers are required.

So limited is the supply that the aldermen believe that exportation should be stopped if the double danger of excessive prices and lack of seed is to be avoided.

Representations to that effect have been made to the horticultural department at Victoria.

In this connection Commissioner Abbott stated at the Victoria convention that 60 per cent of the potatoes coming on the market in his district were raised by Chinamen.

MAKING FARM LIFE PLEASANT

"Good farming depends upon good neighboring. Living on good terms with folks is a part of modern farming as truly as knowing how to farm." Thus reads the first paragraph of a farm bulletin issued recently by the Wisconsin Agricultural College.

The bulletin mentioned goes on to say: "A higher level of efficiency is reached in the science and art of local agriculture when families know one another well and meet frequently." Wisconsin, through its great college, was among the first to differentiate its treatment of the subject of farming with a campaign for the benefit principally of the farmers' wives and families, for better neighboring, closer communication for all and everything tending to elevate and make the farm folk happier and better contented.

While the art of agriculture has nothing to do with management of the household, with the play spells of the mothers and children, with the furnishing of the parlor or better conditions in the kitchen, still it is true that for the farmer to get the best returns from his farm labors in dollars and cents the entire machinery of the farm, indoors and outdoors, must run like clockwork, regularly and almost unerringly. To do that, father, mother and the boys and girls must pull together as a unit, which cannot be done as one would manage so many serfs or slaves.

The greatest of all steps toward a united household is a better understanding with each other, a closer communion, days of play and evenings of enjoyment in the home and in the homes of neighbors, in grange, farm clubs and other meetings.

Farm life can be made more pleasant than city life, if the matter is taken hold of in the right way and followed up with the right spirit. If this is done, the answer to the back-to-the-farm movement will not be difficult to discern.—Portland Oregonian.

Men's Hats

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Beekeeping in British Columbia

By Williams Hugh

THE BEEKEEPERS' ASSOCIATION OF B. C.

The annual general meeting of the above was held Wednesday, February 7, at 2:30 and 7:30 p.m. in the Board of Trade rooms, Vancouver, Mr. D. Mowat, president, occupied the chair at both sessions, supported by Hon. Vice-presidents E. S. Knowlton, John Reagh, W. H. Turnbull, Dean Klink of B. C. University, Manager Rolston, Vancouver Exhibition, J. P. Markey. Over one hundred persons attended the evening session. Mr. D. Mowat, at the afternoon session, delivered an address on the past year's work of the association. Secretary Hugh presented his annual report, with the auditors' report. Mr. John Brooks reported on the question of judging honey, and laid before the members a score card, for the use of judges, at local exhibitions, and suggested the association provide hydrometers to assist judges in their duties. Mr. W. H. Turnbull, chairman of supplies committee, stated he had been unable to secure definite replies to his enquiries from dealers, as to members being granted a discount on their purchases during the coming year, notices will be sent out advising where supplies can be obtained at reduced rates.

The directors were not in a position to recommend a label for members' use, this question was laid over for the new board's consideration.

The several addresses delivered during the session will be printed as space permits in the Fruit and Farm Magazine.

Mr. W. H. Lewis, of Edmonds, a beekeeper of 30 years' standing, delivered an interesting address on Spring and Winter Management.

Williams Hugh spoke on the cause of American Foul Brood, and its control by the McEvoy method of treatment and suggested the government should compensate beekeepers when its inspectors destroyed bees and hives affected with Foul Brood.

Dr. A. E. Cameron, M. A., at the evening session delivered a lucid address on the Anatomy of the Honey Bee. The doctor stated while not understanding the practical part of beekeeping, he was sure that a knowledge of the anatomy and physiology of the bee would enable beekeepers to become more proficient in their work and thus secure a larger return for their labors given to their pets.

R. C. Treherne, B.S.A., addressed the members on the "Problems of the Fruit-grower and Beekeeper." This interesting and instructive address will be inserted in next month's issue. Mr. F. D. Todd, with the aid of a well built Dadant Hive, described its advantages and its suitability for a climate like B. C. Votes of thanks were tendered all the speakers. The secretary was requested to thank the Entomological branch, Ottawa, for the services rendered by Dr. Cameron, M.A., and R. C. Treherne.

Election of Directors.

All the directors elected last year were unanimously re-elected for the year 1917. Messrs. H. L. Chittenden, of Langley Prairie; A. W. Finlay, Veddar Crossing; Jos. Robertson, Esquimalt, directors who are serving at the front in France, are to be kept in good standing, without fees, for the duration of the war. The following members were elected to the board of directors for the year 1917: Messrs. A. French, F. C. Raney, J. P., G. W. Stones, B. F. Andrews, C. Chinery, B. Hugh, R. B.

Hetherton, W. H. Gray, C. Cooke and Mrs. Fred White. John Brooks and Wilfred M. Smith were appointed auditors.

Election of Officers and Committee.

At a meeting of directors held at 10:30 p.m., the following directors were elected to fill the several offices: President, D. Mowat; vice-president, W. H. Turnbull, hon. sec.-treasurer, Williams Hugh. Delegate to Vancouver Exhibition Association, D. Mowat.

Exhibition Committee—Chas. Sprott, J. P., chairman; W. H. Lewis, J. Brooks, G. W. Stones, W. M. Smith, B.A., F. C. Raney, J. P., R. B. Hetherington, A. Smith.

Experimental Apiary and Lecture Committee—John Brooks, chairman; W. Rant, W. H. Lewis, B. Hugh, B. F. Andrews, W. H. Gray.

Supplies Committee—W. H. Turnbull.

BEEKEEPERS' MEETING.

A Start for Beginners.

In view of a number of persons interested in beekeeping being desirous of studying the theory and practice of the craft, an address, "Making a Start With Bees," will be delivered by Williams Hugh, Wednesday, March 21, 7:30 p.m., in the offices of the Vancouver Exhibition Association, Hastings Street West, Vancouver.

The Vancouver exhibition manager has kindly placed the room at the disposal of the beekeepers' association for the purpose of giving instructions not only to its members but all who wish to avail themselves of the opportunity of attending. It is pro-

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posed to continue with practical demonstrations at the exhibition grounds during the summer.

NOTES.

Mr. and Mrs. Dean of Keatings, V. I., brought a jar of prunes preserved in honey and two jars of honey, one granulated and the other liquid, both taken from the same tank. Mrs. Dean would like to know why one granulates and the other does not? This question could not be answered at the meeting. Mr. Root states in A. B. C.: "It some times happens that of two lots taken from the same barrel or can and placed in two self-sealing packages that the honey in one will be candied while in the other it will remain liquid notwithstanding that both packages have been subjected to the same temperature and the same general conditions." Dr. Miller states: "While this may not be accounted for in some cases, in others it may be accounted for by the fact that in a large vessel the honey at top differs from that at bottom." This does not answer the question. Here is another from Dr. Phillips: "If granulated honey is in a 60-lb. can and is to be transferred to 1-lb. bottles, it is necessary that the entire 60 lbs be liquified and mixed before any is poured out into bottles in order that all bottles may contain honey according to the legal standard. Unless this is done, some of the bottles will contain a high percentage of dextrose and will granulate rapidly, while others will contain a preponderance of levulose and will not granulate for a long time." In view of this statement and our knowledge of the composition of different honey, there may have been a quantity of nectar gathered from flowers high in sugar or dextrose, this would granulate quickly.

Mr. J. S. Lucas, of Glasgow Av., Maynard P.O., sent for the inspection of members a frame with a broad top bar. Mr. Lucas claims this conserves the heat in the brood chamber. He favors the warm idea in his hives, that is the frames are parallel with the entrance.

Members wishing to avail themselves of the discount granted by dealers must on every occasion, when purchasing, produce their card of membership to Messrs. Wm. Rennie Co., 872 Granville St.; Ritchie Bros and Co., 840 Granville Street; James Brand and Co., 723 Robson, Vancouver; Messrs. Trapp and Co., New Westminster.

JUDGING HONEY.

By BURREARD.

Apropos to a discussion which took place at the B. C. Beekeepers' convention in Vancouver, February 7, on a score card for honey. The question came to our mind, Is it good policy to unite the two fundamental systems of judging, viz. comparison and scoring? The resolution of the committee stated, in reference to the density of honey that 75 per cent of pure would be allowed 1 point, and so on up to 100 per cent; 25 points to be the full score, but the highest scoring honey would be allowed the full 25 points. This is where the comparison system comes in: Suppose the highest scoring honey gets 90 per cent. It being the highest it will be given 25 points. The second highest score is say 89 per cent, it is given its score ratio of 15 points counting from 75 per cent—1 point, etc., consequently the best exhibit will be given 10 points more than the second which in reality is only one point behind it.

Another feature detrimental to the selection, in combining the two systems is the extra labor. If a judge be competent the score system is ideal and is all that is necessary. An individual exhibit is judged

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independent of any others. Whether there be one or a hundred. The judge has his score card. The first item is density; perfection in this is 25 points starting at 75 per cent. His hydrometer immediately tells him the score, say it is 89. He counts up from 75-1, 76-2, etc., (it should have been 75-0, 76-1, etc.) and finds 89-15 and puts down 15 points for density or better still he adopts the "cut" or deduction principle as it is simpler, in which case he would deduct the 15 points gained from the perfect score and put down a cut of 10 point and proceeds with the other sections in like manner. When he has completed the cuts in each section the card is handed to the clerk who totals the cuts, deducts this from 100, a perfect score, and finds the score of this exhibit, and so on in through the class. The clerk has all the cards totalled; he can tell at a glance which is first, second and so on, but as the resolution called for the best in density to get 25 points it is necessary to set them all out for comparison, or at least an addition to the score of the best specimen to the extent of the difference between what it actually gained and 25 points, the total for the section. In doing this it makes an imperfect ratio between the winner and the others in the class and loses all the value of the score system for future reference. An exhibit in one year may score 90 per cent gaining first prize. A much better exhibit another year without the "honorary" points may score only 89 or less and the exhibitor doesn't know where he is at.

We think that one full point per degree of density is too high a cut. A sample showing 90 per cent density is nearly per-

CHILLIWACK

FOR SALE—House and large lot in Chilliwack, "the garden of British Columbia"; seven-room house, electric light, city water, garden full of flowers, fruit and vegetables; five minutes' walk to postoffice and cars; fishing the year round; shooting in season; fifteen swarms of bees in Langstroth hives, producing hundreds of pounds of honey. See owner on the place. M. J. Henry, Chilliwack.

fect whereas according to the schedule drawn up it has to carry a cut 10 points. If it were absolutely perfect in all other ways it would only score 90 which is a very low score indeed for a good sample. It would appear to us that a half point per degree of density from 76 per cent to 90 per cent would be in correct ratio, and we would suggest that 75 per cent—15 points and half a point for each degree in addition.

"The "Comparison System" is nearly obsolete. Why not discard it entirely? Judges are now qualified to handle the score card in most departments in its entirety. A few demonstrational lectures and a little experience soon qualifies anyone to judge and everyone who exhibits should be able to score their exhibits. The Vancouver fair, to be held in August this year, offers classes in stock judging. It is possible to get up a class in honey judging with qualified demonstrators. Why not put it up to the association to make the necessary class with prizes?

IMPORTANCE OF SUFFICIENT VENTILATION IN THE HIVE.

W. J. SHEPPARD, NELSON, B. C.

Bees, in connection with other living things, cannot thrive properly without a sufficient supply of oxygen. This is often lost sight of by bee-keepers and gives rise to troubles of various kinds. Bees are able to take care of themselves in this respect, to a great extent, and provide ventilation in the hive by fanning at the entrance, but during extremely hot weather it may happen that this is too great a task for them to accomplish. There is always danger of brood being killed then through the overheating of hives and the lack of fresh air. Sometimes the heat may be so great that the combs will actually melt in a garden in a corner formed by the junction of two brick walls, where the sun was not only beating down on it, but was being radiated from the bricks as well, the consequence being that a steady stream of honey was running from the entrance through the break down of the combs. Needless to say the colony was completely ruined. The hives mostly in use here are constructed so that there is a permanent entrance of seven-eighths of an inch in depth extending along the whole width of the hive. This is generally found sufficient to provide enough ventilation for the summer season, especially as the nights are nearly always cool. To make the entrance smaller, when required, a block is used which has only to be turned over to give an entrance of either three-eighths of an inch deep by the full length of hive, or three-eighths by three inches. It is well known that if adequate ventilation is not provided during the swarming season, excessive swarming will result. Queen excluders are often the cause of impeded ventilation at this time, especially if they are unbound and laid flat on the tops of the frames. All queen excluders should have a wooden frame all around, which will ensure a clear bee-space of a quarter of an inch both above and below them. Attention has lately been drawn to the probability that more swarming occurs from hives where the frames are spaced one and three-eighths inches, from centre to centre, than where the spacing is one and a half inches. If this is so, the reason would be that the latter spacing permits of freer ventilation between the combs. When the top bars were made seven-eighths of an inch wide, instead of the present one and a sixteenth, there was plenty of room for ventilation, although more brace comb was built between. Ample ventilation in winter is very important and makes all the difference to the comfort and well-being of the bees. Want of sufficient fresh air, then, results in dampness and causes the combs to become mouldy and is a fruitful cause of dysentery. A damp hive is also a colder hive, especially in freezing weather. From experiments tried here this winter we have found a decided improvement for ensuring ample ventilation. The double screen wire super-clearer, that has been previously mentioned in these columns, was placed immediately over the frames last fall, which provides a clear bee-space above them. Over this a porous covering was put, composed of bags containing either planer shavings or coarse sawdust, and a ventilated roof. The bees have not been able to fly since October 27th last, and it is now the middle of February, and the worst of the winter over. We have never before seen the bees in such splendid condition at this time of year. They are clus-

tered well over the tops of the frames and smell sweet and dry and have an exceptionally healthy and bright appearance. The winter mortality has been far less than usual and in some hives there are very few dead bees to be found at all. We have decided to always adopt this plan in the future.

Kootenay Beekeepers' Association invite all interested in apiculture to become members. The subscription is \$1.00 per annum, due on the 1st of October. This association offers many advantages to its members. Mr. W. J. Sheppard is the hon. sec-treas., Nelson, B. C.

PRESIDENT'S REPORT BEEKEEPERS' ASSOCIATION OF B. C.

Vancouver, B. C., February 7th, 1917.
Ladies and Gentlemen:

It is with a certain amount of pleasure that I have the honor of presiding at the first annual meeting of the Beekeepers' Association of British Columbia as your president.

You will naturally expect me to give an account of my stewardship for the past year, being the first year of our existence.

Most of you are aware that in December, 1915, a few friends interested in apiculture met in the office of the Fruit and Farm magazine and talked over the question of forming a beekeepers' association for the province. There were present, besides myself, Messrs. John Brooks, Fred W. White, Williams Hugh, Wilfred M. Smith, J. P. Markey and W. C. F. Gillam. The decision was arrived at that an organization was advisable and a necessity. We next had an organizing meeting on January 10, 1915, and on February 2, 1916, we held a regular inaugural meeting which was well attended, at which our first officers and directors were appointed and our association launched, I hope, on a prosperous and educational career of usefulness.

Our association was mainly started to promote and encourage the keeping of bees and assist members in disposing of their product; with these objects in view we have steadily progressed.

The apicultural exhibit at the Vancouver Exhibition last August, held under the auspices of our association, was an effort to fulfil one of the objects of our organization. It is needless for me to say the exhibit was a pronounced success. It not only showed the general public what beekeepers were doing, but proved to ourselves what can be done in the province by and through organization. We have learned much from our efforts in that direction, which I trust will be of profit to all in the near future. Primarily, we should aim at a better prize-list for future exhibits, not only in Vancouver, but elsewhere in this province, so as to give the small beekeeper, the person with one or two colonies of bees, an opportunity to compete for awards. I would also advocate that prizes be offered for light, amber and dark honey.

As our association is of a provincial status, I would recommend that the officers and directorate of this year make an effort with the directors of all agricultural associations and farmers' institutes holding fairs, to revise their lists so as to encourage the beekeepers to make better display of their products of the apiary. I would also take this opportunity of stating that the time has arrived when our association should possess a demonstration tent, so that the public can see the manipulation of bees in comfort.

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the association has, during the past year, been the means of saving many of our members some money by securing supplies and appliances at a reduced rate. I trust it will be continued, and if not this year, I hope in the near future to have an organization so perfected that we will be able to buy our supplies co-operatively, and eventually have our products sold in the same manner.

A committee of the directors on labels will submit their report and several designs for your approval. These labels when used by our members will be a guarantee of the purity of their product, and will be the means of inspiring confidence in our members with the buying public.

Our secretary has applied to the education department and the B. C. University authorities, to institute a short course in beekeeping annually. You will be pleased to know that as soon as the necessary funds supplied by the legislature, this request will be granted.

Although we have only been organized twelve months, our association is the largest organization of beekeepers in the Dominion of Canada, outside the province of Ontario. We number now 134 members and I trust we shall go on and increase in numbers and usefulness, and encourage beekeepers to produce more, so that we can meet the growing demand for B. C. honey, and thus build up in the province of British Columbia an industry that shall stand equal with the other great branches of agriculture.

I beg to thank the members for the honor they did me in electing me their first president. I hope the trust has been faithfully carried out.

I cannot conclude without expressing to you that the association is deeply indebted

to our very zealous and efficient secretary for the great progress our organization has made during the first year of its existence.

To your directors who have so ably assisted in the management during the year, at considerable loss of time, we are deeply indebted, and too much praise cannot be accorded them.

I have the honor to be,

Yours obediently,

DANIEL MOWAT,
President.

INSTRUCTIONS IN AGRICULTURE

Two-Year Course at the University Outlined by Dean Klinck.

A report from Dean Klinck of the faculty of agriculture of the B. C. University with regard to the courses to be started in his department next year was approved at the recent session of the growers. There will be two courses; the first of academic standing, leading to a degree. The major part of the work will be under the existing arts and science faculties, the remainder, under the agricultural faculty.

The second course will be a more pretentious programme of short course work, which will not be of academic standing, but similar to the short course in horticulture given during the past months. The regular matriculation standing will be required for entrance to the former course. The latter will be for anyone particularly interested in the branch under study. Dean Klinck stated that he hoped later to add a two years' course which should lead to a diploma and which might be of very real value to the practical man.

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JAN. 9, 1917

Gardening for the Home

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

If the suggestions on seeds to be sown last month have not been carried out, no time ought to be lost now in getting them into the ground, provided, of course, that the soil and weather conditions are favorable.

To ensure a regular supply of green peas for the table the whole season through, don't forget to put in a sowing every second week from now on till the end of June; or sow a selection of varieties that will mature in succession, such as Pilot, Gradus, Alderman, Stratagem, Sharpe's Queen and Autocrat. Those varieties, if sown at one time, will give a regular supply of green peas for about two months, but if sown at intervals of two weeks the season may be extended to five months—June to October—and if one particular variety, say Gradus, is preferred above all others, then use the one variety for each sowing after the middle of April, and for earlier sowings use Pilot.

On a warm, rich, sunny border put in small sowings each of early, mid-season and late varieties of cabbage and cauliflower; also a few seeds of Brussels sprouts, savoy, curled greens and pickling cabbage. Work up the surface until it is nice and mellow, and sow the seeds in rows one-half inch deep and nine inches apart; tread as little as possible on the bed, so that it will be loose and open and allow the circulation of air in the soil to encourage a quick growth.

Plants from the above seeds, if sown now, will be ready to transplant the last week in May or the first in June, and will mature from the first week in August till the end of the year.

To get a bouquet of sweet peas as early as possible, get the seeds in at once, and if the best results are to be expected from this popular flower, no pains must be spared in preparing the ground for them. I have often heard people giving vent to expressions of disgust because the flowers did not come large like they had seen on exhibition tables, even although, as they said, they had bought seeds of the "big-flowered kinds."

Ordinarily speaking, there is only one kind of sweet pea seed as far as large or small flowers are concerned, and the fault must have been the grower's, not the seeds, nor the seedsman's either. It is not enough to go to a reputable seedsman and buy some high-priced sweet pea seed, take it home and scratch a rut in the garden on soil that has had no special preparation, cover it up and stand aside to watch large blooms develop, for you will most assuredly be disappointed. To obtain exhibition blooms, the most elaborate soil preparation is necessary, and the whole energy of the plant is forcibly concentrated into the production of a few flowers of enormous size; the large flowers look fine in a vase, I admit, but the plants on which they are grown are no ornaments to the garden, and as the sweet pea plant is a decorative plant par excellence it is better for the average gardener to be content with smaller blooms and an abundance of them. In any case,

however, the soil should be dug at least two spades deep and be well enriched with manure, a light dressing of well-decayed barnyard manure, supplemented with a dusting of basic slag, bone meal or superphosphate of lime and well incorporated with the soil the full two feet deep; all other conditions being right, this will give very good results. Sow the seed thinly and when well up, thin out to six or eight inches apart. The thinnings, if carefully lifted with a trowel, may be transplanted to other desired situations.

Contrary to the above-mentioned cabbage where a quick, soft growth is wanted, the soil for sweet peas must be tramped firm. Firm soil produces firm, short-jointed stems, and as flowers are usually produced at every joint from one foot from the ground up, it necessarily follows that the more joints you can crowd into a given length of stem, the more flowers you will get.

March is a good month to transplant herbaceous and Alpine plants, many of which are shallow rooting and are easily heaved out by the frost if planted earlier. In dividing many of the above plants for replanting it is better to pull them apart with the hands wherever possible rather than chopping them up with the spade; and remember that the outsides of clumps of Michaelmas daisies, phloxes, pyrethrums, sunflowers, etc., are the strongest and best for replanting. Examine the rockery very carefully and see that the rampant growers, such as aubretias, arabis and alyssium are not encroaching or smothering any of their weaker or compact growing companions.

It is too early yet to prune dwarf roses, but to avoid having all the pruning to be done at one time a start may be made on the climbers.

Climbing roses of the the polyantha type, of which the Crimson Rambler and Dorothy Perkins are representative of two classes, bear their flowers mostly on the young wood; therefore, preference must be given to that wherever possible. Old branches, which have already borne flowers, if needed to fill up or to support young branches higher up, will flower again if the old flowering wood is cut back to one or two buds, but note the difference in the quality of the flowers produced from those spurs and those on the young wood, and the desirability of retaining as much of the latter as possible will at once be apparent. Tea and hybrid tea climbers, like Gloire de Dijon and Kaiserin A. Victoria, require different treatment from the polyantha class. Here rampant growth is to be discouraged and all rank, pithy growths must be well shortened back. The idea is, of course, to cause all the lateral buds on those long shoots to break into growths which will terminate in a flower, and to do this they must be considerably shortened. Remove entirely the weak breast wood from the older branches, and prune back the stronger to one or two buds. All other climbers of whatever kind

ought to be attended to at the same time.

Clematis, of the Jackmanii type, are inclined in a few years to produce their young wood and have their flowers higher up, while the lower limbs remain bare; this can be counterbalanced by pruning back the branches to different lengths, starting at one foot from the ground and so on over

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the whole plant. Clematis Montana and its varieties bear their flowers on the previous year's wood, therefore the time to prune them is immediately the flowering season is over, the same method of pruning as outlined for the Jackmanii type being applicable to them also.

The planting, pruning and spraying of all fruit trees must be completed by the end of the month, it still being safe to use the winter strength of sprays.

WEST KOOTENAY FARMERS' INSTITUTE.

A rather unique report was received at the annual meeting of the above institute at Nelson, B. C., on January 26 last.

The retiring president, Mr. Chas. F. McHardy, reported that on account of the formation of other institutes within one and eight miles respectively of Nelson post office the West Kootenay Institute seemed to have outlived its usefulness and he advised that serious consideration be given to the advisability of applying to the department for permission to wind up its affairs. The secretary-treasurer reported 50 members. Albert H. Webb, of the Manual Training school pointed out to the members that in a city like Nelson they had splendid opportunities for missionary work among the young people. A scheme of home garden, poultry raising and potato growing competitions among the school children if properly carried out would be ample justification for the prolongation of the life of the institute. The speaker also touched several other lines of activity that should appeal to the members. After some discussion a motion to elect directors for another year was carried unanimously. They are Chas. F. McHardy, president; James Johnstone, vice-president; Albert H. Webb, secretary-treasurer; directors, Mayor J. E. Annable and Mr. J. A. Irving.

The secretary-treasurer was directed to write the department of agriculture re better representation for the Kootenays on the advisory board, the only representation at present being Mr. Brown of Vernon for the whole of the interior against three for the coast and one for Yukon.

Mr. James Johnstone moved "That on account of the numerous deaths of horses and cattle in the district during the past year from some cause unknown, the government be asked to station a veterinary surgeon in Nelson so that these matters might be looked into properly, as great loss had been borne by the settlers on this account." Carried.

Mayor J. E. Annable moved the following which was carried unanimously: "That in view of the high price and scarcity of cattle caused by the shortage in Europe brought about by the war we request the government of British Columbia at its first session to pass an act prohibiting the slaughtering of all female cattle under three years of age and all males under one year."

The secretary, Alb. H. Webb, was appointed organizer of a Junior Farmers' Institute among the young folks of the district.

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TEN ACRES AND CONTENTMENT

How Chas. Raine of Cloverdale Lives in Comfort From the Profit of Six Hundred Fowls.

(By BEVAN L. HUGH.)

At this time when all are asked to contribute to the cause of the empire in service, in money or in production, whichever they are able, to the utmost of their ability, we might advise those who are unable to go to the front to become producers. Young men of the city do not like to leave the "bright lights" for the quiet life that one leads in the country on a ranch. There is more money made in producing the food of our empire than there is in working in the city. An instance of this may be seen in a ten-acre chicken ranch just over two miles from Cloverdale in the Fraser Valley. Mr. Chas. Raine, the owner of this ranch was not raised among chickens although he has been on a farm or in the country nearly all his life.

Thirteen years ago he came to Eastern Canada from Richmond, Yorkshire, England. He farmed in Ontario and in Manitoba before coming to British Columbia. When he arrived at the coast, he tells us, he knew nothing of poultry except the fact that hens laid eggs—and most of us know that hens lay eggs—sometimes—it all depends in whose hands they happen to be whether they lay or not. The ten-acre plot four years ago (when he purchased it) was not in the splendid condition it is at present. Huge stumps have been blown off the place—some of them requiring a box of powder—and all the land is now under the plough and in cultivation except a small patch in one corner and the part occupied by the dwelling, barn and poultry houses.

Four years ago Mr. Raine could not distinguish between a layer and a non-layer. Today he weeds out all the non-layers and as a consequence got \$900.00 clear last year from 600 hens in selling eggs and broilers. The large colony house, 16x100 ft. was built by himself and holds 600 hens besides several smaller colony houses, breeding houses, etc. The incubator is certainly a credit as well. It holds 560 eggs and was also made by Mr. Raine as were the hovers (for 600 chicks) and brooders.

The dwelling was on the ranch when the present owner bought it, but it has undergone great improvements. It has been made more comfortable by the addition of a kitchen as well as being shingled and stained all over.

Most of the feed for the chickens, cow, pigs, horse, etc., is grown on these ten acres. A patch being in oats, another in red clover and another in swede turnips. From the whole ranch, including chickens, cow, pigs, vegetables and fruit, Mr. Raine says his income is approximately \$150.00 per month and men who are not in the know say farm life is a grind and no money made. Grind is the wrong word—hard work is the correct term—and who fears hard work when such splendid results follow. There's one thing, Mr. Raine, or any other small rancher does not have to climb out of bed at the beck and call of the morning whistle, gobble his breakfast and run for the car. He gets up early, finishes his chores and has breakfast in peace and quite at his leisure—then he works again. Can city office or store life compare with the gentle breeze permeating the atmosphere as the independant rancher walks behind his horse as it pulls the cultivator—no more back-aching hoe-ing—and weeding the turnips? A sense of freedom surrounds the small rancher of today.

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Scarlet Runners, popular climber. Pkg. 10c, 4 oz. 15c, lb. 50c.

Spencer Sweet Peas, good mixed colors. Pkg. 10c, oz. 25c, 4 oz. 80c, lb. \$2.40.

XXX Imperial Japanese Morning Glory, all colors. Pkg. 10c, oz. 35c.

Triple Curled Parsley, dwarf dark green. Pkg. 5c, oz. 20c, 4 oz. 50c.

Ninety-Day Tomato, smooth and firm. Pkg. 10c, ½-oz. 30c, oz. 50c

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Crimson Giant Radish, early crisp. Pkg. 5c, oz. 15c, 4 oz. 40c, lb. \$1.20

Senator Peas, large, luscious dwarf. 4 oz. 15c, lb. 40c, 5 lbs. \$1.75.

Yellow Globe Danvers Onion (black seed). Pkg. 5c, oz. 25c, lb. \$2.10.

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XXX Guernsey Parsnip, smooth, high-grade. Pkg. 10c, oz. 25c, 4 ozs. 75c.

Stringless Refugee Wax Beans, 4 ozs. 15c, lb. 50c, 5 lbs. \$2.25.

Rennie's Fireball Beets. Pkg. 10c, oz. 20c, 4 ozs. 50c, lb. \$1.60.

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PROBLEMS OF THE FRUIT-GROWER AND BEEKEEPER

R. C. Treherne, Field Officer, Entomological Branch, Dominion Department of Agriculture.

(Delivered before the members of the Beekeepers' Association of B. C.)

The interests of the fruitgrowers and the beekeepers touch on so many points of mutual concern that it may be readily foreshadowed that frequently occasions of friction arise. The fruitgrower, for instance, on the one hand, has for many years regarded the honey bee with scant favor on account of the fact that he has been assured it is one of the main agencies in the dissemination of destructive orchard diseases. The beekeeper, on the other hand, has watched very carefully the movement which advises orchardists, and for that matter agriculturists in general, to use arsenic as the controlling factor for many orchard and farm troubles.

It is my intention to discuss with you, some of the problems which confront both fruitgrowers and beekeepers in this province as elsewhere. Briefly enumerated these are somewhat as follows: (1) Pollination; (2) Arsenical spraying and the use of Poisoned Baits for the control of injurious insects; (3) Dissemination of plant diseases and (4) the question as to whether or not bees attack and injure fruit.

Pollination.

It is not necessary to enlarge on the horticultural reasons which make it necessary that many of the blossoms of our most luscious fruits be properly fertilized. It is merely advisable to draw attention to the fact that nearly every individual blossom requires pollen from another bloom, whether of the same variety or not, to insure a perfect fruit. Further than this the secretion of nectar within a blossom is a clear indication that the plant has evolved so as to attract some outside agent to bring about this cross-pollination. All sweet-loving, strong-flying insects are useful in this connection. Beekeepers must not assume that the honey bee is the only insect which answers to this description. All bees, whether domestic or wild fulfil the requirements of the plant, in respect to pollination, as do a great many wasps, moths, butterflies, flies, thrips, nectar-loving beetles and occasionally a few of the true bugs. Ants though handicapped by the absence of wings may be seen also carrying pollen from one flower to another. You may have seen, further, members of the useful Syrphid-fly family, which in their general appearance resemble bees or wasps, hovering around the blossoms of fruit trees, and causing blooms to be pollinated less directly than the honey bee. Wild bees particularly of the Andrenid and Halictus families, may often be observed mingling with the true honey bee in the search for the sweet nectar among the blossoms. But fruitgrowers must not assume that they are able to dispense with the services of the honey bee, in the matter of pollination, because of this array of other pollinating agents. Instances are numerous where the loss of a fruit crop has been directly attributed to the lack of honey bees. It is axiomatic to state that commercial orchard areas require a full complement of honey bees to insure proper pollination of the fruit blossoms. Alfalfa and white clover are worked on extensively by honey bees and red clover is commonly visited by bumble bees. In each case the relation between the plant and the insect is mutually beneficial. Under strictly natural conditions doubtless the wild insects are sufficient to

SEEDS

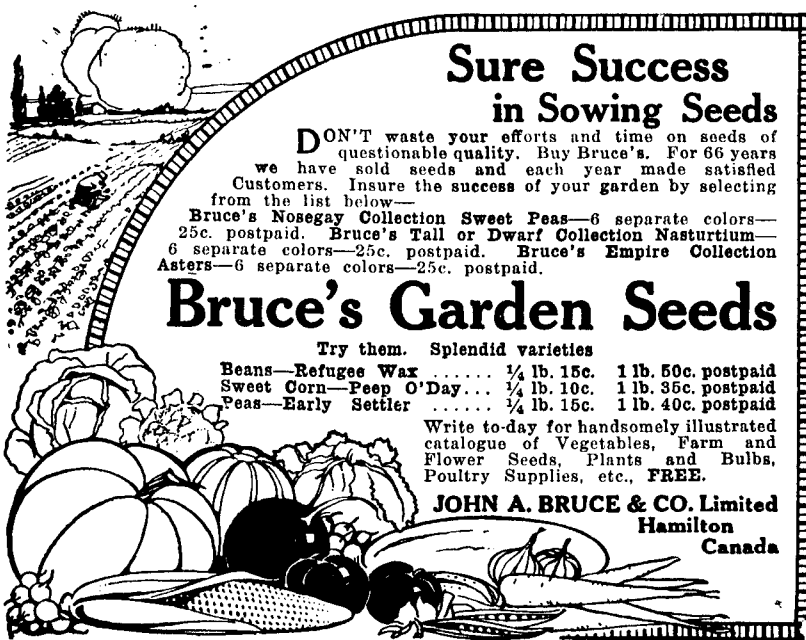
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answer the needs of the plants but under our present day system of extensive fruit culture, it can be readily understood, that these wild species are entirely too few to insure satisfactory yields. Furthermore fruitgrowers must bear in mind that bees of all varieties pass the winter in the adult stage and are, therefore, ready to work in the spring at a time when comparatively few insects are on the wing. It is true that

honey bees do not always work during favorable weather. Nevertheless being present, they take advantage of suitable occasions wherein to visit the flowers. Fruitgrowers, in view of these statements cannot avoid the conclusion that bees and the honey bee in particular, are necessary to the welfare of their industry.

To be continued in April issue.

POULTRY SECTION

SIXTH INTERNATIONAL EGG-LAYING CONTEST

Sixth International Egg-laying Contest, held under the auspices of the provincial department of agriculture, at Exhibition Grounds, Victoria, B. C., from October 6th, 1916, to October 5th, 1917—twelve months.

Fourth month's report, being for month ending February 5, 1917.

Average price per dozen, 46.75 cents; temperature, highest 58 degrees, lowest 6 degrees, mean 39.3 degrees; on 30th, lowest temperature, 6 degrees, yet experienced in

any of the contests here. Two feet snow in yards for week. Weather practically paralleled the same period last year. First four days of February last year egg yield totalled 196; this year, 246 eggs. Highest daily yield, 86 eggs (29th).

B. C. P. A. diploma winners—Class 1, pens 12, 8, 5; class 2, pens 37, 27, 34. Hot wet mash fed daily since middle of month. Moulting pens—1, 6, 7, 8, 9, 16, 17. Broody pens—24 (1), 37 (1), 38 (1).

W. H. STROVAN, Poultryman.
J. R. TERRY, Director.

Pen No.—Name and address	Breed.	Month's Total	
		Eggs.	Eggs.
1—J. O. M. Thackeray, Chilliwack, B. C.	White Leghorns (first)	45	242
2—D. Edwards, Somenos, V. I., B. C.	White Leghorns	33	161
3—A. V. Lang, R.R.3, Victoria, B. C.	White Leghorns	30	112
4—Norie Bros., Cowichan, V. I., B. C.	White Leghorns	31	153
5—Mrs. F. C. Kenward, Invermere, B.C.	White Leghorns	50	99
6—W. McEwan, R.M.D. 1, Duncan, B. C.	White Leghorns (second)	19	221
7—W. Bradley, Maywood, V.I., B.C.	White Leghorns	39	103
8—Graves & McCulloch, Saturna, Is., B.C.	White Leghorns	56	149
9—Mr. and Mrs. R. W. Chalmers, Thrums	White Leghorns	38	143
10—G. O. Pooley, R.R. 1, Duncan, B.C.	White Leghorns	28	150
11—Madrona Farms, R.R. 4, Victoria, B.C.	White Leghorns	26	93
12—F. E. Pullen, Whonnock, B.C.	Anconas	75	117
13—H. A. Hineks, Langford Sta., B.C.	White Leghorns	26	107
14—C. G. Golding, Qualicum, B.C.	White Leghorns	24	70
15—M. H. Rutledge, R.R. 2, Sardis, B.C.	White Leghorns	38	138
16—H. Dryden, Corvallis, Oregon	White Leghorns	2	142
17—J. L. Smith, Shawnigan Lake, B.C.	Buttercups (third)	47	178
18—L. M. Ross, Cowichan, B.C.	White Leghorns	40	124
19—H. Colbourn, 49th Ave. W., So. Van'r	Black Minorcas	31	55
20—F. Hoey, R.M.D. 1, Duncan, B.C.	White Leghorns	39	123
21—P. D. Hillis, Rocky Point, B.C.	White Leghorns	23	92
Totals		740	2772
CLASS II—Heavy weights—			
22—W. H. Mahon, Duncans, B.C.	Wh. Dottes	9	196
23—W. H. Willins, Stannard Ave., Victoria	R. C. Reds	43	101
24—W. H. Catterall, Mt. Tolmie, Victoria	Wh. Dottes	86	238
25—V. T. Price, Cowichan, B.C.	S. C. Reds	82	269
26—J. P. Wood, R.R. 1, Cowichan Bay	S. C. Reds	57	141
27—G. D. Adams, box 840, Victoria, B.C.	Wh. Dottes (first)	108	397
28—Norfolk Farms, St. Williams, Ont.	Bar. Rocks	72	134
29—R. N. Clerke, Vernon, B. C.	R. C. Reds	86	138
30—F. G. Barr, Colquitz, B.C.	Wh. Dottes	48	244
31—J. B. Bloore, Chilliwack, B.C.	Wh. Dottes	74	93
32—A. L. Lowe, Lake Hill P.O., B.C.	S. C. Reds	76	169
33—P. S. Lampman, York Place, Oak Bay	S. C. Reds	53	206
34—E. D. Read, Duncan, B.C.	Wh. Dottes (second)	88	326
35—S. S. F. Blackman, R.M.D., Sidney	S. C. Reds	28	92
36—A. W. Cooke, Kelowna, B.C.	Buff Orps.	79	205
37—Dean Bros., Keatings, B.C.	Wh. Dottes (third)	121	322
38—Regan Bros., 78th Ave., Edmonton	Buff Orps.	69	275
39—F. W. Frederick, Phoenix, B.C.	R. I. Whites	80	274
40—D. Gibbard, Mission, B.C.	Bar Rocks	66	184
Totals		1325	4004

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WOMEN'S SECTION

British Columbia Women's Institutes

Motto—"FOR HOME AND COUNTRY"

UPPER SUMAS WOMEN'S INSTITUTE

At February Meeting Members Agree to Devote Proceeds of Teas to Y.M.C.A. Military Work.

The February meeting of the Upper Sumas Women's Institute took place on the 8th inst. at the home of Mrs. Hart Huntingdon. The following members were present: Mesdames Beebe, Cameron, Campbell, Cobley, Fraser, Hart, McGillivray, McMurphy, Munroe, Murphy, Porter, Purvis, Skinner, Jay Starr, Perry Starr, Tully, Winsor, Fraser, York and T. F. York. Visitors were Mrs. Bartlett, Mrs. Tapp and Mrs. Whittaker.

An address was given by Mr. Whittaker, describing his work with the Y.M.C.A. in the soldiers' training camps and the help given by this organization at the seat of war. He appealed for funds with which to carry on this excellent work and it was moved by Mrs. Campbell, seconded by Mrs. Tully and Mrs. Cameron and carried, that the collections taken at the teas should for the next few months be given to the Y. M. C. A. On this occasion \$3.35 was donated, while the collection for the Prisoner of War realized \$2.45.

After Mr. Whittaker's address the general business was proceeded with.

The secretary announced the coming of Mrs. Chalmers of Thrums, B. C., on March 12 to 14, to give lectures on "Poultry Raising," geese, cows and pigs on small farms, butter making, soils and their importance, feed, crops, home gardens, home canning, etc.; the Alexandria rooms are lent by Mr. Murphy for the course of lectures. Public notice will be given of the times and subjects later.

A letter was read from the Superintendent of Institutes suggesting a change of membership fee, the government offering a per capita grant of \$1 for the first fifty members if a dollar fee were charged. As this letter was not received by the secretary till twenty-three members had joined the Institute at the old figure of 50 cents, it was decided by a vote that this fee should be retained for the present year and the advisability of a change should be discussed at the next annual meeting.

The superintendent also announced the discontinuance of the payment of Institute secretaries by the government.

Letters were read from the secretary of the Royal Columbian Hospital and from the Women's Committee of the People's Prohibition Movement, asking for aid, but as the Institute funds are very low, no money could be voted.

A cheque for \$25 was received from the Farmers' Institute for the members' Red Cross work, and it was moved by Mrs. Porter, seconded by Mrs. McGillivray and carried, that a letter of thanks be sent.

The secretary opened the Red Cross fund box which had been left at the postoffice and reported two monthly subscriptions of \$1 each from Mr. Fooks and 75 cents in the box as well. This money was handed to Mrs. Porter, who is convenor of the Red Cross work committee; a goodly number of

pairs of socks were handed in and material for making pyjamas was given out.

An interesting paper on "The Aims of Our Institute," was read by Mrs. Murphy and some discussion followed.

On adjournment all enjoyed delicious refreshments served by Mrs. Hart.

SURREY INSTITUTE VOTES TEN DOLLARS

Donation from Valley to Fund for Military Ward of Hospital—Proceedings of Institute.

At the regular monthly meeting of the Surrey Women's Institute held in the municipal hall at Cloverdale on Tuesday, February 6, the sum of \$10 was voted to be given to the Women's Auxiliary of the Royal Columbian Hospital to aid in the furnishings for the returned invalided soldiers.

There was an attendance of twenty-four at the last meeting of the Surrey Women's Institute. The president, Mrs. Whiteley, was in the chair. It was decided by a standing vote that in future meetings be opened with the Lord's Prayer.

It was decided that the membership fee should remain at 50 cents per year, instead of raising it to \$1 as suggested by the Minister of Agriculture.

An interesting address was given by Rev. D. A. McRae on "Woman's Place In Our Community." Mrs. A. G. Stevens also gave a very practical paper on "How the Business Part of Meetings Should Be Conducted."

Tea was served by Mrs. Sharpe and Mrs. H. Burrows.

The institute members are now preparing a comedy sketch entitled "How the Club Was Formed," and the date has been set for February 20, in the Cloverdale Opera House. A good evening's entertainment is promised to all who attend. As the proceeds are for the Prisoners' of War Fund a good attendance is hoped for.

"SANA MENS SANE CORPORE"

An Interesting Contribution by Dr. A. McKay Jordan.

Editor Women's Section,
Fruit and Farm Magazine,
Vancouver, B. C.

Sir:—

I was much interested to read in the February issue of Fruit and Farm the article in explanation of the aims and ideas behind the Women's Institute movement, and was highly gratified to see that the women are keenly alive to the importance of the rising generation—the welfare of the child. Inasmuch as I myself have given considerable study to this subject and have compiled data which may be of service to the institute in the work which it is undertaking, perhaps a few facts at this time will not be amiss. At any rate I hope that what I will have to say here may be suggestive of a line of endeavor which will facilitate the work this organization is so splendidly undertaking and may be the means of assisting in attaining for the child a higher standard of efficiency.

From my experience of nearly a quarter of a century of independent thinking and investigation, both Dr. Gamble, my associate,

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and myself, have become deeply interested in the problem of efficiency. In these investigations, we have discovered that the greater proportion of human inefficiency results almost entirely from defective eyes. We have examined and made careful notes on more than 50,000 cases since we began practice and have yet to find a single instance of mental or physical deficiency in which the eyes have been perfect. On the other hand, we have noticed that certain conditions of the eyes (independent of the vision) produce innumerable functional disorders of the brain and vital organs of the body, such as inability to concentrate, absent-mindedness, retarded metabolism and general mental and physical incompetency.

Without going further into the technical phases of this question, I would say that a large proportion of the children of today are suffering from defective eyes and reflex nerve action, which, preventing the

true functioning of the brain and body, thereby lowers the standard of efficiency in the schools.

While this fact is generally recognized by educational authorities throughout the world, and certain steps have been taken towards a remedy in the past few years, no truly scientific methods have been adopted. The "letter-test" system at present in use is archaic. It belongs to the last century. By it, the child is allowed to test his own eyes.

Dr. J. R. Newcombe, who has been pursuing a line of investigation parallel to our own, writes in a technical treatise on the subject: "In the course of time I was brought to the full realization of the fact that there is nothing more untrustworthy than your patients' visual judgment. With the improvement and the development of the technic of skiascopy (which none of your school examiners either understood, apparently, or rely upon) offers the only scientific method for the determination of errors of refraction.

"The so-called 'letter-test' trial case method I believe to be a dangerous, unreliable method, and to substitute for your skiascopic findings a lens selected by your patient is but the casting aside of scientific accuracy, under your own control, for the unintelligent guess-work of your patient."

This letter-test system above referred to is the one which the scholars of the public schools throughout Canada are subjected to. As a result, thousands of children are backward in their studies, mentally deficient and physical sufferers, without knowing (or any one else knowing) the true cause. Sooner or later this drain upon the nervous system through the eyes so reduces the vitality of the child that it is unable to resist or throw off the germ diseases, and the effort to concentrate and memorize becomes painful in the extreme as well as harmful.

Laziness, so-called stupidity, inability to concentrate, truancy; these are but the indications or symptoms of what is in reality sickness, caused by defective eyes, and therefore forerunners of incompetency, dependence and often insanity and criminality. In these days when prison reform has become a subject of world-wide interest of the most intense kind, a word as to the causes of criminality should not be amiss. Begin with the child; for it must be remembered that "the potentialities of the man are at the mercy of the sponsors for the child": I will quote from noted authorities:

Psychologists are coming more and more to the view that the lazy child, the child that shows little desire to acquire knowledge, and even engages in his games in a half-hearted way, is always a sick child, the victim of a debilitated condition of the nervous system. Under such a condition, as the famous scientist, Dr. Theodule-Armand Ribot, puts it, "The brain shows not so much an indisposition as a real incapacity for concentrating attention, and soon, owing to the fact that its nourishment is at the vanishing point, becomes exhausted." Naturally enough therefore the lazy child instinctively seeks to husband its scanty resources by the expedient of exerting himself no more than is absolutely necessary.

Dr. Wm. Richards, author of "Giving Eyes to the Blind" and "The Criminal Unmasked" in a very able article recently wrote: "The incompetent may be born with bad eyes, which make him or her unable to do near work without suffering. But defective vision is one of the defects upon which incompetency and later, crime is based. . . . If Society . . . has provided educational training for the normal young members, how much more im-

portant, from society's standpoint, it is to discover and help its abnormal young . . . the fertile recruiting ground for crime and its weaker sister, dependence.

"Of the specific physical defects criminals are heir to, eye strain is the most prevalent by far. According to Dr. George M. Case, the majority of the boys at the reformatory at Elmira, N. Y., have such abnormal eyes that it is impossible for them to do with any ease, or expertness, near work; even to the making of shoes, for instance . . .

"With a little sympathy, a little intelligence and a thousandth part of the money spent to fight criminals, the majority of them might be reclaimed . . . untold numbers of potential criminals saved to the side of lawful pursuits. Society must forget the comfortable assumption (to paraphrase) 'the criminal we have always with us.' His experience in the face of facts is a greater reproach to us than it is to him an almost as great a menace. . . . Signs are not wanting that society is waking up. There is an advance guard of progress forming. Innovations are being introduced into our various educational institutions to succeed outworn and inefficient methods. And these innovations are, for the most part, more than proving their value."

In 1910, Dr. George L. Orton was appointed resident physician to the State Reformatory at Rahway, New Jersey, and tested the vision of the inmates. He found that approximately two-fifths of those inmates who had been previously reported as having normal vision, needed glasses. Of the total number of boys in this institution, 83 per cent were found to need glasses. As a result of Dr. Orton's innovation, the sick rate fell 56 per cent during the first year of his incumbency. That is progress!

But here, on the contrary, is lack of progress. In the DeWitt Clinton high school of New York City was a class of 37 defectives who had failed in every subject. A cursory inspection of the boys' eyes showed that they averaged less than one-half normal vision. The American Society for the Conservation of Vision tried to obtain \$150.00 to pay two months' salary to a physician who might fit these boys with glasses. They were unable to obtain the money. Does it require the gift of prophecy to foretell that many of these boys will take the easy path to crime and the reformatory and prison? If we multiply that pitiful \$150 a thousand times we will get a conservative estimate of what these boys will cost the community before they die.

I have spoken chiefly of the boy defective whose downfall is tracable to eyestrain; but what of the girl truant? The streets hold more temptation and even more degradation for her. She may end in a house of refuge . . . she may not!

In the reformatories all refuge homes these boys and girls are taught various trades and handicrafts all necessitating the use of the eyes. As it is obvious that the use of the eyes without glasses to correct them only increases the defect, these unfortunate young people come out of the institutions that are supposed to reform them actually worse off than when they entered.

To quote Dr. Richards again: "My earnest advice to society, for its own sake if for nothing else, is to find out what is the matter with defectives as early as possible in the lives of these defectives as may be, and set about forthwith to remedy the defects. The wisdom and economy of such a course of action will stand upon very easily ascertainable grounds as a sufficient and firm foundation.

"For the majority of men and women who enter our penal institutions would

never get there at all if they had received a comparatively inexpensive examination and proper subsequent treatment in the public schools. And the majority who have not received this treatment in school, and do come to our penal institutions would never return a second time if they had the attention they required as inmates.

"What actually happens now, is that however much we may try to reform defectives and penal institutions morally, we turn them out of those institutions no better able to earn their living honestly than when they went in . . . in many cases in worse condition than when they went in.

"Investigators know these statements to be true from the very small amount of work that has been done, comparatively speaking, in the inspection of prison conditions to date. We need more and evermore statistics . . . and adequate publicity of our findings. . . . I should like to prove beyond discussion that with proper attention given them, inmates of reformatories and prisons will feel that a sojourn there has been the next best thing to remedial treatment that could be given them. If proving this helps society to a realization of its short-sightedness in not aiding such defectives at the earliest possible moment, so much the better."

So much for the criminal.

Have Cured Insanity.

It is the same with the insane. In the course of my own practice, I have **actually prevented** and cured many cases of insanity, that is, I have cured what I call for want of an accepted scientific name "ocular insanity," and have prevented the aggravation of conditions which indicated incipient insanity—by the use of glasses. To give a recent instance of this kind: (I do so by permission.):

Mrs. Blackham, of this city, was brought to me in November, by her husband, suffering from numbness of the extremities, physical and mental disturbances and other symptoms of insanity. Her children had been taken from her and placed in a home and she was to be removed to the asylum at New Westminster where her two sisters were confined. Her mother died in an asylum in England. The case was, apparently, a typical one of "hereditary insanity," and had been diagnosed as such.

Upon examination of her eyes, I found them to be of the far-sighted variety for which I prescribed glasses, which so restored the proper functioning of the eyes, nerves and brain, that in two weeks she had apparently recovered. In four weeks, there was no sign whatever of her former malady and she was so elated that she brought me one of her sisters from Westminster for examination. I discovered 'hat she also suffered the same visual defects in a more exaggerated form. After supplying glasses to this sister, she rapidly improved and in a month fully recovered.

Mrs. Blackham has had her children restored to her. A short time ago she brought her youngest, a girl, less than a year old, for examination, and in this examination I found the same eye condition as existed in the mother and her sister. While the baby is too young for glasses, I hope to be able to remove the cause of trouble at the proper time. The child suffered from convulsions when exposed to strong light.

I can cite many cases of defective or apparently idiotic children where the proper glasses have been the means of placing them on the true road to recovery. The proper care and education will bring them to a normal state of mental and physical health and make of them useful and self-supporting citizens instead of dependents.

Insanitary Not Hereditary.

In Mrs. Blackham's case, as in many others, the insanity was not in reality hereditary, only the condition of the eyes was inherited and insanity was prevented by the proper use of glasses.

The time to obviate incompetency and dependency of all kinds is in childhood. Of course, under the present system, it is impossible for the government to take care of all children during infancy. But all children become practically the wards of the government when they enter public schools, at which time a proper examination and measurement of the eyes should be made. But not by the present archaic "letter test" system.

The test system is a hit-or-miss system of—what? Certainly not of the capacity of the eyes, or their size and shape. It is a test of what the eye is able to do at the time of the test. If glasses are fitted to the eyes according to information given by the patient as to what lenses he can see clearly with, then, I say, that in nine cases out of ten, he is incorrectly fitted. Indeed, if he is fitted correctly at all, then it is purely and simply a matter of luck or coincidence.

Only One Scientific Way

There is but one scientific way of fitting glasses to the eye. That is by measuring the eye as to size and shape by means of skiascopy and supplying lenses accurately ground exactly what the eyes need to bring the light to a proper focus at the back of the eye. There is no other scientific way than this. Anything else is guess-work. It is tampering with the most delicate organ of the human machine. It is dangerous.

In my opinion, the remedy for the major portion of all incompetency and dependency in the rising generation, and therefore the means for a high standard of efficiency, when efficiency is more than ordinarily desirable, is in a thorough system of provincial supervision or a strictly scientific method of examination of the schools in the province, by a man thoroughly qualified in the technic of skiascopy and the science of light. A clinic could be established if necessary where children could obtain such professional services as their parents were able to pay for, and in the event of their inability to pay, could receive these services at the expense of the government. By following this plan, I am convinced that the government of British Columbia would be supported by every right-thinking person in the province. It would also give British Columbia an enviable reputation for progress along educational lines.

As I have said, there is much valuable material in my library at the disposal of the Women's Institute. I shall be glad to co-operate in every way, and, if the educational committee of the institute cares to have us, both Dr. Gamble and myself will be pleased to give a short illustrated talk upon the subject to assist in the propaganda. We have prepared a joint lecture which, I believe, would be of considerable assistance to the institutes. It is not a dry-as-dust preachment, but an interesting heart-to-heart talk, punctuated with highly entertaining experiments in physics and chemistry and illustrated with stereoptican pictures. I believe it would be valuable. We are at the disposal of the institutes.

Very truly,

A. McKAY JORDAN,

President Actino-Optical Institute.

826-31 Birks' Building.
February 23, 1917.

WOMEN'S INSTITUTES

The annual meetings of the Women's Institutes of the Fraser Valley, which brings into prominence the reviews of the work of the year, call forth the observation that these organizations are splendid expressions of the high purpose of the women of New Westminster district to leave no duty unperformed that would assist in making brighter or easier the way of the soldiers at the front. The record of the socks knit and sent overseas, of comforts in many forms dispatched to the front, of interest in what the soldiers desire in the battle area—letters, newspapers and magazines—and of earnest purpose to keep the home fires bright for the gallant absent ones, is one of the brightest pages in the year's history of the war as it concerns the Fraser Valley. And what is true of this district is true of all sections of the province where the women's activities are organized for co-operative effort in war work.

But the institutes do not limit their work to sending comforts to the soldiers at the front or in training camps. The members are deeply concerned in all things that will make rural home life better and brighter, that will improve economical management in the farm home, that will add to the intellectual uplift of the community. They are a force in rural community progress the value of which it is hard to estimate at its true worth, so indefinable and measureless is the influence that radiates from public service well done.

The Tenth Annual Report of the Department of Agriculture shows that at the close of the year 1915 there were fifty-six women's institutes incorporated, being an increase of eight during that year, one of these being Haney, Maple Ridge Municipality.

What a splendid stimulus to co-operative effort that one new institute was, the success of their exhibits at the Maple Ridge fair last fall testifies. The membership of the institutes at the close of 1915 stood at 2994 as against 2857 in 1914.

The government's aid to Women's Institutes for 1915 totalled \$8217.21 compared with \$12,151.08 in 1914. There was paid as remuneration to secretaries \$1327.11, or an average cost per institute of \$23.70. The per capital grant in aid of membership was \$1329.75; lecturers' expenses were \$3279.91; advisory board, \$1042; flower shows, \$680; conferences, \$231, and bulletins, \$295.

Cowichan Women's Institute

At the annual general meeting of the Cowichan Women's Institute, in Duncan, on January 9 last, Mrs. Blackwood-Wileman, president, summarised the work of 1916. From a membership of thirty they had in-

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creased to 147. Library improvement, the formation of a library committee, and a "bee" and book tea had resulted in the library being set in order and contents augmented. The institute had not been called upon to pay one cent for this, the president and the library committee having formed a small fund for library purposes. A scheme to make the library of still greater usefulness would be placed before the members in due course.

The room and recreation committee had done good work. The Daffodil tea and social evenings were here noticed. The room, continued the president, is now open daily for the convenience of members. Thus it could be used by members from a distance as a rest or club room.

Mrs. Blackwood-Wileman, recapitulated the programme of papers read and other events of 1916. The outdoor lawn meeting was so much enjoyed that this year three outdoor fixtures have been made. The institute had donated \$50 for a bed in the Ramsgate Canadian Convalescent hospital and, in October, had welcomed officers of Shawnigan Institute at a special directors' meeting on co-operation between island districts respecting home industries.

The acquisition of a piano had proved of value. Red Cross work, Friendly Help and Prisoners' Fund had done splendidly under the presidency and care of Mrs. Hayward.

Mrs. Whidden, secretary-treasurer, presented the accounts, audited through the kindness of Mr. E. F. Miller. Receipts from all sources were \$408.01, and expenditure \$360.99, leaving a balance in hand of \$47.02 as compared with \$46.75 a year ago. Other monies not handled by the treasurer but connected with institute work, totalled thus: Prisoners of War Fund, \$16.55; piano fund, \$22.30; Ramsgate hospital bed, \$35.00; Red Cross, \$275; Friendly Help, \$106; Belgian and Serbian Relief Funds, \$4; and Duchess of Connaught presentation fund, \$5; a total of \$463 raised by institute members for these various causes.

Mrs. Hayward presented details of the work of the committees of which she is the head. Following the election of officers Miss Wilson read a paper on the practical working of the Duncan Hospital.

Library Developments

A report submitted by Messrs. E. B. McKay, K. F. Duncan and R. Blackwood-Wileman, being a sub-committee of the Cowichan W. I., appointed to consider the best means of improving the existing library, was adopted at the annual meeting of the institute.

The report, after thanking the institute for taking over the books, stated that it seems evident the library should serve a larger circle and recommends that, as a first step to this end, the library should be placed on an independent basis. For general improvement it is recommended that the entire management be placed with a committee formed on the lines of the old original library committee; that all patrons be charged \$1 a year; that it would be inadvisable to remove the books from the institute and that, as a consideration for such privilege, institute members who become members of the library be allowed a rebate of 50 cents a year; that the care of the books be under sole control of the librarian; that a book tea be organized to secure donations of books; that all monies received be devoted to the purchase of new books.

A meeting of the institute's library committee was held on Tuesday, when it was

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decided to organize themselves as an independent library committee for 1917 to work in co-operation with the institute. Five institute members and five non-members comprise the organization thus constituted. viz., Mrs. R. Blackwood-Wileman, chairman; Mrs. K. F. Duncan, vice-chairman; Mrs. Rushton, librarian; Mrs. Hamish Morten, secretary; Mrs. Marlow, treasurer; Mrs. Holt Wilson, Miss Hadwen, the Rev. A. F. Munro, Mr. E. B. McKay, and Mr. R. Blackwood-Wileman, committee.

A book tea was held on February 20. The meeting of the Cowichan Woman's Institute held on February 13th was very enthusiastic, over 50 per cent. of the members being present, and a very large number of visitors. An industrial committee is looking out for plans for handling jams, toys, baskets and herbs, and arrangements are now in hand for the manufacture of jam on a small scale.

Mrs. F. G. Christmas, Mrs. E. Macdonald, Mrs. Hayward and Mrs. Blackwood-Wileman, were appointed delegates to the Council of Women which met on Wednesday and Thursday at Victoria.

A musical committee has recently organized and decided on giving to the public, Sullivan's "Trial by Jury," soon after Easter. About 45 have joined the chorus which Mr. C. W. Silence will conduct. The Duncan Orchestral Society will assist. Proceeds are for the Blue and Red Cross Societies. Mrs. E. Gardner Smith, secretary, will take the names of new members.

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