

REPORT OF THE PRESIDENT  
OF THE UNIVERSITY OF BRITISH COLUMBIA  
FOR THE ACADEMIC YEAR ENDING  
AUGUST 31st, 1934.

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REPORT OF THE PRESIDENT

To the Board of Governors and  
the Senate of  
The University of British Columbia.

Ladies and Gentlemen:-

I have the honour to submit the following  
report on the work of the University for the academic year  
ending August 31st, 1934:

During the year under review, no major changes  
in academic policy or in administrative practice have been  
introduced. Minor changes in courses, however, have been  
fairly numerous, as faculties and departments have sought  
to adjust themselves to the drastic restrictive changes of  
the two preceding years.

A disproportionate part of the time of the  
professorial staff is still being devoted to the teaching  
of undergraduates, and the classes are often too large for  
the most effective instruction. While the standards for  
the Honour Courses have been maintained at a relatively  
high level, the number of courses offered is more restricted  
in certain departments than was the case several years ago.  
There is also a growing disposition to encourage prospective  
graduate students to go to other universities for courses  
leading to the Master's degree, more particularly as the  
reduction in the teaching staff makes it very difficult to  
give the necessary time to the directing and supervising  
of graduate essays and theses.

Teaching Staff:

President.....	1
Deans and Heads of Departments.....	3
Dean of Women .....	1
Professors Emeriti.....	2
Professors and Heads of Departments.....	16
Professors.....	14
Associate Professors.....	24
Assistant Professors.....	16
Lecturers.....	4
Honorary Lecturers.....	3
Instructors.....	11
Reader - Applied Science - .....	1
Assistants.....	25
Lecturers in Public Health	
(Part-time).....	10
Lecturers in Social Service	
(Part-time).....	5
Lecturers in Commerce	
(Part-time).....	2
Lecturers in Teacher Training	
(Part-time).....	15
Substitutes for members on leave .....	7.

New Appointments:

Walter H. Gage, B.A., M.A.(Brit.Col.), Assistant  
Professor of Mathematics.  
Harry Warren, B.A., B.A.Sc.(Brit.Col.), D.Phil.(Oxon.),  
Lecturer in Geology and Geography.

Promotions:

Mr. G. F. Drummond from Assistant Professor to Associate  
Professor of Economics.  
Dr. D.C.B.Duff from Instructor to Assistant Professor  
of Bacteriology.

Leaves of absence:

Dr. G.M.Weir, Professor and Head of the Department of Education, granted leave of absence as from November 15th, 1933.

Dr. W.A.Carrothers, Professor of Economics, granted leave of absence from January 1st, 1934 to September 1st, 1934.

Dr. H.W.Hill, Professor and Head of the Department of Bacteriology and Professor and Head of the Department of Nursing and Health granted leave of absence for one year from September 1st, 1933.

Mr. F. J. Brand, Instructor in Mathematics, granted leave of absence for one year from September 23rd, 1933.

Mr. Hunter C.Lewis, Assistant Professor of English, granted leave of absence from September 1933 to September 1934.

Miss M.L.Bollert, Assistant Professor of English, granted leave of absence from January 1st, 1934 to May 15th, 1934.

Substitutes for members of staff on leave:

Mr. C. B. Wood	-	(Substitute for Dr. G.M.Weir)
Mr. W. H. Taylor	-	(Substitute for Dr.W.A.Carrothers)
Dr. G.F.Amyot )	.	
Dr. J.W.McIntosh)	-	(Substitutes for Dr. H.W.Hill)
Miss M. Barclay	-	(Substitute for Mr. F.J.Brand)
Mrs. S. Lewis	-	(Substitute for Mr. H.C.Lewis)
Dr. D. Blakey	-	(Substitute for Miss M.L.Bollert).

Resignation:

Mr. E. G. Cullwick, M.A., A.M.I.E.E., Mem.A.I.E.E., Assistant Professor of Electrical Engineering.

### Obituary.

In the passing of Dr. Francis C. Walker, Associate Professor of English, the University suffered a great loss. The tribute paid to Dr. Walker in the memorial booklet written by his associates in the Letters Club, conveys something of the esteem and affection in which he was held by faculty and students alike.

### Honorary Degree.

At the Spring Congregation, the University conferred the degree of Doctor of Laws, honoris causa, on a distinguished graduate of the Imperial University of Tokio, the Honourable Iyenasa Tokugawa, K.C.V.O., O.B.E., His Imperial Japanese Majesty's Envoy Extraordinary and Minister Plenipotentiary to Canada, - a diplomat and statesman signally honoured in his own country and in ours.

### Gifts.

The University has received the following gifts:

The British Columbia Telephone Company, a number of valuable pieces of electrical equipment; the Canadian Institute of Mining and Metallurgy, a bronze plaque in memory of Dr. Donaldson Bogart Dowling; Major Charles Flick, votive mace heads, cuneiform tablets, seals and coins; Mr. G.S. Eldridge, \$180.00 towards the purchase of a planing machine for the Department of Mechanical Engineering; Mr. Bernard Pelly, Chief of the British Consulate, in Seattle, several hundred photographs taken by the British Government during the Great War.

Numerous gifts to the Library, to the Geological Museum and to the Science Departments were also received. A number of valuable scholarships given for the first time are listed in the Calendar.

### Funds for Research contributed by Private Individuals and Business Firms.

During the year a sum slightly in excess of \$4,000.00 was contributed from private sources for certain researches in

which a number of medical men in the city of Vancouver were interested. These funds were administered by a Committee consisting of Dr. J. G. McKay and Dean F.M. Clement. The publications listed in which the names of Professor E. A. Lloyd, Mr. J. Biely, Miss V. Elvira Palmer and Miss E. Irene Palmer appear as authors, are all supplementary to the main project. Members of the Department of Bacteriology co-operated in these researches, and laboratory accommodation was provided by this Department.

### Special Bursary Fund.

The need for a special Bursary Fund became evident early in the session. Many students who had completed two years of the University course found themselves unable to continue without some financial assistance. To meet this urgent need, a Committee of the Board of Governors raised the sum of \$2,100.00. Included in this amount was the sum of \$100.00 given by the Canadian Club of Vancouver. Twenty-one students received assistance from the Fund. The amount of the Bursaries awarded ranged from \$50.00 to \$150.00 according to the need of the student. This timely assistance made it possible for a number of men and women of high scholastic attainments to continue their studies who otherwise would have been compelled to discontinue their attendance. The University is deeply grateful to all those public-spirited citizens whose generous contributions to this Fund made this result possible.

### University Extension.

During recent years the University's services outside the lecture rooms and laboratories have been seriously curtailed owing to the heavy demands which undergraduate instruction has made on the time and energy of a greatly reduced professorial staff. As a result of this enforced adjustment, the contacts of the University with its constituents have not been as close and personal as formerly, more particularly in the case of those citizens who do not reside in the immediate vicinity of Vancouver and Victoria. This condition is regrettable alike from the standpoint of the University and of the public, and should be rectified as promptly as possible.

Demand for Graduates.

A number of departments report an increased demand for graduates. One department with a fairly large number of graduates had more applications from commercial and industrial organizations than it had men. This condition, however, was not general. Many graduates were unable to obtain employment of any kind, - a condition which, in some instances, at least, bore little or no relation to the training and experience of the men who were available.

Carnegie Corporation Grant.

In November, 1933, the Carnegie Corporation of New York generously offered each of the four western Canadian Universities a sum, not to exceed \$50,000.00, to assist such projects as each University considered desirable. As this grant was intended to assist and encourage higher education during a most difficult period, the governing bodies of the University of British Columbia appreciated it deeply and carefully considered how it might best be used. At the close of the academic year, the disposition of this grant had not been definitely determined.

Respectfully submitted,

LEONARD S. KLINCK,  
President.

February 17th, 1936.



REPORT OF THE REGISTRAR

7.

REGISTRATION:

	<u>Women</u>	<u>Men</u>	<u>Total</u>
<u>FACULTY OF ARTS AND SCIENCE:</u>			
First Year.....	94	177	271
Second Year.....	94	138	232
Third Year.....	128	148	276
Fourth Year.....	124	150	<u>274</u> 1053

FACULTY OF APPLIED SCIENCE:

Second Year.....	-	111	111
Third Year.....	-	53	53
Fourth Year.....	-	62	62
Fifth Year.....	-	44	<u>44</u> 270

FACULTY OF APPLIED SCIENCE (NURSING):

First Year.....	15	-	15
Second Year.....	8	-	8
Third Year.....	7	-	7
Fourth Year.....	9	-	9
Fifth Year.....	9	-	<u>9</u>

FACULTY OF AGRICULTURE:

First Year.....	-	11	11
Second Year.....	4	10	14
Third Year.....	3	13	16
Fourth Year.....	1	14	<u>15</u>

GRADUATES:

Faculty of Arts and Science.....	38	56	94
Faculty of Applied Science.....	-	17	17
Faculty of Agriculture.....	1	6	<u>7</u>

<u>TEACHER TRAINING COURSE</u> .....	39	22	<u>61</u> 61
T o t a l.....1606			

Classification and Enrolment of Students  
who are not taking the full undergraduate  
Courses:

	<u>Women</u>	<u>Men</u>	<u>Total</u>
Summer Session - Arts and Science (1933) (Degree Course).....	133	237	370
Extra-Sessional Classes (Degree Course).....	15	46	61
Social Service (Diploma Course).....	10	1	11
Public Health Nursing (Diploma Course).....	29	-	29
Occupational Course in Agriculture (Diploma Course).....	-	3	3
Evening Class in Botany.....	8	12	20

Nationalities of Students:

American 30; British 1414; Chinese 15; Czecho-Slovakian 1;  
Danish 1; Dutch 2; Finnish 1; French 1; Greek 2; Hebrew 17;  
Icelandic 1; Italian 9; Japanese 28; Norwegian 4; Polish 3;  
Russian 11; Swedish 4; Swiss 1 .....Total ..... 1545

This does not include the Teacher Training Course).

Geographical Distribution of Students:

(a)	From Vancouver.....	1020
(b)	From Victoria.....	100
(c)	From New Westminster.....	88
(d)	From other Provincial points....	346
(e)	From other Provinces.....	38
(f)	From other Countries.....	14
		<u>1606</u>
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Occupations of Parents:

The following occupations were most largely represented:

Accountant 34; Broker 28; Carpenter 15; Civil Servant 35;  
Clergy 47; Contractor 33; Doctor 63; Engineer 95; Farmer 36;  
Insurance 22; Lawyer 39; Lumberman 24; Manager 49; Merchant 105;  
Railway Employee 55; Teacher 40.

Location of Graduates:

Number in,-

Vancouver 1725; Other parts of British Columbia 877; Other  
parts of Canada 160; United States of America 169; British  
Isles 23; Australia 2; India 1; Africa 8; France 2; South  
America 4; China 6; Japan 10; Mexico 2; Other Countries 4.

Number deceased..... 36

Number whose address is unknown 236

Total..... 3265

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Comparative Statement of Attendance  
Sessions 1930-31 to 1933-34.

Session	Arts and Science	Applied Science	Nurs- ing	Agric- ulture	Teacher Training Course	Total Winter Session	Summer Session	Short Courses	Grand Total
1930-31	1580	289	41	63	71	2044	455	401	2900
1931-32	1477	284	44	75	109	1989	441	342	2772
1932-33	1269	288	47	71	64	1739	404	181	2324
1933-34	1147	287	48	63	61	1606	370	124	2100

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Comparative Statement of Degrees  
Conferred - 1931 to 1934.

Year	M.A.	B.A.	B.Com.	M.A.Sc.	B.A.Sc.	B.A.Sc. Nursing	M.S.A.	B.S.A.	Total	Grand Total
1931	20	211	14	2	39	7	2	13	308	2500
	4	31	1	-	4	-	-	-	40	2540
1932	17	201	15	2	37	4	9	6	291	2832
	6	36	1	-	6	-	-	-	49	2881
1933	19	215	22	8	44	7	4	12	331	3212
	4	46	5	3	5	-	-	1	64	3276
1934	11	204	31	3	37	5	4	12	307	3583

Honorary Degrees Conferred

1934      LL.D.  
             1.

# SCHOLARSHIPS, FELLOWSHIPS and BURSARIES AWARDED TO GRADUATES

During the year many scholarships, fellowships and bursaries have been won by graduates of the University. The following list does not include awards which have been made in The University of British Columbia.

Name	Award	Value	Subject	Where Tenable
Archibald, Reginald M.	Research Fellowship in Biochemistry	\$1100	Biochemistry	University of Toronto
Beall, Desmond	Fellowship	1100	Biochemistry	University of Toronto
Bell, Alan	Cellulose Research Scholarship	600	Chemistry	Cellulose Research Institute, McGill
Birney, Earle	Royal Society Fellowship	about 1400	English	
Black, Peter	Research Scholarship	750	Biochemistry	McGill University
Fowler, Francis	Cellulose Research Scholarship	600	Chemistry	Cellulose Research Institute, McGill
Gibson, William	Research Scholarship	1000		Neurological Institute, Montreal
Gregson, John D.	Assistantship	700	Zoology	University of Alberta
Hart, Josephine F.L.	Scholarship - Research	500	Zoology	University of Toronto
Katznelson, Harry	Research Fellow in Soils	1200		Washington State College
Kennett, W.T.E.	Charlotte Elizabeth Procter Fellowship	1400	German	Princeton University
Luxton, George	Royal Bank Fellowship	1000	Economics	McGill University
Marshall, H.B.	Cellulose Research Fellowship	1200	Chemistry	Cellulose Research Institute, McGill
Mitchell, Marion	Women's University Overseas Travelling Scholarship		History	British Museum
Moore, Ralph	Research Council Bursary and Cellulose Research Scholarship	600	Chemistry	Research Council and Cellulose Research Inst. McGill

SCHOLARSHIPS, FELLOWSHIPS and BURSARIES AWARDED TO GRADUATES (continued):

Name	Award	Value	Subject	Where Tenable
McKeown, Thomas	Research Council Fellowship	\$ 750	Biochemistry	McGill University
MacTaggart-Cowan, Ian	Head Fellowship	1200	Zoology	University of California
MacTaggart-Cowan, Patrick	Rhodes Scholarship (3 years)	400 pounds a year.		Oxford
Okulitch, Vladimir J.	Royal Society Fellowship	1500		Harvard
Robbins, William	I.O.D.E. Fellowship	about 1400	English	
Waddington, Guy	Research Fellowship	1000	Chemistry	Cal.Inst. of Technology
Young, M.Fyvie H.	Rockefeller Foundation Fellowship	about 2500		Columbia University.

NOTE:

In many cases these scholarships and fellowships carry with them free tuition or exemption from fees in addition to their monetary value.

Value of scholarships, fellowships and bursaries won by our graduates in other Universities and in Institutes in 1934.....\$23,500.00

Total value of scholarships, fellowships and bursaries won by our graduates in other Universities and in Institutes since the first awards were made in 1917.....487,300.00

Respectfully submitted,

STANLEY W. MATHEWS,  
Registrar.

REPORT OF THE DEAN OF THE FACULTY OF  
ARTS AND SCIENCE

Bursaries

In the Faculty of Arts and Science the registration dropped about 125 below that of the previous year. This reduction was no doubt wholly due to the cumulative effect of the depression. Through the generosity of certain public-spirited Vancouver citizens to whom a very limited appeal had been made, funds were made available to assist in the part payment of the fees of a few needy students of good ability who could not have attended the University without financial assistance. A scheme of bursaries of this kind cannot be too highly commended.

Honours for Members of the Staff.

There will be found elsewhere the list of the various publications of the staff during the year 1933-34. While it is not intended in this report to cite all the achievements in various fields which members of the staff have made to bring distinction to the University reference will be made to four members.

At the urgent request of a great many citizens, Dr. George M. Weir, Head of the Department of Education, accepted the nomination for the constituency of Point Grey at the last Provincial election, and was elected at the head of the polls. In the new Government which was formed after the election he was given the double portfolio of Provincial Secretary and Minister of Education. It is very gratifying to all who are interested in education to know that there is probably no one in the Province who has a higher appreciation of the value of education than has Dr. Weir.

Dr. W. A. Carrothers, Professor of Economics, was given leave of absence in January 1934 to accept the chairmanship of the newly-formed Economic Council. Already we learn that he has been of great service to the Province in conducting scientific investigations concerning various phases of its economic life.

Dr. G. G. Sedgewick, Head of the Department of English, was invited to give the Alexander Lectures at the University of

Toronto last February. This was the first time that a Canadian professor was honoured by being asked to give these lectures. His general topic was Irony in the Drama.

Dr. C. McLean Fraser, Head of the Department of Zoology, was invited to accompany the Hancock expedition to the Galapagos Islands and the coastal regions extending from Ecuador to San Diego. The cruise lasted about ten weeks and had for its purpose the collection of specimens for the Zoological Gardens in San Diego and for the University of Southern California. The other scientists on the expedition were a representative from the United States National Museum, one from the University of Michigan and another from the University of Nebraska who also represented the Carnegie Institution at Washington. It is indeed a compliment to our University that a member of our staff should have been chosen. It is of interest to note that the expedition of these scientists occurred in the year of the Centenary of Darwin's visit on board the Beagle to some of the same regions.

#### Dr. Francis Cox Walker.

It was a great shock to the University when the sad news arrived of the unexpected death of Dr. Walker. Accompanied by Mrs. Walker he left at the close of the session to spend the summer in Europe. They had spent but a short while in Italy and had reached the city of Florence when Dr. Walker was taken seriously ill with pneumonia and despite the best of medical attention passed away on June 25th. He had been connected with the University since September 1920, first as Assistant Professor of English and later as Associate Professor. His work in the Department of English was of a very high order and was greatly appreciated by his students. Outside the class-room he took a very active interest in the Letters Club and in the Players' Club being Honorary President of the latter organization for the last three or four years. He was beloved by his students and colleagues alike. His keen sense of humour brightened many a lecture and enlivened many a Faculty meeting. The University has lost a distinguished scholar, the students and staff a devoted friend.

#### The Work of Students and Graduates

A greater earnestness of purpose seemed to prevail among the students during the session under review. While undoubtedly many attended the University who would have preferred to accept positions if such had been available, nevertheless they made good use of their opportunity for study and for better preparation for the positions which we hope will soon await them.



While the number of bursaries, scholarships and fellowships available at other institutions has decreased in recent years, our graduates are nevertheless winning at least their share of the awards. It is also very gratifying to note the increasing number of graduates who are being appointed to responsible positions in the intellectual, social, economic and industrial life of the Province.

Conclusion.

The Dean wishes to express his very great appreciation of the splendid spirit of co-operation shown by the Faculty.

Respectfully submitted,

D. BUCHANAN,

Dean.

REPORT OF THE DEAN OF THE FACULTY OF  
APPLIED SCIENCE.

1. Policy

This remains unchanged. Briefly it is to give students a sound training in natural laws and in the means of utilizing natural products, in exact and fertile thinking, in acquiring and extending knowledge, in isolating problems and applying knowledge in solving them. Such a course is considered a better preparation for the engineering professions than a specialized professional course and it is becoming increasingly apparent and more widely recognized that it is the best University training for a large and increasing proportion of administrative, supervisory and technical problems in industry, commerce and government.

It is not a vocational school - it does not attempt to turn out a finished product, which can only be produced in the school of experience, but it does attempt, with marked success, to turn out a worker with a trained and disciplined mind who in the minimum of time in an engineering profession or in an industry, will attain the maximum efficiency permitted by his natural qualifications and ability.

The superiority of such a course over a strictly vocational training is being increasingly recognized in the larger and more progressive universities, whose courses are being gradually altered - gradually because it cannot be done suddenly and quickly in a going concern - to something like those which a new university, such as the University of British Columbia, could and did adopt when first opening its halls to students. The larger industries, which forced the older universities to introduce specialized vocational courses have now recognized their mistake, and are pressing for sound fundamental training instead, undertaking to give such specialized training as is required themselves. They have found that a graduate with his bag of tricks is more useful at the start but does not develop like the graduate with the broad and sound foundation.

British Columbia is in the forefront not merely in the type of training in the University but also the

recognition by the profession of the soundness of the above principles. The Association of Professional Engineers, which is entrusted with the administration of the Engineering Act governing the practice of engineering in the Province will not register an engineer to permit him to practice until he has had several years' experience after graduation in responsible work under supervision. In other words the University is not required to attempt to train a professional engineer but only to give the student the proper fundamental education.

2. Changes in Courses.

Slight changes are made in courses from time to time. The only changes during the year under review that are worthy of note are those in Forestry, necessitated by the loss of the Professor and Head of this Department. Only the practical portion of Forestry 2 (Mensuration) was given. This work was given to the students by Messrs William Byers and Edward W. Bassett of the Forestry Branch of the Provincial Department of Lands, through the courtesy of the Chief Forester Mr. P. Z. Caverhill. The University is deeply indebted to these gentlemen for their generous and timely assistance.

To further lighten the teaching load on Assistant Professor Knapp, Forestry 9 (Lumbering) and Forestry 12 (Marketing) were given to the combined Fourth and Fifth years in Forestry, the work omitted from the Fourth Year to be given to the combined years next session. By giving the courses in alternate years, Professor Knapp with a graduate student assistant and with the help of the Forestry Branch of the Provincial Government in Mensuration is managing to carry on with a course in Forestry.

3. Publications of the members of the Faculty are listed under "Publications."

4. Other Pertinent Matters

(a) Number and Distribution of Students.

The number of students continues to show a small increase. The drop in the number of graduate students indicates a slight improvement in employment.

1932-331933-34Engineering Courses

265	Undergraduate	exclusive of 1st Year)	271
23	Graduate		17

Nursing

47	Undergraduate	48
18	Public Health	29

353

365

Registration by Courses

<u>Department</u>	<u>Juniors</u>			<u>Seniors</u>		
	'32	'33	'34	'32	'33	'34
Chemistry	12	6	14	7	9	7
Civil	10	8	2	6	11	8
Electrical	20	12	14	14	16	14
Forest	2	2	4	2	2	2
Geological	3	2	6	1	4	3
Mechanical	7	5	11	10	10	4
Mining	4	9	11	7	5	6
Nursing	8	5	9	4	11	9

The distribution of students in the various departments in the Junior Year reflects the employment situation. For example construction almost ceased with the depression, consequently the number of students in the Junior Year in Civil shows a sharp drop from ten to two. Mining is the bright spot, shown by the increase in students in the Junior Year in 1934 in Mining, Geological and Chemical Engineering. These fluctuations are embarrassing to the departments concerned, leaving some with fewer and filling some with more students than can be properly looked after. It is bad also for the students and for the industries; the students enter a course for a reason other than natural taste and ability, and by the time they are ready to enter the industry, it is the overcrowded one: the industries suffer in being deprived of the normal number, and therefore in having to employ untrained

or improperly trained men, and in having men entering it who are not especially keen on it or naturally fitted for it. The Faculty tries to prevent these stampedes but no very effective means have as yet been found to prevent it.

When the students are selecting their courses on the basis of openings it is a pity they cannot be made to see the opportunities in the lumber industry of the Province. Very few students are taking Forest Engineering though it is perhaps the most promising field for the technically trained man.

(b) Effects of the Cut in Applied Science Budget.

Too much praise cannot be given to the staffs of the various departments handling Applied Science students for the way in which they have carried on understaffed, and overworked and short on equipment and supplies. They have cheerfully accepted the situation, they have given of their best and they have succeeded in reducing to a minimum the effects upon the quality of the training, but it would be idle to deny that the courses have suffered. There is a limit to material and human endurance.

Of the five Departments under Applied Science for administrative purposes, three are without Professors and Heads of the Department: of the fourteen departments with which Applied Science students have most to do all have had material cuts in staff and all but two very serious ones. Despite the best efforts of the remaining staff, such losses cannot be offset.

The time is at hand when certain repairs or renewals must be made.

(c) The Faculty is co-operating with the University of Alberta in economising by accepting the Fifth Year Nursing students from Alberta, who return to Alberta to graduate. This saves Alberta the cost of putting on a Fifth Year and it brings the University of British Columbia additional fees.

Respectfully submitted,

R. W. BROCK,  
Dean.

REPORT OF THE DEAN OF THE FACULTY OF  
AGRICULTURE

The academic year ending August 31st was quite uneventful. The general instructional work was carried out according to calendar. Some research problems were undertaken by students as a part of their instruction. There were no changes in policy.

As in the previous year, the lands and equipment of the outside departments were operated under lease. The lessees have co-operated wholeheartedly in an endeavor to maintain the efficiency of the instruction. I know of no precedent on the part of a public institution for operation and maintenance of teaching equipment by lease similar to the arrangements that are in effect here. Under the various leases the lessees maintain the equipment and materials except in some details, and assist in the preparation of class materials. The lessees receive their remuneration from cash sales in the various departments. While the arrangement cannot be said to be ideal, it has been nevertheless not too unsatisfactory.

Outside or extension activities have of necessity been limited by the time factor. The Faculty is not overmanned and though some outside work can be done, these activities are not as extensive as I feel they should be. I do not believe that the Faculty of Agriculture can be of greatest service by confining its activities mainly to the four walls of the institution. It is my belief that some arrangement should be made whereby the Faculty can be used more fully in the public service.

During the past year attention has been given by members of all departments to the re-establishment of adequate teaching facilities in all buildings outside of the Agriculture Building. The rooms in the outside buildings should be fitted for class room purposes. We face the ever constant problem of growing the materials for class work, especially in the Departments of Agronomy and Horticulture. Some progress was made with this detail during this past summer, and it is hoped that following the next year or two it will be possible to improve the efficiency to some degree.

Dominion Department of Agriculture Co-operating.

As advised in a previous report, an arrangement was

made with the Dominion Experimental Farms for the carrying on of the wheat project. This work is now proceeding under conditions that are satisfactory to the Faculty and the Department of Agronomy. I wish to record particularly our appreciation of the sympathetic consideration and support given by the Dominion Cerealists, Mr. L. H. Newman, to all phases of this work.

#### National Research Council Grant

During the past year under a grant from the National Research Council of Canada, the study of the influence of a mixed starter culture on the making and ripening of Cheddar Cheese has been possible. This work was a direct outgrowth of the studies upon which the late Professor Sadler had been engaged, and was an attempt to bring to a satisfactory conclusion the particular aspects of the problem as planned by the late Professor Sadler. The work has been carried on in large measure as he has planned it. The study is not yet completed. The results of the work should make possible an orientation of our previous findings, which otherwise would have been lost, and further should open up several new lines of approach to the main problem of cheese-ripening.

#### An Appreciation.

I wish to express my appreciation to public spirited men in the city of Vancouver who during the past year have contributed the sum of \$4,000 to assist with certain research, mainly in the Department of Poultry Husbandry. While this fund was not contributed to the University, it was, nevertheless, spent at the University under the direction of a committee, and for the benefit of humanity and industry.

I wish, also, to express my appreciation of the hearty co-operation of the Department of Bacteriology in permitting the use of the rooms in which the researches were conducted.

Respectfully submitted,

F. M. CLEMENT,  
Dean.



### REPORT OF THE DEAN OF WOMEN.

The work of the Dean of Women for the academic year which closed on the thirty-first of August 1934, followed in a general way the course reported upon in detail in previous years.

A plan to keep a record of interviews with students, the nature of help given, participation in student and other activities etc. broke down because of pressure of work, early in the year. The only record kept had to do with financial assistance to students deserving both from the financial and from the academic points of view but, for various reasons, not eligible for a loan or bursary from University funds - perhaps because they were overtaken by an emergency too late to apply for help from this source, perhaps because of shyness in revealing home conditions to a committee, perhaps because the amount needed was too small, perhaps because home conditions made it advisable to have the money given in small amounts at frequent intervals rather than in a lump sum.

An interesting example of what a few dollars can mean to a student, occurred in the case of a first year student who had won a scholarship at matriculation and who was described by the principal as being in a certain subject the most proficient student who had gone through his school. In November I happened to notice that this girl was not in the University, for a few days, and, upon inquiry, discovered that she was lacking car fare. She now receives \$5.00 a month for this purpose. She is keeping up in the University, the excellent record of the High School. Several other students are receiving the same amount and several others who are giving light services in partial return for room and board, receive \$10.00 a month. Not infrequently a matter of \$25.00 or even less, will decide whether or not a student of excellent grade may remain in college.

The amount disbursed was \$1,127.50. Of this \$572.60 was received from the University Women's Club, the McGill Alumnae, the Toronto Alumnae, the Faculty Women's Club, the Gamma Phi Beta Sorority, and from personal gifts, among them \$10.00 from a former student, then a Rhodes Scholar at Oxford. \$360.00 was returned by students who had been given assistance at intervals during the last five years.



The work done for Japanese students by the University of British Columbia was recognized by an invitation to the Dean of Women extended by a group of prominent women in Japan and backed financially by the Japanese Government, to visit their country. A growing number of young men and women born of Japanese parentage in Canada and the United States and educated in these countries are going to Japan to seek employment. The thought that a first hand knowledge of the conditions which meet these young people would enable their college advisers to offer them with greater confidence assistance in their choice of vocations and the appropriate courses of study resulted in an invitation to eight Deans of Women in Universities and Colleges on the Pacific Coast. The courtesy of the Imperial University and of Waseda University in Tokyo, of the Higher Normal School for Girls in Tokyo and in Nara, and of other colleges and schools in these cities and in Kyoto, Kobe and other places should be acknowledged in this report.

Respectfully submitted,

MARY L. BOLLERT

Dean of Women.

REPORT OF THE DIRECTOR OF  
THE SUMMER SESSION

The courses announced for the Summer Session consisted of twenty-eight three-unit courses and five unit-and-a-half courses. Of the twenty-eight listed there were ten courses of which only four were to be given, depending upon the choice of the students registering. These ten courses were Chemistry 2, Economics 10, Geography 1, Mathematics 3, French 3a or 4a, Government 1, Latin 4 or 7, Mathematics 2. The first four named were selected. In addition to the courses listed in the Announcement work was supervised in Economics 11, Philosophy 1b, Social Service 5 and 6, Sociology 3, Physics 12, 13, 14 and a Graduate Thesis in Mathematics.

SUMMARY OF REPORT OF SUMMER

SESSION EXAMINATIONS

<u>YEAR</u>	<u>ENROLLED</u>	<u>WROTE EXAMINATIONS</u>	<u>COMPLETED YEAR</u>	<u>WITHDREW</u>
PARTIAL	12	11	-	-
FIRST	88	87	18	-
SECOND	118	117	23	-
THIRD	47	43	11	3
FOURTH	50	50	18	-
GRADUATES	65	49	1	2
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	380	357	71	5
	<hr/>	<hr/>	<hr/>	<hr/>

Attention is called to the large proportion of graduates.

SPECIAL LECTURES

Through the generosity of the National Gallery at Ottawa and the Department of Education at Victoria, Miss Marion Richardson, Supervisor of Art in the London County Council Schools, gave a series of three illustrated lectures on "Art in the London County Council Schools." These lectures were of a high quality and were well attended. They attracted a considerable number of people outside of the Summer School.

At the request of the Summer Session Executive, Professor F.H.Soward gave a general lecture on Modern Europe. This lecture was held during part of the time for which the Executive had asked for the cancellation of all regular lectures to enable them to transact the business of the Association. The lecture was attended by practically the whole student body and was greatly appreciated.

During the period under review, the Summer Session showed a substantial credit balance.

In conclusion the Director wishes to express his appreciation of the splendid spirit manifested by the staff and student body and of the high quality of the work that is being accomplished.

Respectfully submitted,

D. BUCHANAN,

Director of Summer Session  
1934.

## REPORT OF THE EXTENSION COMMITTEE

I have the honour to present the following report of the Extension work for the year beginning April 1-1933 and ending March 31st, 1934.

The Committee arranged for 60 lectures; 251 others were reported, making a known total of 311. In addition the Committee provided 18 radio lectures, and 8 other radio addresses were reported. The total estimated attendance for the 311 public lectures was 34,358, an average of over 110.

Addresses were given in twenty-eight centres in the Province. Eight addresses were given in other Provinces and five in the United States. Arranged by districts, these were distributed as follows:-

Vancouver and vicinity .....	226
New Westminster and vicinity.....	8
Fraser Valley.....	22
Vancouver Island.....	19
Howe Sound.....	4
Okanagan Valley.....	10
Other Interior Points.....	9
Other Provinces.....	8
United States.....	5

T o t a l ..... 311

Respectfully submitted,

O.J.Todd,  
Secretary of the  
Extension Committee.

REPORT OF THE MEDICAL EXAMINER OF STUDENTS

I beg to submit the annual report upon the physical examinations of the students entering the University for the first time, during this academic year.

The number of students examined was slightly greater than that of last year but much smaller than in previous years, the number of men greatly exceeding that of women.

No women participating in athletics and no students marked for re-examination presented themselves this year.

Dr. Monica Saunders conducted the examination of women students.

At the opening of the session I had the privilege of addressing the men students on the subject of health and its important place in University education.

I was able to give to them the benefit of the experience of students of former years.

At the individual examinations I found that many had acted upon my suggestions and that much time and repetition were saved.

The general health of the students was found to be very good. The most prevailing disability was that of the common cold. Despite my warning I found that a large number had been suffering from this common malady for several weeks, having taken no steps to rid themselves of it.

Cases of uncorrected defects of vision and defects of hearing were numerous, chiefly in students from outlying districts, showing the need for more health education throughout the province.

The number having had tonsils previously removed was high, 39.6 per cent of the men and 53.89 per cent of the women.

The number protected from small-pox by vaccination was also high, 83.27 per cent of the men and 82.63 per cent of the women.

After each evening's examination a report was sent to the University Health Service stating the cases which needed

following up by the Public Health Nurse.

Through the kindness of the Superintendent of the Vancouver General Hospital the examinations were conducted as usual in the rooms of the Out-Patient Department.

Respectfully submitted,

HAROLD WHITE

Medical Examiner of Students.

#### REPORT OF THE PUBLIC HEALTH NURSE

I have the honour to present my seventh annual report as part-time Public Health Nurse to the University of British Columbia.

Of the four hundred and thirty (430) entrance students examined by the University Medical Officer, thirty-four (34) were referred to the Health Service for follow-up of physical defects found - of this group twenty-seven (27) were referred to their physicians and dentists, and were able to afford professional attention.

A marked improvement in the health condition of the student population, over all years, is indicated by the relatively few reports received from physicians, and the reduction in the number of student days lost through illness.

Days lost during the 1933-34 session number eight hundred and twenty-two (822) as compared with fourteen hundred and nineteen (1419) days the previous year - credit for this satisfactory showing must go to Dr. H. W. Hill.

The plan as outlined by Dr. Hill for our guidance, included the supervision of student absences from the University, and the inspection and checking, of any medical certificates presented on return and even more, the daily inspection of non-immune contacts exposed to infection.

The main achievements have been:-

The complete exclusion from the Campus of epidemics.

The raising of the percentage of vaccinated on the Campus to over 90 per cent. of the Campus population.

The introduction of the method of observation of exposed non-immune students (as opposed to their quarantine at home).

Respectfully submitted,

CELIA A. LUCAS,  
Public Health Nurse.

REPORT OF THE OFFICER COMMANDING  
CANADIAN OFFICERS' TRAINING CORPS  
UNIVERSITY OF BRITISH COLUMBIA CONTINGENT

Officer Personnel

Lieut. Col. H.F.G.Letson, M.C.	Commanding Officer
Major G. A. Lamont, C.A.M.C.	Medical Officer
Lieut. G. J. Spencer	
Lieut. E.S.Catherwood, C.M.G.C.	
"A" Company	
Major W.A.Carrothers, D.F.C.Coy. Com. (on leave)	
2/Lieut. G.S.Allen	
2/Lieut. C.R.Harwood	
2/Lieut. E.D.James	
2/Lieut. F. H. Dawe	
"B" Company	
Capt. G. M. Shrum, M.M. Coy. Com.	
2/Lieut. D.McC.Smith	
2/Lieut. J.S.Beeman	
2/Lieut. R.B.Leeson	
Lieut.R.Irving B.C.Hussars.	

Instructors from P.A.M.

Q.M.S. I Smith P.P.C. I again carried out instructional and general duties for the period. The measure of success attained by the Corps was in a large measure due to the efforts and devotion to duty displayed by this Warrant Officer.

Capt. E. M. MacBrayne M.C. conducted the lectures for one night a week for candidates preparing for Certificates "A" and "B". This work was carried on in addition to his duties as District Cadet Officer. His skill and interest in the work are shown by the results attained at the examinations.

Training (General)

Weekly Corps parades were held on Wednesday evenings from 7:30 to 10:15 p.m. at the Beatty Street Armouries. This was possible through the kindness of Lt. Col. G. H. Whyte M.C., V.D., O.C. Beatty Street Armouries.



## Musketry.

Members of the Corps carried out the prescribed course of Musketry on the Blair Range during October and November. Further practice was conducted in April after the Spring examinations.

On the 5th November at Blair Range the Annual Inter University Service Rifle Competition was fired over the 200-500-600 yds. ranges.

The Corps also competed in the Inter University Miniature Rifle Competition. This match consists of the aggregate of three scores for teams of 10 fired in January, February and March.

- d) The Corps entered a team in the Vancouver and District Garrison Miniature League. This match is shot under similar condition to (c) but with teams of 8.
- e) The Wesbrook Cup and a 1st Class spoon was won by 2/Lieut. J.S.Beeman for the highest total aggregate in the Inter University and Garrison Shoots. His score was 578/600.
- f) Lieut. Col. Letson was elected to the Council of the D.C.R.A. and was chosen to command the 1934 Canadian Bisley Team.

## Annual Inspection

The Annual Inspection by the D.O.C. Major General E.C. Ashton C.M.G., V.D. took place at 8:30 o'clock 7 March, 1934.

The parade strength of 13 officers 630 R out of total strength of 13 officers and 780 R.

authorized establishment is 134 all ranks.

## Training Special.

The courses leading to Certificate "A" (Lieuts.) and Certificate "B" (Capts.) were conducted by Capt. E. M. McBrayne M.C. and Q.M.S.I. A.A.Smith both of the P.P.C.L.I.

In order that no member of the Corps would be called upon to devote more than one evening per week to this work Corps Parades and Certificate Lectures were held on Wednesday evenings at Beatty Street. Candidates for Certificates were given supplementary lectures during noon hour periods throughout the training season.

### Prizes and Scholarships.

- (a) "The Governor General Medal"  
 was won by G. M. Volkoff and in addition he was  
 awarded the "University Graduate Scholarship."

"The Engineering Profession's Prizes"  
 James Verner.

### General Comments.

The general work of the Corps progressed well during the year. There was a gain in strength over the preceding year.

The number studying for Certificates was greater than before and the results were of the usual high standard. The thanks of the Corps are again tendered to Capt. E.M.McBrayne M.C. and G.M.S.I. A.A.Smith for their unflinching interest in the Corps and their excellent instructional efforts.

All ranks again donated all their pay and allowances to Corps funds.

The yearly audit of funds was carried out by a Board appointed for the purpose and all books and accounts were found correct.

- (e) The Ordnance inspection was satisfactory.
- (f) The number of cadets who are taking commissions in the Militia is steadily increasing and the comments of Commanding officers on ex-cadets in their units are highly favorable in every case.
- (g) There were no breaches of discipline of any kind during the year.

The Officer Commanding wishes to record his appreciation of the assistance and co-operation afforded him by the Chancellor, the President, the Board of Governors, the Committee on Military Education, the D.O.C.M.D. No. 11 and Staff and to O.C.'s 23 Inf. Bde. and B.C.Reg't. (D.C.O.R.)

Respectfully submitted,

H.F.G.LETSON

Lt. Col.  
 Officer Commanding.

PUBLICATIONS

FACULTY OF ARTS AND SCIENCE

DEPARTMENT OF BACTERIOLOGY:

Dr. D.C.B.Duff:

"Investigations on Causes of Disease in Salmonidae."  
Biological Board of Canada, Annual Report 1931, p. 70.

"Toxic Properties of Herring Meal and Oil When Used as  
Food for Sockeye Fry."  
Biological Board of Canada, Annual Report 1932, p. 81

"Furunculosis and Other Notes on Fish Pathology."  
Biological Board of Canada, Annual Report 1933, p.75.

DEPARTMENT OF BOTANY:

Dr. A. H. Hutchinson:

"Longevity and Periodicity of Growth - A Study of  
Tree Growth."  
Proc. Fifth Pacific Science Congress, Vol. 2, 933-946,  
1934.

C.C.Lucas and Dr. A.H.Hutchinson:

"Density Studies of the Strait of Georgia."  
In Press.

DEPARTMENT OF CHEMISTRY:

# Dr. R.H.Clark and Mr. H.I.Edwards:

"The Effect of Certain Chemicals upon Amylase Activity."  
Trans. Royal Soc. Can., Vol. XXVII, 1934.

# Dr.R.H.Clark, Mr. R.G.D.Moore and Mr. M.McArthur:

"The Preparation of Certain Cinnamic Acid and Ortho-  
Phenyl-Phenol Derivatives."  
Trans. Royal Soc. Can., Vol. XXVII, 1934.

#Also reported under Faculty of Applied Science -Dep't.of Chemistry.

Department of Chemistry - continued:# Dr. R. H. Clark and Mr. J.A.Spragge:

"Addition Products of Halogenyl Amides with Pyridine"  
Trans. Roy. Soc.Can., Vol. XXVII, 1934.

DEPARTMENT OF ECONOMICS:Mr. H. F. Angus:

"Canadian Immigration: the Law and its Administration"  
American Journal of International Law, Vol. 28, No.1,  
January, 1934.

DEPARTMENT OF ENGLISH:Dr. W. L. Macdonald:

"The Augustan 'Mobility' "  
University of Toronto Quarterly  
January 1933.

DEPARTMENT OF GEOLOGY and GEOGRAPHY:Dr. S. J. Schofield:

"The Geology of British Columbia and the Yukon" 730 pages  
In Press.

"Ore in depth in B.C.Mines," in conjunction with Mr. I.M.  
Marshall.  
Paper read before Canadian Institute of Mining and  
Metallurgy.

Dr. M. Y. Williams:

"Summary of the Mineral Resources of the Peace River Area  
of B.C."  
Trans. of Can. Inst. of Min. & Metall., July 1934, pp.351-357.

#Also reported under Faculty of Applied Science- Dep't. of Chemistry.

Department of Geology and Geography-continued:Dr. M.Y. Williams:

"Distribution of Life around the Pacific."  
Trans. Pacific Science Congress, In Press.

Dr. H.V. Warren:

"The Mineralogy of the Cariboo Gold Quartz Mine."  
British Columbia Miner, Vancouver, July 1934, Vol. 7, No. 7.

"The Occurrence of Schwatzite in British Columbia."  
Economic Geology, In Press.

"The Silver Tetrahedrite in the Coeur d'Alene  
District, Idaho."  
Economic Geology, In Press.

DEPARTMENT OF HISTORY:Dr. W.N. Sage:

"A Note on the Origin of Strife between Sir George Simpson  
and Dr. John McLoughlin,"  
Washington Historical Quarterly, October, 1933.

"Life at a Fur-Trading Post in British Columbia a Century Ago."  
Washington Historical Quarterly, January 1934.

"The British Commonwealth and the Collective System,"  
Pacific Historical Review, June 1934.

Mr. F.H. Soward:

"Canada and the Far Eastern Crisis."  
A paper read at the annual meeting of the Canadian Historical  
Association in 1933 and distributed by the Canadian Institute  
of International Affairs as a Delegation Paper for the Banff  
Conference of the Institute of Pacific Relations.

Mr. A.C. Cooke:

"The Dual Mandate in British East Africa."  
Pacific Historical Review, June 1934.

DEPARTMENT OF MATHEMATICS:

Dr. D. Buchanan:

"The Spheroidal Pendulum"  
Transactions The Royal Society of Canada,  
Section III, Vol. XXVIII, 1934.

Dr. F. S. Nowlan:

"Transformations which leave Invariant the  
Multiplication Table of a Total Matric  
Algebra."  
The Tshoku Mathematical Journal,  
Vol. 39, Pt. 2, June, 1934.

"Analytic Geometry"  
McGraw-Hill Book Co., Inc.,  
New Second Edition - June 1934, 352 pp.

Mr. L. Richardson:

"Application of Vector Analysis in Spherical  
Trigonometry"  
Mathematical Monthly. In Press.

"New Proofs for  $\sin (A \pm B)$ ,  $\cos (A \pm B)$  for all angles."  
School Science and Mathematics. In Press.

Mr. F. J. Brand:

"An Elementary Approach to the Theory of Relativity"  
Journal of the Royal Astronomical Society, February, 1934.

DEPARTMENT OF ZOOLOGYDr.C.McLean Fraser:

"Hydroids as a food supply,"  
Trans. Roy. Soc. Can. 3rd Ser.  
Vol. 27, Sec. 5, pp. 259-264.

"Some Greenland Hydroids,"  
Jour. Wash. Acad. Sc., Vol. 23,  
No. 12, pp. 563-566.

"Report of the Standing Committee on the  
Oceanography of the Pacific, British Columbia,  
Proc. Fifth Pac. Sc. Congress, 1933, pp.307-317.

"Report of the Standing Committee for the  
Protection of Nature in and around the  
Pacific for the years 1929-1932,  
Canada. Ibid. pp. 390-395.

"Hydroids from the Pacific Coast of North America."  
Book - In Press.

Mr.G.J.Spencer:

"On the Function of the air-sacs of Insects."  
Can. Entomologist - In Press.

"The Bed Bugs of British Columbia."  
Proc. Entomological Soc. of B.C. 1934.

"The Identity of the Carnation Maggots of B.C."  
Proc. Entomological Soc. of B.C. 1933.

"The Identity of Rhynchocephalus sackeni Will."  
Proc. Entomological Soc. of B.C. 1933.

"Notes on Rhynchocephalus sackeni Will."  
Can. Entomologist, Vol. 86, No. 4, April 1934.

"The Biology of certain range-infesting grasshoppers  
in British Columbia." (With E.R.Buckell).  
Proc. International Grain Congress at Regina, 1933, In Press.

Dr.Gertrude Smith:

"Further observations on the ecology, rate of growth and  
food supply of some Pacific clams."  
Trans. Royal Soc. Can. 3rd Ser. Sect. V, Vol. XXVII, 1933,  
p. 229-245.

FACULTY OF APPLIED SCIENCEDEPARTMENT OF CHEMISTRY:

# Dr. R.H.Clark and Mr. H.I.Edwards:

"The Effect of Certain Chemicals upon  
Amylase Activity"  
Trans. Royal Soc. Can. Vol. XXVII, 1934.

# Dr. R. H. Clark, Mr. R.G.D.Moore and Mr. M.McArthur:

"The Preparation of Certain Cinnamic Acid and  
Ortho-Phenyl-Phenol Derivatives"  
Trans. Royal Soc. Can. Vol. XXVII, 1934.

# Dr.R.H.Clark and Mr. J. A. Spragge:

"Addition Products of Halogenyl Amides with  
Pyridine"  
Trans. Royal Soc. Can. Vol. XXVII, 1934.

DEPARTMENT OF CIVIL ENGINEERING:

Mr. A.Hrennikoff:

"Work of Rivets in Riveted Joints"  
Transactions American Society of Civil Engineers,  
Vol. 99 - 1934, p. 437.

DEPARTMENT OF NURSING AND HEALTH:

Dr. H.W.Hill:

"Series of Eight Articles in the Bulletin of the  
British Columbia Board of Health."

# Also reported under Faculty of Arts and Science-Dep't. of Chemistry.



FACULTY OF AGRICULTUREDEPARTMENT OF AGRONOMY:Dr. D.G.Laird:

"Soil Survey: A Basis for Land Utilization in  
British Columbia." In Press.

OTHER PUBLICATIONS

The following publications are based on researches financed by private individuals and business firms. The Board of Governors placed the necessary laboratory accommodation in the Department of Bacteriology at the disposal of the investigators. All the members of the Department of Bacteriology and of the Department of Poultry Husbandry co-operated with the research workers listed below:-

Mr. Jacob Biely and Mr. William Roach:

"A Comparison of the Routine and the Routine Rapid  
Whole Blood (Stained Antigen) Serum Agglutination  
Tests for Pullorum Disease."  
Can. Jour. Res. 10, 1934, pp. 798-806.

Mr. Jacob Biely and Mr. E.A.Lloyd:

"Agglutination Tests for the detection of Pullorum  
Disease."  
The Veterinary Record, XIV, 31, 1934, pp. 878-882.

Mr. Jacob Biely and Miss E.Irene Palmer:

"Studies in Total Erythrocyte and Leucocyte Counts of  
the Domestic Fowl. III. Variation in Number of Blood  
Cells of Normal Fowls."  
Poultry Science, Vol. XIII No. 5, pp. 297-298, 1934.

Mr. Jacob Biely and Miss V.Elvera Palmer:

"An Examination of the Brachial Plexus of Normal Birds  
for the presence of Lymphoid Infiltrations."  
Jour. Comp. Path. and Therap. XLVII. (3) pp.205-210,1934.

In addition to the above publications which were financed by private individuals and business firms, reference should be made to the investigation conducted by Dean F.M. Clement on the marketing problems confronting the co-operative producers of fruit and vegetables in the Okanagan Valley. The funds providing for this investigation and for the publication of this Report were subscribed by the members of the Southern Okanagan Co-operative Associations.