

1909.

NEW ZEALAND.

# EDUCATION: HIGHER EDUCATION.

*Presented to both Houses of the General Assembly by Command of His Excellency.*

## EXTRACT FROM THE THIRTY-SECOND ANNUAL REPORT OF THE MINISTER OF EDUCATION.

### HIGHER EDUCATION.

THE body having general control of higher education in the Dominion is the University of New Zealand, which was founded by the New Zealand University Acts of 1870, 1874, 1875, and recognised by the Royal Charter of 1876 as entitled to grant degrees in arts, law, medicine, and music having currency throughout the Empire. The Amendment Act of 1883 and the supplementary charter of the same year give authority in addition to confer the degrees of Bachelor and Doctor of Science. Further, the University Degrees Act of 1904 has given the Senate statutory authority to confer certain other degrees—Doctor of Literature, Master of Laws, of Surgery, of Science; and Bachelor, Master, and Doctor of certain branches of applied science—veterinary science, dental surgery, engineering, agriculture, public health, and commerce. For these no further charter has been given, so that nominally these degrees have currency only within New Zealand; some of them, at least, might be held to be already included within the powers of the supplementary charter. The four chief functions of a university may be said to be—

- (i.) To provide higher education for those who have passed beyond the standard of the secondary schools;
- (ii.) To train its students for their professional work;
- (iii.) To be the home of sound learning, where knowledge is increased, and research is encouraged—and so to be an active agent in aiding the progress and in raising the standard of culture of the community;
- (iv.) To confer degrees as evidence of the completion of a course of higher education, or of professional courses, or in recognition of research-work or of definite contribution to human knowledge or thought.

In New Zealand the actual task of providing higher and professional education (i) and (ii), is undertaken mainly by the University colleges and other institutions named below; but the University exercises most important functions in regard to these matters inasmuch as the recognition of the institutions themselves, the conditions as to study, the keeping of terms, and so forth, the requirements of the degree examinations, the appointment of examiners, the conferring of degrees, the awarding of scholarships and prizes, and many similar matters are dealt with by the University itself, acting through the Senate, or through the Chancellor as the representative of the Senate. At the outset, the University found it necessary to employ outside examiners for its degree examinations, and in the main this policy is still continued, with the consequence that the colleges, which are the actual teach-

ing bodies—having the programme of work determined very strictly by the statutes of the University, and the examination-tests of the bulk of their work conducted by examiners in Great Britain—possess very little real freedom in teaching, and very little power to direct or modify the character of the work of their students.

The beginning of research-work is provided for in the conditions attached to certain of the higher degrees; but so far not much has been done to encourage advanced research; probably the conditions have not been altogether favourable to it.

In two of the University colleges, the lectures are delivered mainly, but not entirely, in the evening; in the other two most of this work is done during the day; so that in the former institutions the students are at liberty to follow other occupations, and a large proportion of them actually do so. While this fact no doubt increases the number of students, its tendency is to bring down the standard of the work accomplished; as far as the holders of University scholarships are concerned, a recent decision of the Senate will render this impossible in future. The raising of the standard of matriculation, and the acceptance of evidence of the satisfactory completion of a four-years secondary course as a qualification for admission to the University would also make it easier for the colleges to raise their standard of work. At the present time proposals in reference to the modification of the course for the ordinary degrees of Bachelor of Arts and Bachelor of Science are under consideration, having been referred to the University colleges for report and suggestions. In regard to the preparation of students for professions, the University and the several colleges have done valuable work, and through their means many of the lawyers, doctors, and teachers of the Dominion have received the greater part of their training. The affairs of the University are controlled by the Senate, which under "The New Zealand University Amendment Act, 1902," consists of twenty-four members or Fellows—four elected by the Governor in Council; eight by the governing bodies of the four affiliated institutions, two by each; four, one each, elected by the Professorial Boards; and eight, two each, elected by the four District Courts of Convocation, consisting of the graduates belonging to the several University districts. The revenue of the University is derived mainly from the statutory grant of £3,000 per annum, examination and diploma fees, and from interest upon sums invested—the savings of past years. By the decision of the Senate, half the amount of the statutory grant is allocated each year to the Scholarship Fund, and, as the income of that fund is never fully expended in any year, the result has been the building-up of a reserve putting the scholarship scheme of the University on a sound basis.

The chief items of income and expenditure of the University of New Zealand for 1908 are shown below:—

<i>Income.</i>				<i>Expenditure.</i>					
				£					£
Balances—					Scholarships				
General Account .. .. .				3,230	Examinations				1,970
Scholarship Account .. .. .				21,729	Office salaries				4,680
Statutory grant .. .. .				3,000	Expenses of Senate meetings				1,054
Fees .. .. .				5,880	Miscellaneous				370
Interest .. .. .				954	Balances .. .. .				774
Miscellaneous .. .. .				93					26,038
				<u>£34,886</u>					<u>£34,886</u>

The special scholarship and prize funds due to private donors are not included above. It will be seen that, apart from the Scholarship Fund the balance available for general purposes was £3,852, against which the chief liabilities were £1,318, the estimated amount due to the English examiners for the degree examinations of November, 1908, and the expenses of administration.

The institutions for higher education in the Dominion consist of the four affiliated institutions (or University colleges), and six professional schools. The four affiliated institutions are the University of Otago, Canterbury College, Auckland University College, and Victoria College; the professional schools are the Medical and Dental Schools of the University of Otago; the Canterbury Agricultural College, Lincoln, recognised as a school of agriculture; the School of Engineering (mechanical, electrical, and civil) at Canterbury College; the Schools of Mining and Metallurgical Engineering at the Otago University and at the Auckland University College.

The four training colleges for teachers, although not affiliated with the University, and having only a slight and indirect connection with it, may also be

considered as professional schools; a condition of entrance is the passing of the Matriculation Examination, and attendance at some at least of the courses at the University colleges is compulsory, even for those students who do not take the full course for a degree. Further, on each Board of Advice of a training college one member is a representative of the Professorial Board of the University College, and the Principal of the Training College is, in every case, the professor or lecturer in education at the University college.

Including the training colleges, and counting the professional schools as distinct from the affiliated institutions, we may say that there are in New Zealand fourteen public institutions for higher or professional education.

[In addition, there are certain other institutions for professional education which are endowed private y or otherwise, and are chiefly concerned with the training of theological students, many of whom also appear on the books of the affiliated institutions.]

At the four colleges of the University there were in all 1,493 students attending lectures during the year 1908—namely, 888 men and 605 women; of these, 1,162 (698 men and 464 women) were matriculated students, graduates or undergraduates, and the rest were unmatriculated. The full numbers at the several colleges are given in Table M, which also shows the number of exempted students—that is, students who are prevented by the necessity of earning their living or by distance from a college from attending lectures, and are allowed to keep terms, except in certain science and professional subjects, by passing the annual college examination.

TABLE M.—STUDENTS ON THE BOOKS OF THE AFFILIATED INSTITUTIONS.

Number of Students, 1908.	Auckland University College.	Victoria College.	Canterbury College.	Otago University.
<b>I. Attending lectures (whether terms were kept or not),—</b>				
<b>(1.) Matriculated students,—</b>				
<b>(a.) Graduates,—</b>				
Men .. .. .	9	15	19	18
Women .. .. .	4	14	6	5
Total graduates attending lectures	13	29	25	23
<b>(b.) Undergraduates,—</b>				
Men .. .. .	122	195	137	183
Women .. .. .	78	131	131	95
Total undergraduates attending lectures	200	326	268	278
<b>(c.) All matriculated students, (a) and (b),—</b>				
Men .. .. .	131	210	156	201
Women .. .. .	82	145	137	100
Total matriculated students attending lectures	213	355	293	301
<b>(2.) Non-matriculated students,—</b>				
Men .. .. .	50	56	49	35
Women .. .. .	77	22	39	3
Total non-matriculated students attending lectures	127	78	88	38
<b>(3.) All students attending lectures (1) and (2),—</b>				
Men .. .. .	181	266	205	236
Women .. .. .	159	167	176	103
Total all students attending lectures	340	433	381	339
<b>1,493</b>				
<b>II. Exempt students not attending lectures, not included above,—</b>				
Men .. .. .	12	60	5	26
Women .. .. .	3	32	1	2
Total exempt students .. .. .	15	92	6	28
<b>141</b>				
<b>III. Total all students I and II,—</b>				
Men .. .. .	193	326	210	262
Women .. .. .	162	199	177	105
Grand total all students .. .. .	355	525	387	367
<b>1,634</b>				

Table M1 shows the degree courses being taken in 1908 by students attending lectures at the several colleges, including the professional schools attached thereto.

TABLE M1.—COURSES TAKEN BY STUDENTS ATTENDING LECTURES AT UNIVERSITY COLLEGES IN 1908.

(NOTE.—No Student is included in more than one course in this list.)

Course.	Number.*		
	Men.	Women.	Total.
Arts (as for B.A., M.A., &c.) .. .. .	168	185	353
Science (as for B.Sc., M.Sc.).. .. .	19	7	26
Law (as for LL.B.).. .. .	54	..	54
Commerce (as for B.Com.) .. .. .	4	..	4
Music (as for B.Mus.) .. .. .	1	..	1
Medicine (as for M.B., &c.) .. .. .	77	5	82
Dentistry (as for B.D.S.) .. .. .	14	..	14
Engineering (Civil, Mechanical, or Electrical) .. .. .	32	..	32
Mining Engineering .. .. .	19	..	19
Agriculture (exclusive of students at Lincoln Agricultural College during 1908) .. .. .	..	..	..
Totals .. .. .	388	197	585

\* Exclusive of Victoria College, the return from which does not show the classification of the students according to courses.

The total staff of the four colleges consists of 37 professors and 40 lecturers; in many cases, from want of funds the Councils of the colleges have been compelled to put two or more subjects under the charge of one professor; but with increased grants from Government this difficulty has recently been to some extent overcome.

The staff of the several institutions are as follows:—

*Professors and Lecturers (1908).*

	Professors.	Lecturers, Demonstrators, and Assistants.
Auckland University College .. .. .	7	6
Victoria University College .. .. .	10	8
Canterbury University College .. .. .	9	7
Otago University .. .. .	11*	19†
Total .. .. .	37	40

*Scholarships, Bursaries, &c.*

The following University Entrance Scholarships are awarded each year on the results of the University Junior Scholarship Examination held in December: Junior University, Senior National, Taranaki, and Queen's Scholarships. Certain local and privately endowed scholarships (about thirty-seven in number) are also awarded on the same examination; and all who gain "credit" are entitled to hold bursaries which meet the cost of college fees up to £20 a year—that is, generally speaking, the whole of the fees.

Scholarships awarded during the degree course are the Senior University, Tinline, Sir George Grey, and various local scholarships and exhibitions. The chief scholarships awarded at the end of the University courses are the 1851 Exhibition Scholarship, the Cecil Rhodes Scholarship, the Medical Travelling Scholarship—these three being all travelling scholarships—that is, tenable abroad. There are also four New Zealand Research Scholarships of £100 per annum, with laboratory fees and expenses, one at each of the affiliated institutions, which are offered by the Government for research likely to be of benefit to the industries of the Dominion.

\* Also 1 Emeritus Professor.  
Medicine and Clinical Surgery.

† Also, the honorary staff of the Dunedin Hospital act as Lecturers on Clinical

*Degrees Conferred, &c.*

At the beginning of the present year the Senate conferred degrees and made awards of scholarships and prizes on the results of the academic year 1908, as under :—

TABLE M2.—DEGREES CONFERRED BY THE NEW ZEALAND UNIVERSITY AT THE BEGINNING OF 1909.

Degrees.	Auckland.			Victoria College.			Canterbury College.			Otago University.			Total.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Honours in Arts .. ..	..	..	..	9	6	15	3	3	6	6	3	9	18	12	30
Honours in Science .. ..	1	..	1	..	..	..	1	..	1	..	..	..	2	..	2
Honours in Law .. ..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1
Doctor of Medicine .. ..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1
Master of Arts .. ..	1	..	1	12	6	18	6	4	10	6	3	9	25	13	38
Master of Science .. ..	1	..	1	..	..	..	2	..	2	1	1	2	4	1	5
Master of Laws .. ..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1
Bachelor of Arts .. ..	4	7	11	6	6	12	12	9	21	5	5	10	27	27	54
"    Science .. ..	..	..	..	1	1	2	1	1	2	3	..	3	5	2	7
"    Engineering .. ..	..	..	..	..	..	..	7	..	7	..	..	..	7	..	7
"    Medicine and Bachelor of Surgery .. ..	..	..	..	..	..	..	..	..	..	9	..	9	9	..	9
"    Laws .. ..	2	..	2	3	..	3	1	..	1	1	..	1	7	..	7
Senior University Scholarships ..	3	1	4	2	2	4	2	..	2	1	..	1	8	3	11
Medical Travelling Scholarships ..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1
Macmillan Brown Prize .. ..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1
Total .. ..	..	..	..	..	..	..	..	..	..	..	..	..	116	59	175

The total number of graduates (exclusive of *ad eundem* graduates) admitted up to the 31st December, 1908, was 1,275.

The Cecil Rhodes Scholarship was awarded by the special committee of selection to A. MacDougall, Victoria College.

The degree of Doctor was not granted this year in any branch, and there were no Bachelors of Agriculture, Music, Dentistry, or Commerce; nor was the Tinline Scholarship awarded. The degree of Doctor of Music, and the degrees of Bachelor of Agriculture, Bachelor of Dentistry, and Bachelor of Veterinary Science have not yet been granted at all by the University; in regard to the last two, it may be mentioned that the School of Dentistry has not been in operation long enough to allow this to be done, and the proposed Veterinary School at Dunedin has not yet been opened. The necessary grants for buildings and maintenance (£3,000 and £1,200 a year respectively) have, however, been promised by the Government, and before long, no doubt, the Veterinary School will be in operation. The following scholarships, &c., were held during 1908 :—

TABLE M3.—SCHOLARSHIPS, BURSARIES, EXHIBITIONS, AND STUDENTSHIPS HELD AT THE AFFILIATED INSTITUTIONS IN 1908.

Scholarships, &c.	Auckland University College.	Victoria College.	Canterbury College.	Otago University.	Total.
Junior University Scholarships .. ..	10	8	10	11	39
Senior National Scholarships .. ..	7	7	6	11	31
Taranaki Scholarships .. ..	..	..	1	..	1
Queen's Scholarships .. ..	..	16	..	..	16
Senior University Scholarships .. ..	1	1	4	2	8
Bursaries Scholarships .. ..	2	1	1	4	8
Sir George Grey Scholarships .. ..	1	1	1	1	4
Other Scholarships and Exhibitions ..	2	5	22	4	33
Training college Studentships .. ..	48	78	72	76	274
Totals .. ..	71	117	117	109	414

The proportion of male and female students who have won the chief entrance scholarships in the last three years may be seen from the following table :—

*Junior University, Senior National, Taranaki, and Queen's Scholarships.*

					M.	F.	Total.
1906 ..	..	..	..	..	20	16	36
1907 ..	..	..	..	..	18	12	30
1908 ..	..	..	..	..	24	6	30
Totals	..	..	..	..	62	34	96

*Finances of the Affiliated Institutions in 1908.*

The detailed accounts of the four University colleges will be found in the Appendix; the following summary will give a general view of their finances, as in it are massed all the accounts, except the special trust accounts and the accounts of non-university institutions under the same control :—

TABLE M4.—SUMMARY OF ACCOUNTS.

*Expenditure (exclusive of Special Trusts).*

University College.	Deficits, 1907.		Salaries.	Sites, Buildings, and Equipment Endowment.	Administration, Scholarships, &c.	Interest, &c.	Balances, December, 1908.		Total.
	General.	Special.					General.	Special.	
Auckland .. .. .	£	£	£ 5,192	£ 3,093	£ 1,193	£ ..	£ 4,634	£ ..	£ 14,112
Victoria (to 31st March, 1909) ..	..	..	6,322	1,295	2,358	..	5,079	..	15,054
Canterbury .. .. .	1,346	637	14,662	7,046	2,749	590	..	33,315	60,345
Otago .. .. .	..	433	9,893	3,634	1,646	498	137	12,539	28,780
Total of four University colleges	1,346	1,070	36,069	15,068	7,946	1,088	9,850	45,854	118,291
Canterbury Agricultural College	..	..	1,489	871	4,894	..	624	..	7,878

*Receipts (exclusive of Special Trusts).*

University Colleges.	Balances, 1907.		From Government.			Endowments.	Interest.	Fees.	Miscellaneous.	Deficits, December, 1908.		Total.
	General.	Special.	Statutory.	Special and other.	Buildings, &c.					General.	Special.	
Auckland .. .. .	£ 5,181	£ 1,877	£ 4,000	£ 2,075	£ ..	£ 502	£ 66	£ 99	£ 114	£ ..	£ 198	£ 14,112
Victoria .. .. .	4,944	..	4,000	3,363	200	54	126	1,950	417	..	..	15,054
Canterbury .. .. .	..	26,400	..	3,771	471	15,582	985	4,296	1,393	6,497	950	60,345
Otago University .. .. .	483	12,249	..	2,000	2,793	8,238	814	1,740	26	..	437	28,780
Total of four University colleges	10,608	40,526	8,000	11,209	3,464	24,376	1,991	8,085	1,950	6,497	1,585	118,291
Canterbury Agricultural College	292	..	..	..	..	2,642	..	1,739	3,205	..	..	7,878

“THE UNIVERSITY ENDOWMENT ACT, 1868.”

The income accrued under this Act, and applicable to purposes of higher education yet to be determined by Parliament, amounted, on the 31st March, 1909, to £292 2s. 6d., received from reserves in Westland.

## APPENDIX.

### A. REPORT OF THE UNIVERSITY OF NEW ZEALAND, 1908.

[In continuation of E.-6, 1908.]

*Visitor.*—His Excellency the Governor.

*Chancellor.*—His Honour Sir Robert Stout, K.C.M.G., Chief Justice.

*Vice-Chancellor.*—Hon. C. C. Bowen, M.L.C.

*The Senate.*

Appointed by His Excellency the Governor in Council.—G. Hogben, M.A.; F. Fitchett, M.A., LL.D.; H. A. Gordon, F.G.S., M.A.I.M.E., A.M.I.C.E.; and W. E. Collins, M.B., M.R.C.S.Eng.

Appointed by governing bodies of affiliated institutions.—J. Shand, M.A., LL.D.; J. Allen, M.A.; R. J. Scott, M.I.C.E., M.I.M.E., A.A.I.E.E.; Hon. C. C. Bowen, M.L.C.; Sir G. M. O'Rorke, Kt., M.A., LL.D.; Hon. J. A. Tole, B.A., LL.B.; His Honour Sir R. Stout, K.C.M.G., Chief Justice; and Rev. W. A. Evans.

Appointed by Professorial Boards.—J. H. Scott, M.D., M.R.C.S., F.R.S.E.; C. Chilton, M.A., D.Sc., M.B., C.M., F.L.S.; F. D. Brown, M.A., B.Sc.; and J. R. Brown, M.A.

Elected by District Courts of Convocation.—Rev. W. Salmond, M.A., D.D.; Rev. A. Cameron, B.A.; J. M. Brown, M.A., LL.D.; J. Hay, M.A., LL.B.; F. E. Baume, M.P., LL.B.; Dr. W. C. W. McDowell, B.A., M.D., C.M.; H. F. Von Haast, M.A., LL.B., N.Z.; and Louis Cohen, M.A.

*Registrar.*

John William Joynt, M.A.

*Assistant Registrar.*

Barclay Hector.

### ANNUAL REPORT OF THE SENATE.

In compliance with the 28th clause of the University Act, the Senate makes the following report to His Excellency the Governor of the proceedings of the University since the date of the last report:—

The Senate met at Auckland, pursuant to the provisions of the University Act, in annual session on the 20th January, 1909, and at that session made certain amendments in the University statutes. These amendments have been approved by His Excellency.

The usual examinations were held in May, November, and December, 1908, and in January and April (for medical only), 1909, in the faculties of arts, science, medicine, law, engineering, commerce, and music, and for admission to the legal profession. The total number of candidates at these examinations was 2,499.

The Senate also held a special session in April, 1909.

At the annual and special sessions the Senate ordered the following degrees to be conferred by the Chancellor or his deputy, subject to the payment of the necessary fees:—

- The degree of Bachelor of Arts on 54 candidates,
- The degree of Bachelor of Science on 7 candidates,
- The degree of Bachelor of Laws on 7 candidates,
- The degree of Bachelor of Medicine on 9 candidates,
- The degree of Bachelor of Surgery on 9 candidates,
- The degree of Master of Arts on 38 candidates,
- The degree of Master of Laws on 1 candidate,
- The degree of Master of Science on 5 candidates,
- The degree of Doctor of Medicine on 1 candidate,
- The degree of Bachelor of Engineering on 7 candidates.

In addition, 30 gained Honours in Arts; 2 gained Honours in Science; 1 gained Honours in Law; 11 gained Senior Scholarships; 164 passed sections of examinations for various degrees, exclusive of the above-mentioned graduates; 141 passed various examinations for admission to the legal profession; 10 gained Junior University Scholarships; 20 gained Senior National Scholarships; 36 gained "credit" at the Junior Scholarship Examination; 559 passed the Matriculation and Solicitors' General Knowledge Examination; 58 passed the Matriculation, Solicitors' General Knowledge and Medical Preliminary Examination; 107 passed the Matriculation Examination; 1 passed the Matriculation and Medical Preliminary Examination; 4 passed the Matriculation and Engineering Preliminary Examination; 8 passed Matriculation, Engineering, and Medical Preliminary and Solicitors' General Knowledge; 1 passed Matriculation, Engineering, and Medical Preliminary; 35 gained certificates of proficiency.

The number of graduates of the University admitted and qualified for admission is now as follows:—

	Qualified by Examinations of 1908.	Total Number of Graduates admitted up to 31st December, 1908.
Bachelors of Arts (alone) ... ..	54	478
Bachelors of Arts and Science ... ..	...	11
Bachelors of Arts and Laws ... ..	...	31
Bachelor of Arts and Master of Laws ... ..	...	1
Bachelor of Arts and Doctor of Laws ... ..	...	1
Bachelor of Arts and Medicine ... ..	...	1
Bachelors of Arts, Medicine, and Surgery ... ..	...	5
Bachelors of Arts, Science, Medicine, and Surgery ... ..	...	2
Bachelors of Science (alone) ... ..	7	28
Bachelors of Science, Medicine, and Surgery ... ..	...	5
Bachelor of Science and Doctor of Medicine ... ..	...	1
Bachelors of Engineering (alone) ... ..	7	25
Bachelors of Laws (alone) ... ..	21	86
Bachelors of Medicine (alone) ... ..	...	21
Bachelors of Medicine and Surgery ... ..	9	92
Bachelors of Music (alone) ... ..	...	3
Bachelor of Commerce (alone) ... ..	...	1
Masters of Arts (alone) ... ..	38	340
Masters of Arts and Bachelors of Science ... ..	...	46
Masters of Science (alone) ... ..	5	16
Masters of Arts and Bachelors of Laws ... ..	...	33
Masters of Arts and Masters of Science ... ..	...	18
Masters of Arts and Doctors of Science ... ..	...	6
Masters of Arts and Bachelors of Medicine and Surgery ... ..	...	2
Master of Arts, Bachelor of Science, Medicine, and Surgery ... ..	...	1
Masters of Arts and Doctors of Laws ... ..	...	3
Masters of Laws (alone) ... ..	1	2
Doctors of Laws (alone) ... ..	...	4
Doctors of Medicine (alone) ... ..	1	8
Doctors of Science (alone) ... ..	...	3
Doctor of Literature (alone) ... ..	...	1
	<u>143</u>	<u>1,275</u>

The accounts of the University for the year 1908, duly audited, are appended to this report.

## ACCOUNTS AND BALANCE-SHEETS, YEAR ENDED THE 31st DECEMBER, 1908.

(Summarised from full details in the original).

### A. CLASSIFIED RECEIPTS.

#### I. GENERAL ACCOUNT.

	£	s.	d.
Statutory grant (half share) .. ..	1,500	0	0
General miscellaneous .. ..	92	17	7
Fees—			
1. Degrees—			
B.A. degree .. ..	63	0	0
B.Sc. degree .. ..	14	14	0
M.A. degree .. ..	91	7	0
M.Sc. degree .. ..	34	13	0
D.Sc. degree .. ..	15	15	0
Hon. Diploma .. ..	28	7	0
M.B. and Ch.B. degree .. ..	113	8	0
M.D. degree .. ..	31	10	0
L.L.B. degree .. ..	132	6	0
B. Eng. degree .. ..	44	2	0
B. Com. degree .. ..	7	7	0
		576	9 0
2. <i>Ad eundem</i> and certificates .. ..		62	7 0
3. Medical registration .. ..		37	16 0
4. Examinations—			
(a) November, 1908, Degree Examinations, Teachers C, &c. .. ..	2,206	5	0
(b) December, 1908, Matriculation, Junior Scholarship Examination, &c. .. ..	2,997	4	0
		<u>£7,472</u>	<u>18 7</u>

#### II. ORDINARY SCHOLARSHIP ACCOUNT.

	£	s.	d.
Statutory grant (half share) .. ..	1,500	0	0
Interest .. ..	954	6	1
		<u>£2,454</u>	<u>6 1</u>

#### III. JOHN TINLINE SCHOLARSHIP ACCOUNT.

	£	s.	d.
Interest .. ..	63	0	0



IV. SENIOR NATIONAL SCHOLARSHIPS ACCOUNT.							£	s.	d.
Treasury grants	..	..	..	..	..	..	1,744	14	3
Taranaki Scholarship	..	..	..	..	..	..	60	1	0
Refund	..	..	..	..	..	..	1	0	0
							<u>£1,805</u>	<u>15</u>	<u>3</u>

SUMMARY OF RECEIPTS, 1908.							£	s.	d.
General Account	..	..	..	..	..	..	7,472	18	7
Ordinary Scholarship Account	..	..	..	..	..	..	2,454	6	1
John Tinline Scholarship Account	..	..	..	..	..	..	63	0	0
Senior National Scholarships Account	..	..	..	..	..	..	1,805	15	3
							<u>£11,795</u>	<u>19</u>	<u>11</u>

## B. CLASSIFIED EXPENDITURE.

## I. GENERAL ACCOUNT.

			£	s.	d.				£	s.	d.
1. Senate sessions—						Brought forward ..	..	4,201	0	11	
Expenses of Fellows	..	..	281	6	8	4. Examinations— <i>continued.</i>					
Expenses of sessions	..	..	71	0	5	(c) January, 1908—					
Expenses of election	..	..	17	10	11	Examiners' fees	..	137	7	4	
2. Office and salaries—						Supervision fees	..	5	15	10	
Registrar	..	..	500	0	0	Printing and advertising	..	7	0	2	
Assistant Registrar	..	..	300	0	0	(d) April, 1908—					
Clerical assistance	..	..	22	13	0	Examiners' fees	..	116	18	4	
Messenger and charwoman	..	..	15	0	0	Supervision fees	..	6	13	6	
Rent of offices	..	..	104	0	0	Printing and advertising	..	11	1	4	
Office furniture and fittings	..	..	17	0	6	(e) May, 1908—					
Official postage	..	..	95	0	0	Examiners' fees	..	42	1	6	
3. Miscellaneous—						Supervision fees	..	22	2	0	
Printing—						Printing and advertising	..	15	1	8	
Calendar	..	..	169	11	6	(f) Special examinations—					
Minutes	..	..	61	15	0	Examiners' fees	..	10	0	0	
Diplomas	..	..	38	14	3	Supervision fees	..	2	0	0	
General printing and stationery	..	..	268	10	2	(g) Supplementary examinations	..	94	1	4	
Expenses of conferring diplomas	..	..	74	5	11	(h) November, 1908—					
Miscellaneous	..	..	134	17	3	Examiners' fees	..	442	7	2	
4. Examinations—						Supervision fees	..	365	2	8	
(a) November, 1907—						Printing and advertising	..	315	4	3	
Examiners' fees	..	..	1,060	15	0	(i) December, 1908—					
English agent—						Supervision fees	..	768	7	9	
Fee (part)	..	..	60	0	0	Printing and advertising	..	289	5	0	
Expenses	..	..	48	10	2						
(b) December, 1907—											
Examiners' fees	..	..	790	15	0						
Supervision fees	..	..	9	1	0						
Printing and advertising	..	..	60	14	2						
Carried forward	..	..	£4,201	0	11						
							<u>£6,851</u>	<u>10</u>	<u>9</u>		

## II. ORDINARY SCHOLARSHIP ACCOUNT.

Scholarships—		£	s.	d.	
(a) Junior scholarships—					
Scholarships of 1905—					
9 at £50, £450; 5 at £30, £150	..	..	600	0	0
Scholarships of 1906—					
2 at £50, £100; 12 at £30, £360	..	..	460	0	0
Scholarships of 1907—					
4 at £55, £220; 6 at £35, £210	..	..	430	0	0
(b) Senior scholarships—					
Scholarships of 1907—					
8 at £60, £480	..	..	480	0	0
Miscellaneous	..	..	26	17	6
		<u>£1,996</u>	<u>17</u>	<u>6</u>	

## III. JOHN TINLINE SCHOLARSHIP ACCOUNT.

		£	s.	d.	
Scholarship	..	..	50	0	0
Miscellaneous	..	..	0	14	0
		<u>£50</u>	<u>14</u>	<u>0</u>	

## IV. SENIOR NATIONAL SCHOLARSHIPS ACCOUNT.

Scholarships—		£	s.	d.	
19 at £50, £950; 12 at £20, £240; 1, Taranaki, £60	..	..	1,250	0	0
Fees	..	..	386	2	9
Bursaries	..	..	145	4	0
Miscellaneous	..	..	5	3	0
		<u>£1,786</u>	<u>9</u>	<u>9</u>	

## SUMMARY OF PAYMENTS, 1908.

		£	s.	d.	
General Account	..	..	6,851	10	9
Ordinary Scholarship Account	..	..	1,996	17	6
John Tinline Scholarship Account	..	..	50	14	0
Senior National Scholarships Account	..	..	1,786	9	9
		<u>£10,685</u>	<u>12</u>	<u>0</u>	





## B. REPORT OF THE AUCKLAND UNIVERSITY COLLEGE, 1908.

[In continuation of E.-9, 1908.]

*Staff.*

*Professors.*—Classics—H. S. Dettmann, M.A., Oxford. English—C. W. Egerton, M.A., Dublin. Mathematics—H. W. Segar, M.A., Cambridge. Chemistry and Experimental Science—F. D. Brown, Hon. M.A., Oxford, B.Sc., Lond., F.C.S. Biology and Geology—A. P. W. Thomas, M.A., Oxford, F.L.S., F.G.S. Music—W. E. Thomas, Mus. Doc., Oxford. Mining Engineering—Arthur Jarman, A.R.S.M., London, M.I.M.M., London, M.A.I.M.E.

*Lecturers.*—Modern Languages—M. Walker, M.A., B.Com. (E. W. Shanahan, B.A., *locum tenens*). Law—R. N. Moody, LL.M. Mental Science, Economics, History, and Commercial Geography—J. P. Grossman, M.A. Accounting—H. H. Hunt, F.N.Z.A. and A.A. Education—H. A. E. Milnes, B.Sc., Lond. Applied Mechanics, Steam Engine, Machine Construction and Drawing—Sydney E. Lamb, B.Sc. Hons., London, A.R.C.Sc., A.M.I.M.E.

*Visitor.*—The Hon. the Minister of Education.

*Members of Council.*

Appointed by His Excellency the Governor in Council—Hon. Sir G. M. O'Rorke, M.A., LL.D., M.L.C.; Rev. J. H. Simmonds; Mr. G. L. Peacocke.

Elected by members of the Legislature—Hon. J. A. Tole, B.A., LL.B., K.C.; Rev. W. Beatty, M.A.; Mr. W. B. Colbeck, B.A., LL.B.

Elected by graduates—Mr. F. E. Baume, LL.B., K.C., M.P.; Dr. W. C. W. McDowell, B.A., M.D., C.M.; Mr. T. U. Wells, B.A.

*Ex officio*—Mr. Arthur M. Myers, Mayor of Auckland; Mr. L. J. Bagnall, Chairman of the Education Board (January–August); Mr. C. J. Parr, Chairman of the Education Board (September–December).

*Registrar.*—Rev. Chas. M. Nelson, M.A.

## The CHAIRMAN of the BOARD OF GOVERNORS to the MINISTER OF EDUCATION.

SIR,—

Auckland University College, 27th May, 1909.

In pursuance of section 25 of "The Auckland University College Act, 1882," the Council has the honour to make the following report for the year 1908:—

1. *Number of Students.*—The number of persons who attended lectures in this College in 1908 was 340: Graduates, 13 (males, 9; females, 4); undergraduates, 200 (males, 122; females, 78); and non-matriculated students, 127 (males, 50; females, 77).

2. *Council.*—Mr. G. L. Peacocke was reappointed by the Governor in Council; Rev. W. Beatty, M.A., was elected by the members of the General Assembly resident in the Provincial District of Auckland, in the place of Right Rev. Bishop Neligan, whose term of membership had expired; and Mr. T. U. Wells, B.A., was re-elected by the graduates of the University of New Zealand on the roll of the Auckland University College. There was no alteration in the *ex officio* members.

3. *Professors and Lecturers.*—Mr. H. S. Dettmann, B.A. Sydney, M.A. Oxford, and Hon. M.A. Adelaide, was elected Professor of Classics in the place of Mr. C. F. Bourne, M.A. Oxford, who had acted as Professor of Classics during the year. Professor Dettmann entered on his duties at the beginning of the first term, 1908. Mr. Maxwell Walker, M.A., B.Com., Lecturer in Modern Languages, was granted a year's leave of absence, for the purpose of visiting Europe, until the end of 1909. Mr. E. W. Shanahan, B.A., was appointed his *locum tenens*.

4. *School of Mines.*—A new corrugated-iron building has been erected on the Choral Hall property, for the purposes of the mining department of the College, at a cost of £1,994 7s. 6d., exclusive of architect's fees. About £100 has been further expended for furniture and fittings. The new building was formally opened by Sir Robert Stout, K.C.M.G., Chancellor of the University of New Zealand, on the 21st September, 1908. The large expenditure on this much-needed building left the Specialisation Account with a debit balance at the end of the year of £198 1s. 11d. The Government, in June, 1907, contributed £500 towards the cost of this building.

5. *New College Buildings.*—The need of further accommodation for University students at this College is being more and more felt, and a site for the new University College has not yet been secured by the College Council, nor has a grant for the new buildings yet been made by Parliament; but it is to be hoped that both will be obtained in the present or ensuing year. The urgency of this matter was pointed out a few days ago at the Selwyn centenary by Lord Plunket, when he thus expressed it: "Auckland College is increasing in numbers and usefulness, and so soon as the serious drawback from which it is at present suffering, due to wretched housing, can be removed, it will advance more rapidly still. In Wellington the residential house for female students has already to be doubled. Residential accommodation for male students is also provided. In Dunedin a splendid residential college is connected with the Otago University."

6. Such being the unsolicited testimony of a gentleman holding the high position of Governor of New Zealand, and a graduate of the University of Dublin, the friends of the Auckland institution may rest assured that at no distant day a suitable University building will be erected for the benefits of students and the professorial staff.

7. Before closing these remarks on the want of a new University building, I wish to add that I desire to see the present buildings, though now over fifty years old, utilised for many years as residential accommodation for male students from the country parts of the province, and a similar provision I desire to see established temporarily in the new University College—residential accommodation for female students from country districts.

8. At present it is proposed to keep the College library in the present buildings, but to enlarge it by annexing it to the Chairman's room, which he is willing to surrender for library purposes. A suitable library for the female students will be secured by transferring some of the books from the present library to their new quarters, and acquiring from Home books especially suitable for female students.

9. As regards the erection of the new college buildings, I have come to the conclusion, after consulting the Chairman of the Professorial Board, Professor F. D. Brown, that it will be desirable to keep the laboratories for chemistry, physics, and geology in separate buildings, but contiguous to the main buildings. I have also to suggest that Professor Brown and Professor Thomas's departments should not for the present be moved from their present quarters, but that as soon as the main building is erected the departments of classics, mathematics, English, French, commerce, music, and law be transferred thither.

10. I also think it would be very desirable that a portion of the new building should be set apart for the residential accommodation of female students from the country districts. I think that girls who are losing the benefits of paternal and maternal care should receive instead the care of academic supervision. I would have that supervision exercised by a lady who had been educated at Girton College, in Cambridge, or in a similar college. If she were a married lady, I think her husband should be engaged in University teaching.

11. For the residential students I think the rooms for two should consist of two bedrooms and a sitting-room, and that there should be a dining-room for the male students in the old building, and a dining-room for the female students in the new building. I think the charge for each set of rooms should be £10 per annum.

12. If I have gone into too much detail in these matters, I hope the Government will excuse me; but I thought it desirable that both the Government and Parliament should be in possession of my full views on these subjects. When I estimated the cost of college buildings in 1879 at Auckland and Wellington at £12,500 the cost of such buildings was estimated at a lower rate than now prevails; but I think if Auckland were to get in two years the same amount as the Victoria College in Wellington has received, the Auckland College Council would be satisfied, and would endeavour to keep its expenditure within that amount for its new University College.

13. *Pension Scheme.*—Most of the changes in the management of this College can be effected by the governing body; but, as regards matters involving legislation, I think the pension scheme that was established a few years ago for the benefit of teachers in the primary and secondary schools should be extended to Professors and Lecturers in University Colleges. I also do not think that these officers should be compulsorily retired at the age of sixty-five, but should retire either voluntarily after that age or at the instance of the governing body.

14. *Quorum.*—I would also suggest that the quorum for transaction of business fixed by section 14 of the original Act be reduced from "five" to "three" members of the Council, as inconvenience sometimes arises from waiting for a fifth member.

15. *Receipts and Expenditure.*—General Account: Receipts, including balance of £5,181 12s. 4d. from 1907, £10,037 5s. 3d.; expenditure, £5,402 16s. 9d.; balance, £4,634 8s. 6d. Specialisation Account: Receipts, including balance of £1,877 14s. 4d. from 1907, £3,877 14s. 4d.; expenditure, £4,075 16s. 3d.; debit balance, £198 1s. 11d. Endowments: The income from the endowments was £501 12s. 3d., and the expenditure was £21 6s. 7d., leaving a net revenue of £480 5s. 8d.

16. *Degrees and Honours.*—The degrees and honours gained at last November examinations of the University of New Zealand are as follows: Honours in Science, 1; Master of Arts, 1; Master of Science, 1; Bachelors of Arts, final section, 11; Bachelors of Arts, first section, 13; Bachelors of Laws, final section, 2; Bachelors of Laws, first section, 15; Bachelor of Science, first section, 1; Bachelor of Music, final section, 1; Bachelor of Music, first section, 1; Senior Scholarships, 4.

I have, &c.,

G. MAURICE O'RORKE, Chairman.

## STATEMENT of the RECEIPTS and EXPENDITURE of the AUCKLAND UNIVERSITY COLLEGE for the Year ended 31st December, 1908.

		I. GENERAL ACCOUNT.			
<i>Receipts.</i>		£	s. d.	<i>Expenditure.</i>	£ s. d.
Balance, 31st March, 1907	..	5,181	12 4	Salaries .. .. .	3,638 2 4
From Government—				Office expenses .. .. .	30 17 8
Statutory grant .. .. .	..	4,000	0 0	Stationery .. .. .	14 11 11
Sir George Grey Scholarship .. .. .	..	75	0 0	Advertising .. .. .	51 5 3
Endowments—				Printing .. .. .	84 2 3
Rents collected by Land Board .. .. .	..	239	0 7	Cleaning, lighting, and warming .. .. .	83 12 11
Rents collected by Registrar .. .. .	..	152	11 8	Insurance .. .. .	28 7 0
Taupiri rent .. .. .	..	110	0 0	Commission (bank) .. .. .	0 10 0
Music examination fees .. .. .	..	98	12 9	Furniture and fittings .. .. .	26 12 8
Sale of calendars .. .. .	..	2	18 6	Repairs .. .. .	36 2 10
Miscellaneous .. .. .	..	111	4 5	Additions .. .. .	68 0 0
Interest—				Water rates .. .. .	11 8 0
Debentures .. .. .	..	16	0 0	Lecture requisites (Professor Brown) .. .. .	70 19 11
Grey Street Mortgage .. .. .	..	35	0 0	(Professor Thomas) .. .. .	9 9 5
Auckland Savings-bank .. .. .	..	4	0 0	Library .. .. .	72 15 2
Post-Office Savings-bank .. .. .	..	11	5 0	Premiums .. .. .	25 4 0
				Annual examination expenses .. .. .	4 10 0
				Music examination expenses .. .. .	69 5 3
				Endowment expenses .. .. .	21 6 7
				School of Music .. .. .	9 7 6
				Legal expenses .. .. .	180 14 6
				Choral Hall site .. .. .	500 0 0
				Miscellaneous .. .. .	315 11 7
				Sir George Grey Scholarship .. .. .	50 0 0
				Balance, 31st December, 1908—	
				Debentures .. .. .	£400 0 0
				Mortgage (Grey Street) .. .. .	700 0 0
				" (Te Puke) .. .. .	2,500 0 0
				Post-office Savings-bank .. .. .	336 9 2
				Auckland Savings-bank .. .. .	122 12 2
				Bank of New Zealand—	
				Current account .. .. .	575 7 2
					<u>4,634 8 6</u>
		<u>£10,037</u>	<u>5 3</u>		<u>£10,037 5 3</u>

## II. SEPARATE ACCOUNTS.

## A.—Specialisation Account, School of Commerce and School of Mines.

		£	s. d.		
Balance, 31st December, 1907	..	1,877	14 4	Salaries .. .. .	1,553 18 4
From Government—				Office expenses .. .. .	16 13 8
Statutory grant .. .. .	..	2,000	0 0	Stationery .. .. .	6 18 5
Balance due bank .. .. .	..	198	1 11	Advertising .. .. .	38 9 7
				Printing .. .. .	26 11 0
				Cleaning, lighting, and warming .. .. .	9 15 0
				Insurance .. .. .	7 18 8
				Furniture and fittings .. .. .	42 14 10
				Water rates .. .. .	1 0 0
				Lecture requisites (Professor Jarman) .. .. .	165 16 8
				Library .. .. .	84 10 0
				Commission and interest .. .. .	4 5 7
				Miscellaneous .. .. .	122 17 0
				Building .. .. .	1,994 7 6
		<u>£4,075</u>	<u>16 3</u>		<u>£4,075 16 3</u>

## B.—Sinclair-Gillies Trust Account.

		£	s. d.		
Balance, 31st December, 1907	..	3,641	1 11	Scholarships (two) .. .. .	140 0 0
Interest on £3,000 on mortgage at 5 per cent. .. .. .	..	150	0 0	Advertising .. .. .	13 18 2
Interest—				Balance, 31st December, 1908—	
Auckland Savings-bank .. .. .	..	3	16 0	Auckland Savings-bank .. .. .	121 9 9
Post-Office Savings-bank .. .. .	..	17	1 5	Post-Office Savings-bank .. .. .	536 11 5
				On mortgage .. .. .	3,000 0 0
		<u>£3,811</u>	<u>19 4</u>		<u>£3,811 19 4</u>

## C.—J. L. Sinclair (Bequest) Trust Account.

		£	s. d.		
Balance, 31st December, 1907	..	23	11 9	Balance, 31st December, 1908—	
Interest .. .. .	..	0	18 5	In Auckland Savings-bank .. .. .	24 10 2
		<u>£24</u>	<u>10 2</u>		<u>£24 10 2</u>

CHAS. M. NELSON, M.A., Registrar.

Examined and found correct.—J. K. WARBURTON, Controller and Auditor-General.

## C. REPORT OF THE VICTORIA COLLEGE, 1908.

("The Victoria College Act, 1897.")

[In continuation of E.-10, 1908.]

*Visitor.*—The Hon. the Minister of Education.*Members of Council.*

Appointed by His Excellency the Governor in Council—A. W. Hogg, M.P.; J. Graham, M.P.; W. H. Quick.  
 Elected by members of the Legislature—C. P. Knight, LL.D.; C. Wilson; Heinrich F. von Haast, M.A., LL.B.  
 Elected by members of Education Boards—A. T. Maginnity; the Hon. J. G. Findlay, M.L.C., LL.D.;  
 R. McCallum.

Elected by graduates—J. G. W. Aitken; A. R. Meek, M.A., LL.B.; Francis P. Wilson, M.A.

Elected by public-school teachers—T. R. Fleming, M.A., LL.B.; Rev. W. A. Evans; C. Watson, B.A.

Elected by the Professorial Board—E. T. D. Bell.

*Staff.*

*Professors.*—Classics—John Brown, M.A., St. Andrew's and Oxford. English Language and Literature—H. Mackenzie, M.A., St. Andrew's. Modern Languages—G. W. von Zedlitz, M.A., Oxford. Chemistry—T. H. Easterfield, M.A. Cambridge, Ph.D. Würzburg. Mathematics and Mathematical Physics—D. K. Picken, M.A. Biology—H. B. Kirk, M.A. New Zealand. Law—M. W. Richmond, B.Sc. Lond., LL.B. New Zealand, and J. Adamson, M.A., LL.B., Edinburgh, Dean of the Faculty. Mental Science—T. A. Hunter, M.A., M.Sc., New Zealand; Physics—T. H. Laby, B.A., Cambridge.

*Lecturers.*—Education—William Gray, M.A., B.Sc., New Zealand. Economics, History, and Geography—F. P. Wilson, M.A. Geology—C. A. Cotton, M.Sc., New Zealand. Demonstrator in Chemistry—J. C. McDowall. Demonstrator in Biology—Miss P. Myers, B.A. New Zealand. Assistant in Biology—E. Panting.

*Registrar.*—C. P. Powles.

The REGISTRAR, Victoria College, to the Hon. the MINISTER OF EDUCATION.

SIR,—

Victoria College, Registrar's Office, Wellington, 19th May, 1909.

I have the honour, in pursuance of the Victoria College Act, to forward the following report from the Council on the work of the College during last year:—

Classes have been held in the following subjects: English language and literature, education, Latin, Greek, French, German, mental science, jurisprudence and constitutional history, law, political economy, history, mathematics, mechanics, chemistry, physics, and biology.

The number of students attending classes was 433, and there were 92 exempted students attached to the College; 199 students kept terms.

The Sir George Grey Scholarship was won by Mr. J. C. McDowall.

At the recent degree examinations of the University of New Zealand, students of Victoria College passed as follows:—

M.A. with honours	..	..	..	..	..	..	..	15
M.A. pass	..	..	..	..	..	..	..	2
L.L.M. with honours	..	..	..	..	..	..	..	1
Senior Scholarships	..	..	..	..	..	..	..	4
B. Com.	..	..	..	..	..	..	..	1
L.L.B.	..	..	..	..	..	..	..	1
B.A.	..	..	..	..	..	..	..	12
Engineering, entrance examination	..	..	..	..	..	..	..	1
First section B.A.	..	..	..	..	..	..	..	35
Law examinations	..	..	..	..	..	..	..	32

The number of students attending lectures this year is 458. The numbers have shown a steady increase each year since 1889, the first year of the work of the College, when 115 students attended lectures. And to show what a large number of students the College has to provide for, the number of candidates for the various University examinations of 1908-9 may be quoted. The Victoria College district sent up 1,050 candidates, Otago University district coming next with 616.

A special committee of the Council was appointed to draw up a report on the needs for additions to the teaching staff, and for additional accommodation for classes. This report was presented to the Prime Minister and the Minister of Education by a deputation from the Council, which met with a most favourable reception.

The Government gave an additional grant of £1,500 a year for general teaching purposes; and the Council has therefore been able to appoint a Professor of Physics—Mr. T. H. Laby, B.A.—who will be in the Dominion to take up his work at the beginning of the second term; to relieve Professor Hunter from the teaching of economics, appointing Mr. F. P. Wilson, M.A., to be Lecturer in Economics, History, and Geography, with a view to the Commerce degree; to appoint Mr. C. A. Cotton, M.Sc., as Lecturer in Geology, and also to give assistance to the Professors of English Language and Literature, Classics, Modern Languages, and Mathematics; besides providing Professor Kirk with an assistant in the preparation of subjects for class-work and for the museum.

The provision for teaching is therefore on a satisfactory footing; but the increase in the number of students, and the necessity of dividing the larger classes in English, classics, and mathematics, the addition of the subject of geology and the separation of physics from chemistry, very much emphasizes the difficulties of carrying on the necessary classes with the insufficient accommodation available.





## D. REPORT OF THE CANTERBURY COLLEGE, 1908.

("The Canterbury College and Canterbury Agricultural College Act, 1896.")

[In continuation of E.-8, 1908.]

*Visitor*.—The Minister of Education.*Board of Governors* (G. W. Russell, M.P., Chairman).

Appointed by His Excellency the Governor—The Right Rev. John Joseph Grimes, D.D.; the Right Rev. Churchill Julius, D.D.; and Mr. Thomas William Adams.

Elected by members of the Legislature—George Rennie; Mr. Henry George Ell, M.P.; and Mr. John Lee Scott.

Elected by graduates—Very Rev. Dean Harper, M.A.; Mr. Thomas Scholfield Foster, M.A.; Mr. William Hugh Montgomery, B.A.; Mr. George Warren Russell; Mr. Alfred George Talbot, M.A., M.B.C.M., M.R.C.S.; and Mr. George Thorngate Weston, B.A., LL.B.

Elected by public-school teachers—Mr. Thomas Hughes, B.A.; Mr. Jonathan Charles Adams, B.A.; and Mr. Lawrence Berry Wood, M.A.

Elected by School Committees—Mr. Charles Henry Adolphus Truscott Opie; Mr. Benjamin Michael Moorhouse, M.B.C.M., M.R.C.S.; and Mr. Thomas William Rowe, M.A., LL.B.

Elected by Professorial Board—Mr. William Izard, M.A., LL.M.

*Registrar*—Mr. George H. Mason.*Professors*.—Classics—F. W. Haslam, M.A. Mathematics and Natural Philosophy—J. P. Gallatt, M.A., and C. H. H. Cook, M.A. Chemistry—W. P. Evans, M.A., Ph.D., Giessen, M.S.C.I. French and German—T. G. R. Blunt, M.A. Biology and Palaeontology—Charles Chilton, M.A., D.Sc., M.B.C.M., F.L.S. English Language, Literature, and History—Arnold Wall, M.A. Economics, History, and Commerce—James Hight, M.A., Litt. D., F.R.E.S.*Part-time Lecturers*.—Geology—Robert Speight, M.A., B.Sc., F.G.S. Jurisprudence and Law—T. A. Murphy, M.A., LL.B. Mental Science and Classics—C. F. Salmond, M.A. Music—J. C. Bradshaw, Mus. Doc., F.R.C.O., L.R.A.M., A.R.C.M. Education—Edwin Watkins, B.A. Accounting and Accountancy—Mr. J. Morrison, F.I.A.N.Z. Sound, Light, and Heat—C. C. Farr, D.Sc., A.M.I.C.E.*School of Engineering, Electricity, and Technical Science*.—Professor in Charge—Robert J. Scott, M.I.C.E., M.I.M.E.*Girls' High School*.—Lady Principal—Miss M. V. Gibson, M.A.*Boys' High School*.—Headmaster—C. E. Bevan-Brown, M.A.*Museum*.—Curator—Edgar R. Waite, F.L.S. Assistant Curator—Robert Speight, M.A., B.Sc., F.G.S.*School of Art*.—Director—R. Herdman-Smith, A.M., F.S.A.M.*Public Library*.—Librarian—H. Strong.

## ANNUAL STATEMENT OF THE CHAIRMAN OF THE BOARD OF GOVERNORS.

At the meeting of the Board of Governors of Canterbury College, held on Monday, the 26th April, 1909, the Chairman (Mr. G. W. Russell) laid on the table the accounts of the Board for the year 1908, duly certified by the Auditor-General, and in doing so delivered the following address:—

[Some details are omitted in this reprint.—SECRETARY, EDUCATION.]

The present is the thirty-sixth annual report and statement of the Chairman of the Board of Governors since the establishment of the institution in 1873.

## BOARD OF GOVERNORS.

On the 30th March, 1908, the Rev. Robert Erwin, D.D., resigned his seat on the Board of Governors, before leaving New Zealand on a trip to England, and Mr. George Rennie was elected to fill the vacancy.

The following gentlemen, who retired by rotation, as provided by the Act of 1896, were re-elected to represent the several constituencies:—

*Representing His Excellency the Governor*.—Right Rev. Churchill Julius, D.D.*Representing the Canterbury Members of Parliament*.—Mr. John Lee Scott.*Representing the Graduates of Canterbury College*.—Mr. Thomas Scholfield Foster, M.A.*Representing the Teachers of Canterbury*.—Mr. Jonathan Charles Adams, B.A.*Representing the School Committees of Canterbury*.—Mr. Charles Henry Adolphus Truscott Opie.*Chairman of the Board*.—At the statutory meeting of the Board held on the 27th July, 1908, Mr. George Warren Russell was re-elected Chairman for the ensuing year.

On the 18th June, 1908, Mr. Alexander Cracroft Wilson forwarded his resignation as Registrar of the College as from the 30th June, he having held that office from 27th January, 1891. Mr. George H. Mason, Accountant and Chief Clerk, was promoted to the position of Registrar in succession to Mr. Wilson, Mr. Edward Evans, clerk, being appointed Accountant. The vacancy caused by Mr. Evans's promotion was filled by the appointment of Mr. Reginald Browning.

"College Empowering Act, 1908."—In September last "The Canterbury College Empowering Act, 1908," was passed. This Act validated the purchases of lands and properties in the city by the Board, gave the Board power to purchase land within the city with the sanction of the Governor,

authorised the payment out of capital of overdrafts incurred for buildings and of the balance of the Supreme Court award to the Canterbury Agricultural College, legalised the payment of actual travelling-expenses to members of the Board, and made provision for the appointment of a Deputy Chairman of the Board and of a College Rector.

The passing of that portion of the Bill referring to financial matters has removed the grounds for the exception taken for some years by the Auditor-General to the annual statement of accounts, and the balance-sheet for the year 1908 has been returned audited without any indorsement by the Auditor-General.

*Professor Haslam.*—Professor Haslam returned to Christchurch in February last, after his twelve months' leave of absence owing to ill health, and resumed the duties attached to his chair at the commencement of the current session, his health being considerably improved by his holiday. During his visit to England Professor Haslam succeeded in persuading the authorities of Trinity College, Cambridge, to grant a scholarship to students of this College. The hearty thanks of the Board were conveyed to Professor Haslam for this distinguished service to Canterbury College. Mr. L. G. H. Greenwood, M.A., who acted as *locum tenens* for Professor Haslam during the latter's absence from the Dominion on leave, returned to England in November last, having carried out the duties attached to the chair of classics with full satisfaction to the Board.

*Professor of Mathematics.*—In order to fill the vacancy on the professorial staff caused by the resignation of Professor Cook, applications were invited in the United Kingdom, Australia, and New Zealand for a Professor of Mathematics, the selection of the candidates from Home being left in the hands of the High Commissioner for New Zealand, who was assisted by Dr. H. F. Baker, for recommendation to the Board. The final choice fell on Mr. J. P. Gabbatt, M.A. Cambridge. Professor Gabbatt arrived here on the 27th January, and at once took up his duties.

*Director of School of Art.*—The Director of the School of Art has been granted leave of absence for eight months, to enable him to visit the principal art schools in the United Kingdom and Europe, in the interest of the School of Art. Satisfactory arrangements have been made for carrying on the work of the school during the Director's absence. Mr. Herdman Smith left for England at the end of February. Authority has been given him to purchase a quantity of apparatus and books for the use of the school, while a sum of £50 has been voted for the purchase of specimens of the best students' work from the various art schools visited.

*Reduction of Library Subscriptions.*—With a view to bringing the privileges of the public library within the reach of all classes of the public, the Board reduced the subscription to the circulating department of the library from the commencement of the present year to 5s. per annum, 3s. 6d. per half year, and 2s. per quarter. The result has been a great increase in the number of subscribers, there being no less than, 1,824 on the 31st March, as against 1,415 on the same date last year, a strong proof that the action of the Board in reducing the subscription is highly appreciated by the citizens.

*New Chemical Laboratory.*—During the past year a commencement has been made with the erection of the new chemical laboratory. Tenders were invited in December, and the tender of Messrs. Greig and Sons, amounting to £8,168, was accepted. Operations were commenced at the beginning of the year, and satisfactory progress has been made with the building. The sum of £4,000 has been voted by the Government towards the cost of the building and equipment, of which £1,000 is to be available during the current financial year. The foundation-stone will shortly be laid by the Chairman of the Board, and it is confidently expected that the laboratory will be ready for the reception of students at the opening of the session of 1910.

*Empire Celebration.*—The second annual celebration by the combined institutions under the control of the Board of Governors was held in the College Hall, on the Prince of Wales's Birthday, 3rd June. The gathering was a very representative one, and completely filled the hall. The Chairman of the Board presided, and patriotic addresses were delivered by the Chairman; Mr. J. C. Adams, Chairman of the College Committee; Dr. Chilton, representing the Professorial Board; Mr. T. W. Rowe, representing the Graduates' Association; and Mr. F. B. Redgrave, on behalf of the Students' Association. The function was a distinct success, and, at the conclusion of the addresses, a very fine tableau by pupils of the School of Art, emblematic of the unity of the Empire, was unveiled in the gallery.

#### RECEIPTS AND EXPENDITURE.

The summary of receipts for the year shows a gross total of £50,389. Deducting the credit balance of £15,297, with which the year began, we have a total of gross receipts for the year of £35,092. If we deduct from the £35,092 gross receipts the three sums of £4,567 accrued rents of the Coldstream Reserve, £601 subscriptions for the Boys' High School gymnasium, and £201 subscriptions for the whale-skeleton, the net receipts of the Board's accounts stand at £29,723 for the year, a sum slightly less than the net revenue for the previous year.

The gross expenditure is given as £39,751. From this sum I deduct the following extraordinary items:—

	£
Purchase of sections in College block .. .. .	3,450
Okarito whale-skeleton .. .. .	400
Fixed deposits .. .. .	5,142
	£8,992

We thus arrive at a total net expenditure of £30,759—an increase of £1,147 over last year. The net revenue being £29,723, and the net expenditure £30,759, an apparent deficiency is shown of £1,036. As against this, however, there are the following items of capital expenditure to be taken into account :—

Boys' High School gymnasium	..	..	..	..	..	£	879
Fencing College ground	..	..	..	..	..	..	110
Girls' High School buildings	..	..	..	..	..	..	753
Hydraulic apparatus and buildings	..	..	..	..	..	..	972
Library sinking fund	..	..	..	..	..	..	54
Museum specimens	..	..	..	..	..	..	251
Museum strong-room	..	..	..	..	..	..	114
Whale-skeleton	..	..	..	..	..	..	400
							<hr/>
A total of	..	..	..	..	..	..	3,533
From which deduct deficiency on working accounts	..	..	..	..	..	..	1,036
							<hr/>
And a total profit of	..	..	..	..	..	..	£2,497

for the year is shown. This, I think, must be regarded as satisfactory, indicating the prudence with which the Board's affairs have been administered.

Not only has the long-standing debt due to the Agricultural College been finally wiped off, but the Board has increased its assets in other directions : The Coldstream Reserve rents, amounting to £4,567, have been added to our capital, and that sum will be devoted to the chemical laboratory now in course of erection ; the reserve itself has an area of 1,487 acres, and is producing £195 per year (which is divided equally between the chemistry and physics departments), and the sum stated, capitalized on a 5-per-cent. basis, represents £3,900. Another reserve of 640 acres in the mountains has also been vested in the Board. In addition to these, the purchase of the College block sections for £3,450 has been an event which will mark the year as a most important one in the history of the College.

A comparison of the receipts table will show members that the fees received, including capitation for free places, represent an increase of £400 for the year, but this is very largely made up by the increased capitation received from the Government.

On the other hand, salaries show an increase of £1,365 upon the previous year. The other expenditure is normal, and requires no reference.

The policy which the Board adopted a little over a year ago, of selling its leases by public auction instead of by private tender, so completely justified itself by the increased rents which were obtained, that it has been continued, and a further number of leases which fell in were sold a few weeks ago at Timaru, and resulted in an increased annual revenue of £32 5s. 8d. from 75 acres. I have no doubt that the Board will continue this policy of offering its leases for sale in the open market.

While on this subject, I would like to say that the question has been raised whether the Board should not pay for improvements effected upon its lands during the currency of a lease. The policy hitherto has been that when any tenant desired a valuation on improvements in the nature of buildings, the Board has invariably agreed to such an amount as it considered fair according to the size and value of the property, and, on the same principle as is adopted by the Government in State leases, it has been provided that in the event of the farm changing hands, the new tenant would be required to pay the outgoing tenant the value of the improvements for buildings which had been erected by him during the currency of his lease. I do not think it would be wise that this principle should be extended to cover all improvements, for the reason that the tenant, in taking up a block of land, naturally calculates his rental so that allowance is made for the improvements that he considers necessary to secure the most effective and successful working financially of the property. If, therefore, the Board were to adopt the principle that has been advocated in South Canterbury—namely, that all improvements that have been made by the tenant should, at the expiration of his lease, be paid for at the then value—an entirely new element would be introduced into the transaction, and one which might operate to secure to a tenant a renewal of his lease at his own price, or, at any rate, to limit the competition for the Board's lands. At the same time, I think it would give greater fixity of tenure to the Board's tenants, and possibly encourage more improvements upon the endowments if leases were granted for twenty-one years, which the Board can legally do, instead of for fourteen years, which is the rule at present. During the year 1910 a number of leases of the Board's endowments, mostly belonging to the Boys' High School, will fall in, and I would suggest that the Finance and Estates Committee should, at an early date, take these into consideration, with a view to ascertaining whether a further subdivision would be likely to lead to the more effective working of the property, and to better financial results. It cannot be too often emphasized that subdivision of suitable land is the secret of good farming and increased income. Also, during the year 1911, the Haldon (19,025 acres), Gray's Hills (29,862 acres), and Lake Coleridge (35,594 acres) runs, totalling 84,481 acres, will fall in ; and in anticipation of this, although it may be looking some little distance ahead, careful inquiry should be made whether any of these can be subdivided in order to promote increase of settlement and better financial results.

#### COST OF ADMINISTRATION.

The total cost of administration was as follows : Net revenues, £29,723 ; salaries of official staff, £916—an average of slightly over 3 per cent., or about 7½d. in the pound. For rents of reserves, £15,076 was received, and the cost of inspection was £302, a percentage of 2 per cent., or about 4½d. in the pound. These rates of official cost and inspection are worthy of careful consideration, at a time when retrenchment is " in the air " regarding the public service.

I shall now refer to the various institutions controlled by the Board.

## THE COLLEGE.

The receipts from reserves rose from £8,041 to £8,127, and the students' fees also increased by £122. On the other hand, salaries rose from £7,833 to £8,779, an increase of £946 for the year. The salaries for 1909 amount to £8,426. Members will notice that the account, which began with a debit of £1,345, closes with a debit of £6,497, an increase of £5,152. This amount, however, is made up of £3,450 for the purchase of town sections within the College block, and £2,000 transferred to the General Investment Account for the purchase of the Hereford Street sections in order to comply with the requirements of the Audit Department.

It will thus be seen that, adding these two sums together, the College account was really worked at an actual profit on the year of £298, which, considering the increase of salaries, and some expenses of a non-recurrent character, must be regarded as very satisfactory.

*The College's Work.*

The number of students who have succeeded in passing the various examinations for degrees given by the University of New Zealand are as follows:—

M.A., 179.  
 B.A., 276 (some of whom are still eligible to compete for the M.A. degree).  
 LL.D., 2.  
 LL.B., 19.  
 M.Sc., 8.  
 B.Sc., 16.  
 B. Engineering, 36.  
 Mus. Bac., 3.  
 Two art graduates have also obtained the degree of LL.D.  
 Three that of D.Sc.  
 One that of Litt. D.  
 One that of LL.M.  
 Twenty-four that of LL.B.  
 Twenty-five that of B.Sc.  
 Four that of M.Sc.  
 One that of B. Engineering.

Three science graduates have also obtained the degree of B. Engineering.

Since the foundation of the University of New Zealand 166 graduates in arts and science have been awarded first-class honours; 63 of these belong to Canterbury College. Of the 13 double first-class honours awarded by the University, 10 were gained by students from this College.

Of the 231 Senior and Third-year, and John Tinline Scholarships, awarded by the University of New Zealand during the last thirty-two years (the period during which the present scholarship regulations have been in force), 104 have been awarded to students of Canterbury College.

Of the 28 Bowen Prizes which have been awarded by the University for an essay on a subject connected with English history, and open to all undergraduates of the University of New Zealand, 19 have been gained by students of this College, whilst the only 4 mentioned as *proxime accessit* have also been of this College.

In view of these facts, I cannot but express my surprise and regret that during the six years the Cecil Rhodes Scholarship has been in existence no representative of this College has been selected.

The following statement shows the increase of the fees received by the College during the last six years:—

									£
1903	..	..	..	..	..	..	..	..	1,636
1904	..	..	..	..	..	..	..	..	1,797
1905	..	..	..	..	..	..	..	..	1,821
1906	..	..	..	..	..	..	..	..	2,205
1907	..	..	..	..	..	..	..	..	2,532
1908	..	..	..	..	..	..	..	..	2,634

Such a growth in revenue from this source is very gratifying.

I am pleased to see that the number of enrolments of students attending the various College lectures shows a satisfactory increase over the previous year. During the year 1908 the number of enrolments for lectures was 1,458; this year, 1909, it was 1,628, a very satisfactory increase.

The following table shows the growth of the College in the number of students:—

				Matric.	Non-matric.	Total
1898	..	..	..	131	56	187
1899	..	..	..	117	65	182
1900	..	..	..	125	93	218
1901	..	..	..	148	72	220
1902	..	..	..	151	74	225
1903	..	..	..	167	82	249
1904	..	..	..	210	67	277
1905	..	..	..	200	77	277
1906	..	..	..	198	106	304
1907	..	..	..	253	89	342
1908	..	..	..	293	88	381

It will thus be seen that the College is increasingly fulfilling the hopes of its founders in becoming a centre of light and learning.

Another test may be applied—namely, the total enrolments of students attending the first-term lectures, which has been tabulated for four years, and shows the following results :—

1906	..	..	..	..	..	..	..	..	1,188
1907	..	..	..	..	..	..	..	..	1,365
1908	..	..	..	..	..	..	..	..	1,458
1909	..	..	..	..	..	..	..	..	1,623

Here, again, most gratifying progress is shown.

But this large increase (which chiefly arises from the classics, English, mathematics, modern languages, and mental science departments, although several other departments show gratifying increases also) carries with it enlarged responsibilities for the Board of Governors. In brief, the classes have outgrown the accommodation provided, and one of the urgent necessities is to obtain larger lecture-rooms, and more of them.

The new chemical laboratory is now in course of erection, and it is to be hoped it will be in working-order for the first term of 1910. I am of opinion that the Board will find itself compelled to utilize the present chemical laboratory for the purpose of providing increased accommodation after it has been vacated by the Chemistry Professor and his staff. The building is at present an eyesore, and was erected a great many years ago as a temporary structure ; but the lecture-room which it contains is one of the most commodious in the whole College, and I cannot see how we can avoid using that for temporary requirements, until funds are available for the increase of permanent lecture-rooms in the College.

Members of the Board are aware that I am one of those who consider that the time has come when a physical chair should be established, and a Professor appointed to take charge of it. During my recent visit to Australia I came into contact with several gentlemen belonging to both the Sydney and Melbourne Universities competent to express opinions on the subject, and they confirmed the opinion which has been expressed at this table by several members, that no modern University can be regarded as fully equipped which does not provide for a chair of physics. The relation which exists at present between the School of Engineering and the physics department can only be of a temporary character, and I am of opinion that the Board should take this question of the establishment of a chair of physics into its consideration at an early date, with the view of appointing a Professor to the chair, who should be requested to begin his duties next year, and himself report to the Board as to the construction and equipment of the laboratory that would be required for his purposes.

A further need of the College is the erection of a proper library. At present there is only a small collection of books, and they are stored in a room which does not contain a single table or chair for a reader. Such a state of things needs no comment. The College library should be the finest collection of scientific literature in the province, and up to date. It should also have abundant accommodation for students and teachers, and I shall never be satisfied until this want is supplied.

I have now mentioned three necessities—increased lecture accommodation, a physical laboratory, and a College library—the supply of which are necessary if the College is to attain a complete measure of usefulness. The cost would be at least £20,000, made up thus :—

Increased accommodation	..	..	..	..	..	..	..	..	10,000
Physical laboratory and equipment	..	..	..	..	..	..	..	..	6,000
College library	..	..	..	..	..	..	..	..	4,000
									20,000

The question is, where can we look for the money ? It is impossible to provide any reasonable portion of this large sum from the College Maintenance Account. Every penny of that is required for the working of the institution. Three courses remain open to us : (1) To sell some of our reserves or use some of our capital funds for the purpose ; or (2) to borrow on the securities we possess. I cannot recommend the Board to adopt either of these courses. The first would imply the parting with part of the splendid heritage we possess, and the lessening for all time of our revenues ; the second would result in the work of the College being crippled by heavy annual payments for interest, and in money being spent in stone which is required for higher purposes—the work the College was established to carry out. (3.) The third course is to look to the Dominion Government and Parliament for the necessary funds. The development of education has been so great and rapid in the Dominion during the last ten years that the Central Government has won general praise for its policy in that behalf. The University is the apex of the system, and it would be the height of folly to strengthen the primary, the technical, and the secondary systems, and starve the university colleges. Our present necessities are in large part caused by the Government insisting upon candidates for the teaching service taking a University course, which has led to several of the lecture-rooms being overcrowded. Surely no higher purpose could be served by a University College than the training of teachers ; but it is equally clear that this must carry with it some responsibility on the part of the Government to assist us to carry out the work they have laid upon us. The Prime Minister has shown he realizes, in some degree, the duty of the Government in this matter by not only giving us the Coldstream Reserve and its accrued rentals—a strictly legal obligation, which he was the first to realize—but has also promised £4,000 as a subsidy towards the cost of the chemical laboratory. When it is borne in mind that other colleges in this country are entirely sustained by direct annual votes from the Dominion Treasury, whilst Canterbury has established and maintained for thirty-six years its own University College, virtually unaided by the Government, our claim for assistance in the hour of our necessity becomes unanswerable. I therefore urge that the Prime Minister should be asked to meet the Board and Canterbury members of Parliament, and that a request should be preferred for the sum named, to be spread over five years, so that the three important works I have named may be undertaken without delay. The vast importance of educational work, both for the present and future generations, as compared with some of the purposes for which money has been so freely spent in the past, is sufficient justification for the request I have made.

A table is attached showing the number of students attending the lectures for the first terms of the years 1905, 1906, 1907, 1908, and 1909 :—

Subject.	Number of Subjects.				
	1905.	1906.	1907.	1908.	1909.
Classics .. .. .	118	141	187	212	236
English literature and language .. .. .	279	265	329	327	421
Mathematics .. .. .	120	124	119	114	153
Chemistry .. .. .	86	84	105	86	72
Sound, light, and heat .. .. .	37	22	43	23	28
Biology .. .. .	71	88	105	129	112
French .. .. .	109	127	138	125	143
German .. .. .	21	18	23	30	39
Jurisprudence and law .. .. .	70	68	54	49	52
History and economics .. .. .	46	113	155	126	142
Accounting .. .. .	..	..	6	19	10
Mental science .. .. .	28	30	33	68	65
Geology .. .. .	31	14	16	28	23
Education .. .. .	..	42	53	47	37
Music .. .. .	50	53	69	75	90
Grand total .. .. .	1,066	1,189	1,435	1,458	1,623

*Number of Students.*

The following table shows the number of matriculated and non-matriculated students who attended lectures each year since 1900 :—

Year.	Males.		Females.		Total.
	Matriculated.	Non-matriculated.	Matriculated.	Non-matriculated.	
1900 .. .. .	75	18	50	75	218
1901 .. .. .	95	18	53	54	220
1902 .. .. .	108	14	43	60	225
1903 .. .. .	119	26	48	56	249
1904 .. .. .	144	20	66	47	277
1905 .. .. .	135	26	65	51	277
1906 .. .. .	129	35	69	71	304
1907 .. .. .	153	44	100	45	342
1908 .. .. .	156	49	137	39	381

The following table shows the number of students of this College who passed the various degree examinations of the New Zealand University of 1906, 1907, and 1908 :—

Degree.	1906.	1907.	1908.
Master of Arts, with honours .. .. .	5	7	7
Master of Arts .. .. .	3	1	4
Bachelor of Arts .. .. .	13	16	21
Bachelor of Arts, first section .. .. .	23	26	25
Master of Science .. .. .	2	1	2
Bachelor of Science .. .. .	2	2	2
Bachelor of Laws .. .. .	4	6	1
Bachelor of Engineering (electrical) .. .. .	3	3	4
Bachelor of Engineering (mechanical) .. .. .	..	2	3
	55	64	69
Senior University Scholarships .. .. .	1	5	2

The College Account, being the common-pot of the finances, has been charged with the cost of the properties within the College block which within the last year were purchased by the Board. The Board now owns the entire block with the exception of the property belonging to Professor Chilton.

The desirability and even necessity of the purchase of these properties was evident, and it is highly satisfactory to know that there is no chance of the appearances of the College buildings being spoilt by unsightly erections in the vicinity. The buildings which are now up on the purchased lands cannot remain much longer, nor can the rents that are received from them be regarded as a permanent source of revenue. On the other hand, I think it will be unfortunate if the purchase of these sections, which involves interest to the amount of over £120 per year, should be permitted to detract from the usefulness to the College proper, by proving an incubus upon the institution.

The chief point of satisfaction is that the Board has been able to purchase the fee-simple of the properties without requiring to borrow for the purpose. Provision can now be made for the extension of the College within the boundaries of the block for a great many years to come.

#### MUSIC LECTURES.

Members will see by the return that the attendance at the music lectures for 1909 has increased from 75 to 90, the increase being almost entirely made by the teachers' certificate classes, C and D, which have risen from 30 to 47. I think the time has come when the Board should consider whether a larger scheme should not be gone into in connection with the musical portion of the College's work. As I have stated on a previous occasion, whilst we are doing much for the arts and crafts in connection with the School of Art, we are doing comparatively little for music, which is an art that touches the masses far more closely than painting and sculpture and other work which is being done so well at the School of Art under the control of this Board. I think, therefore, that while the classes are continued as they are at present, dealing merely with the theory of music, and without any practical work attaching to them, we cannot expect this portion of our work to be successful. Dr. Bradshaw fully realizes this, and is most anxious that the Board should assist him in making the music portion of our work broader and wider in its scope. I see no reason why the Board should not establish a small school of music, with the view to undertaking practical as well as theoretical work. One of the buildings recently purchased by the Board in Montreal Street would possibly lend itself to the purpose for a beginning. The expense would not need to be large at the start, and I believe the experiment would very soon justify itself.

As members are aware, the Board has now abandoned its connection with the Associated Board of Music, which sends examiners from Great Britain, and draws large sums of money from the people of New Zealand for merely examining students in music. If the proposal I am suggesting were given effect to, it might be possible for the College to conduct not only a school of music, but also to grant associateships and give diplomas to those who presented themselves for examination throughout the district over which the Board exercises control, as is done both in the School of Engineering and School of Art. In Dr. Bradshaw the College is fortunate in possessing a gentleman whose position in the musical world would amply justify his appointment to examine for the diplomas which I am suggesting. I believe, in time, these diplomas would carry with them even more weight than those now granted by the Associated Board; at any rate, there is no reason why New Zealand should depend entirely for its musical tests upon gentlemen who periodically visit the country from Great Britain. The mere fact of this being the case is an admission of weakness which we should not any longer admit. The proposal to establish a school of music, even in a small way, is one that requires careful examination; but the success which has attended the School of Art amply justifies the Board in embarking upon the experiment which I now venture to suggest. Up to the present, although the University has set up a degree in music, only six students have taken the degree of Bachelor of Music, three at Canterbury College, two at Auckland, and one at Wellington, and I think the reason is not far to seek—namely, that none of the Universities have thoroughly connected themselves with the culture of the art of music. This is a subject upon which I could enlarge with considerable enthusiasm, but it is not necessary that I should do so. Later in the year I shall submit detailed proposals of the scheme for establishing a school of music under the auspices of this College, and I have no doubt that this will receive careful consideration at the hands of members of the Board.

#### BOYS' HIGH SCHOOL.

The accounts of the Boys' High School continue very buoyant, as is to be expected, considering the splendid endowments of that institution. The reserves last year brought in £3,894, as compared with £3,578 the previous year. The total revenue of the institution last year was £5,429, and, deducting £1,052 for balance, gymnasium, and non-recurrent expenditure, the cost of the institution was £4,377. Of this sum, £3,880 was absorbed by salaries. The net attendance for 1908 was 213, which represents salary for teaching at the rate of £18 5s. per pupil for the year. If the preparatory class is eliminated, and the salary of the teacher deducted from the total, the position becomes even worse. I feel that I should not be doing my duty to the people of Canterbury if I did not point out the enormous cost of salaries in this institution as compared with others in the Dominion. The public returns show that in 1907 the cost of teaching 349 pupils at the Auckland Boys' Grammar School was £11 1s. 3d. per head; 288 pupils at the Wellington Boys' College, £10 16s. per head; and 277 pupils at the Otago Boys' High School, £10 13s. 6d. per head. So far as the cost is concerned, these figures compare very markedly with the institution controlled by this Board, and I am of opinion that, with a sum of nearly £4,500 per annum to administer, the benefits of secondary education should be more widely diffused than they are at the present time at the Boys' High School. I think it is incumbent upon the Board to discuss with the headmaster how far, and in what ways, it is possible to provide for a greater measure of benefit to the people of Christchurch from the endowments of the school than is now being achieved.

One direction in which improvement might be desirable would be by handing over to the school the adjoining property purchased from the Acland Estate, and upon it erecting a hostel for the accom-

modation of boys from a distance. I have asked the headmaster to supply me with a report on this matter, which is available for the College Committee. If such a scheme were entered upon, it is probable that boys would be sent from out-districts of Canterbury, and also from the West Coast when the Midland Railway is completed. The want of a good boarding establishment under the control of this Board no doubt handicaps the school in competition with similar institutions.

In order to give the Board a complete grasp of the financial working of the free-place system (which began in 1905) I append a table which shows, taking the total fees for the year and dividing the amount by the number of pupils at the end of the year, the average fee paid has fallen from £8 10s. 10d. in 1903 to £4 15s. 4d. in 1908. The table is as follows:—

	Roll Number at End of Year.	Fees.	Government Payments for Capitation and Technical Classes.	Total.	Average Fee paid.
		£	£	£	£ s. d.
1903 .. .. .	229	1,956	51	2,007	8 10 10
1904 .. .. .	219	1,684	34	1,713	7 13 10
1905 .. .. .	190	1,363	23	1,386	7 3 5
1906 .. .. .	209	1,204	243	1,447	5 15 3
1907 .. .. .	228	1,091	423	1,514	4 15 8
1908 .. .. .	203	968	540	1,508	4 15 4

End of 1908—Junior free places, 51; Senior free places, 44: total, 95.

It will be seen that 95 out of the total school roll of 203 were free-place pupils.

#### GIRLS' HIGH SCHOOL.

The Girls' High School opened the year with a credit balance of £138, and closed with a debit balance of £572, a total debit on the working of the account of £710, but as during the year the balance of the school additions was charged to the account, amounting to £753, it will be seen that the actual profit on the working of the institution for the year was £43. I cannot too highly commend the economy with which this institution is administered by the lady principal. The capitation for free places in this institution is steadily rising, having gone up during the year £71. The Board has incurred a large obligation in the purchase of the adjoining section, in providing increased accommodation for the Girls' High School, but I believe the new scheme of payment by the Government, which came into force on the 1st January of this year, will largely increase the revenue of the School under the free-place system, and have the effect of paying off the difference on the recent additions to the buildings, as well as of clearing within three or four years the cost of the adjoining property, which has just been purchased. We shall not, however, receive the benefit of this enlarged income until next year.

I append a similar statement of the working of the free-place system to that just given regarding the Boys' High School. It will be seen that the average fee at this school has fallen from £11 16s. in 1903 to £1 12s. 2d. in 1908. In fact, out of the total of 202 pupils at the end of the year there were only 29 whose parents were paying fees.

The total cost of the School was £2,549, of which salaries absorbed £2,082. The net attendance for the year was 207, and the salaries thus cost £10 1s. 1d. per pupil for the year.

	Roll Number at End of Year.	Fees.	Government Payments for Capitation and Technical Classes.	Total.	Average Fee paid.
		£	£	£	£ s. d.
1903 .. .. .	130	1,534	35	1,569	11 16 0
1904* .. .. .	145	1,170	344	1,514	8 1 4
1905 .. .. .	166	726	842	1,568	4 7 5
1906 .. .. .	189	398	1,163	1,561	2 2 1
1907 .. .. .	217	413	1,690	2,103	1 18 0
1908 .. .. .	202	325	1,716	2,041	1 12 2

\* Free-place system introduced.

End of 1908—Junior free places, 121; senior free places, 46: total, 167.

It will be seen that 167 out of the total school roll of 202 were free-place pupils.

#### SCHOOL OF ENGINEERING.

The School of Engineering is a national concern, and it is one of which I think this Board may be justly proud. During my recent visit to Australia I had the pleasure of being shown over the schools of engineering in both Melbourne and Sydney. Without indulging in comparisons, which are always



invidious, I came back impressed with the idea that while the institution in Sydney, which has been most richly endowed by private beneficence, is far ahead of ours in magnitude, yet, as regards the equipment and general work that is being done in the institution over which Professor Scott so ably presides, this Board has reason to be highly satisfied with what has been accomplished. The account began with a credit of £1,660, which increased to £2,084 at the end of the year, but the whole of this will be absorbed during the year by plant and equipment which has been ordered for the new Hydraulic Laboratory, which it is expected will be in working-order for the first term of next year.

The enrolments of students attending the lectures at the School of Engineering for the first terms are as follows :—

1907	..	..	..	..	..	..	..	571
1908	..	..	..	..	..	..	..	507
1909	..	..	..	..	..	..	..	489

The following table shows the actual number of matriculated and non-matriculated students attending the school for the years 1905, 1906, 1907, and 1908 :—

Year.	Matriculated.	Non-matriculated.	Total.
1905 .. .. .	53—8 art students ..	124	177
1906 .. .. .	44—8 .. ..	116	160
1907 .. .. .	52—20 .. ..	144	196
1908 .. .. .	39—10 .. ..	134	173

#### PUBLIC LIBRARY.

This account, which is one of the most difficult to work of those under the control of the Board, closes the year with substantially the same debit balance as at the end of 1907. The difficulty of maintaining so large and expensive a concern with the comparatively small funds at the disposal of the Board is increasingly felt. The efforts made to induce the City Council to assist this worthy institution did not meet with the success they deserved. By utilizing a portion of the Gammack Trust money for the circulating department, the general position of the account has been considerably improved, but I do not think the library can possibly be expanded as it ought to be with the funds at our disposal, bearing in mind the responsibility the Board has to other institutions, which have a clearer and more direct claim upon us. The policy which the Board has embarked on, of giving the public the use of the circulating library and subscribers' reading-room at 5s. per year (which, I may remark, is the sum charged for use of the so-called free municipal library at Wellington, an institution which I believe costs the City Council over £3,000 per year) is not likely to increase the revenue. On the other hand, the benefit of the reduction is fully appreciated by the public, as shown by the large increase of subscribers which has taken place during the first four months of the present year. I trust the time may come when the City Council will realize its duty and responsibility both to the public library and the Museum, by assisting both of them, as they are certainly leading attractions to this city.

#### MUSEUM.

The Museum Account, which opened with a debit balance of £97, closed with a debit of £329. But this sum is more than accounted for by the facts that during the year specimens of the value of £251 were purchased, a strong-room erected which cost £114, and £200 expended from the Board's funds for the purchase of the Okarito whale-skeleton. The policy which was initiated during the year of allowing the Curator, Mr. E. R. Waite, to make a tour of the North Island with a view to purchasing Maori specimens is the right one. Our Museum should be strong in its collection of things of historical and antique value relating to the fast-disappearing race who occupied this Island before the Europeans. I trust that this policy will be steadily pursued, and that the Canterbury Museum will take a high place in the direction indicated.

It would be an excellent idea if the Board were to establish in connection with the Museum a section relating to the early colonists. In the course of another generation all of those who took part in the settlement of Canterbury will have passed away. Many records, pictures, photographs, &c., of the city in its early days, and of those who established it, should be at the present time procurable, and it would, in my opinion, be a very gracious and wise policy if the Board were to establish a section at the Museum where such things could be kept on exhibition, so that those who came after us would be able, so far as possible, to picture to themselves exactly what Christchurch and the province generally looked like in the early days of colonization.

While in Sydney I was shown over the great Mitchell library, now approaching completion, and was greatly interested in seeing the manuscripts that have been preserved. There are to be seen documents from whatever source obtainable, collected, bound, and indexed, referring to the earliest stages of the history of all the Australasian colonies, New Zealand included. If a collection were obtained of the letters received by men like Sir George Grey, Sir Frederick Whitaker, Hon. William Rolleston, Sir John Hall, Sir Harry Atkinson, Right Hon. Mr. Seddon, and others, they would be of enormous interest to the people, and would provide an unfailing source of inspiration to the future

historians of New Zealand. I have no doubt, if efforts were made to obtain these, the manuscript-collection of the Museum would be one of the most interesting in that institution.

#### SCHOOL OF ART.

The School of Art continues the prosperous career which was inaugurated on the appointment of the present Director, Mr. Herdman Smith. The institution began with a credit balance of £312, and closed with a credit balance of £618, notwithstanding the fact that some reasonable increases were granted in salaries, amounting to about £130, and also considerable increases given to the different accounts that would assist in the better working of the institution.

I trust that the visit of the Director to Europe will result in still further efficiency.

#### PRIVATE BENEFICENCE.

I would again draw the attention of colonists to the wisdom and patriotism of bequeathing a portion of their wealth to Canterbury College or one or other of its allied institutions. In Australia many large benefactions have been left to the universities, art galleries, museums, and libraries. In this country, unfortunately, such benefactions are almost unknown. Yet no better or more enduring objects can be suggested than those which are of an educational character. Some very large fortunes have during recent years been left by residents of Canterbury, who built up their wealth in this province, but none of that wealth has been turned to educational purposes. Yet the education of a people is the ultimate test of everything that is noble, worthy, and free. Let me add that even small gifts would be appreciated by the Board. I heard some year or two ago of a resident of South Canterbury who was in a difficulty as to what purpose he could bequeath his estate to, and finally gave it to the Road Board of the district in which his property was situated.

#### INVESTMENT OF CAPITAL.

The Board is in possession of considerable sums of money in the shape of capital belonging to the various accounts, and I have had a statement prepared as to these capital accounts, and what they are represented by. The members will see that the total of the capital accounts is £35,678, represented by the various amounts that are shown in the table which is annexed. The whole of the capital is intact, excepting that one portion of it which is shown as having been expended in the payment of the Bank of New South Wales overdraft caused by the expenditure of £10,834 on College and Boys' High School buildings, and for this there are substantial assets. So far as the High School is concerned, there is no reason why the money owing by that institution should not be repaid at the rate of at least £500 per year until their debt on the buildings account is extinguished, and the capital replaced. The following is the table:—

#### *Capital Accounts or Accrued Rents at 31st March, 1909.*

	£	s.	d.
Girls' High School Capital Account .. .. .	5,002	8	1
Public Library Capital Account .. .. .	1,666	8	6
Public Library Sinking Fund Account.. .. .	229	6	4
Medical School Reserves Account .. .. .	4,361	15	9
Museum, Library, and School of Technical Science Capital Account	18,941	8	4
Museum Guide Book Sinking Fund .. .. .	20	0	0
Astronomical Observatory Account .. .. .	411	0	7
Emily S. Foster Memorial Fund .. .. .	65	2	8
Helen Macmillan Brown Memorial Fund .. .. .	98	7	6
Thomas Miller Prize Fund .. .. .	102	16	11
Joseph Haydon Prize .. .. .	212	7	7
Accrued rents of Coldstream Reserve .. .. .	4,567	13	10
	<hr/>		
	£35,678	16	1
	<hr/>		
Represented by—			
Mortgages of freeholds .. .. .	8,700	0	0
Tramway debentures .. .. .	6,050	0	0
City Council debentures .. .. .	400	0	0
Fixed deposit .. .. .	3,142	13	10
Drawing Account, credit .. .. .	1,830	19	0
Purchase of freehold properties in city .. .. .	5,450	0	0
Debt of £10,834 paid off on account of College and Boys' High School buildings .. .. .	10,834	0	0
	<hr/>		
	£36,407	12	10
	<hr/>		

#### BANKING OPERATIONS.

The long-standing No. 2 Overdraft Account of £10,834 at the Bank of New South Wales has now been wiped out. This represented £5,000 owing by the Boys' High School for buildings and £5,834 owing for College buildings extensions. These amounts have now been transferred as debits to the

respective accounts. I anticipate the Boys' High School will be able to repay its debit, but the claims on the College Account are so pressing that I cannot see any prospect of its share of the above liability for buildings being repaid from the Maintenance Account.

#### SUMMARY OF PROPOSALS.

1. That, in order to give greater fixity of tenure and encourage tenants to improve their holdings, the Board's endowments be let for twenty-one years instead of fourteen.

2. That the Finance and Estates Committee inquire into the desirability of subdividing the farm lands and pastoral runs which will come up for re-lease in 1910 and 1911.

3. That a chair of physics be established, and the Professor appointed report on the building and equipment necessary for the laboratory.

4. That the Government be asked to provide a sum of £20,000 (to be spread over five years) for the purposes of providing increased lecture-rooms, a physical laboratory, and a College library, and that if they accede to the request, the works be undertaken at once.

5. That the Board consider how far and in what ways it is possible to provide for a greater measure of benefit to the people of Christchurch from the endowments of the Boys' High School.

6. That a hostel be established for the Boys' High School.

7. That a section relating to the early colonists be established at the Museum, also a manuscript collection relating to notable men in the history of the Dominion.

8. That a school of music be established which shall have power, under this Board, of granting diplomas in music.

In conclusion I have to thank the Board for the sympathetic way in which it has received the proposals which I have made from time to time in the direction of reorganizing and strengthening the finances of the institutions under its control. The work that is transacted by this Board is far larger than that laid upon any other educational authority in the Dominion, and it may be a matter of satisfaction to the members to know that the finances of the College are sound, that during the last few years several thousands of pounds of debts have been extinguished, that we have no overdraft, that our capital is intact, and that we can look forward to the future with confidence and hope.

#### SUMMARY OF RECEIPTS AND EXPENDITURE FOR YEARS 1907 AND 1908.

	<i>Receipts.</i>			1907.			1908.		
	£	s.	d.	£	s.	d.	£	s.	d.
Balance at 1st January .. .. .	12,609	5	5	15,297	7	1			
Rents from reserves .. .. .	14,445	3	0	19,643	10	9*			
Interest on mortgages and debentures .. .. .	1,036	3	10	617	1	1			
House-rent .. .. .	32	6	8	53	17	6			
Fees (including capitation for free places) .. .. .	7,870	7	4	8,271	17	4			
Government grants and subsidies (exclusive of capitation for free places) .. .. .	7,740	16	6	4,448	11	1†			
Public library subscriptions, fines, &c. .. .. .	1,006	17	5	957	4	10			
Voluntary contribution—Boys' High School gymnasium .. .. .	..	..	..	601	8	6			
Voluntary contributions—Whale-skeleton .. .. .	..	..	..	201	10	6			
Revenue from bequests and donation .. .. .	561	17	7	212	10	0			
Miscellaneous .. .. .	357	2	4	84	13	7			
Repayment of loans .. .. .	8,450	0	0	..	..	..			
	<u>£54,110</u>	<u>0</u>	<u>1</u>	<u>£50,389</u>	<u>12</u>	<u>3</u>			

\* Includes £4,567 13s. 10d. accumulated rents of Coldstream Reserve.

† Includes £601 8s. 6d. pound-for-pound subsidy on contributions Boys' High School Gymnasium.

	<i>Expenditure.</i>			1907.			1908.		
	£	s.	d.	£	s.	d.	£	s.	d.
Buildings (including repairs) .. .. .	3,620	19	6	3,023	14	10			
Apparatus, plant, material, and equipment (including fittings) .. .. .	1,629	16	9	2,762	9	10			
Salaries (exclusive of office staff) .. .. .	18,160	9	4	19,525	2	2			
Salaries of office staff .. .. .	1,104	1	8	1,216	14	11			
Inspection of reserves .. .. .	340	0	11	302	0	3			
Maintenance and improvement of reserves .. .. .	237	8	9	168	11	1			
Advertising, printing, and stationery .. .. .	694	9	8	625	9	5			
Fuel and lighting .. .. .	612	16	0	653	16	7			
Rates and insurance .. .. .	247	3	0	308	12	5			
Exhibitions and scholarships .. .. .	370	0	0	396	13	4			
Books, binding, newspapers, &c., at public library .. .. .	536	16	10	544	9	9			
Interest .. .. .	329	5	10	180	0	0			
Part payment Supreme Court award .. .. .	3,500	0	0	..	..	..			
Students' club .. .. .	177	6	11	19	3	5			
Purchase of tramway debentures .. .. .	5,700	0	0	..	..	..			
Purchase of town sections in College block .. .. .	..	..	..	3,450	0	0			
Purchase of Okarito whale-skeleton .. .. .	..	..	..	400	0	0			
Fixed deposits .. .. .	..	..	..	5,142	13	10			
Miscellaneous .. .. .	1,551	17	10	1,031	10	8			
Balance at 31st December .. .. .	15,297	7	1	10,638	9	9			
	<u>£54,110</u>	<u>0</u>	<u>1</u>	<u>£50,389</u>	<u>12</u>	<u>3</u>			

Government Grants and Subsidies for the Years 1906, 1907, and 1908 (including Capitation for Free-place Pupils).

	Grant for Technical Instruction.	Grant for Material.	Grant for Apparatus and Fittings.	Capitation for Free-place Pupils.	Specialisation in Engineering.	Grant for Buildings.	Parliamentary Grant.	Total.
1906.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
School of Engineering	341 12 0	60 16 0	192 1 3	..	2,000 0 0	..	..	2,594 9 3
School of Art	556 18 6	7 4 8	36 9 6	..	..	..	..	2,600 12 8
Boys' High School	15 15 0	..	..	228 10 2	..	..	..	244 5 0
Girls' High School	44 13 1	..	..	1,119 5 0	..	..	..	1,163 18 1
Public Library	..	..	..	..	..	..	16 17 3	16 17 3
Total	958 18 7	68 0 8	228 10 9	1,347 15 0	2,000 0 0	..	16 17 3	4,620 2 3
1907.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
School of Engineering	302 3 6	54 0 0	232 15 0	..	2,000 0 0	928 5 0	..	3,517 3 6
School of Art	997 2 9	41 16 1	21 10 3	108 18 0	..	..	..	1,169 7 1
Boys' High School	13 15 0	..	61 15 4	410 6 8	..	..	..	485 17 0
Girls' High School	45 17 2	..	..	1,645 16 8	..	3,000 0 0	..	4,691 13 10
College	24 15 3	..	..	..	..	..	..	24 15 3
Public Library	..	..	..	..	..	..	17 1 2	17 1 2
Total	1,383 13 8	95 16 1	316 0 7	2,165 1 4	2,000 0 0	3,928 5 0	17 1 2	9,905 17 10
1908.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
School of Engineering	265 1 3	33 0 0	236 0 0	..	2,000 0 0	59 10 0	..	2,593 11 3
School of Art	1,034 11 6	44 18 6	37 11 7	189 6 1	..	..	..	1,306 7 8
Boys' High School	43 16 5	..	..	497 16 8	..	601 8 6	..	1,143 1 7
Girls' High School	50 7 1	..	..	1,716 13 4	..	..	..	1,767 0 5
College	25 0 9	..	..	..	..	..	..	25 0 9
Public Library	..	..	..	..	..	..	17 5 6	17 5 6
Total	1,418 17 0	77 18 6	273 11 7	2,403 16 1	2,000 0 0	660 18 6	17 5 6	6,852 7 2

Comparative Statement of Pupils attending High Schools.

	1907.			1908.		
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
<i>Boys' High School.</i>						
Paying pupils (exclusive of preparatory class)	106	110	109	98	94	86
Junior free places	42	52	52	51	53	51
Senior free places	42	40	41	49	48	44
Preparatory class (all paying pupils)	17	23	25	21	23	22
	207	225	227	219	218	203
<i>Girls' High School.</i>						
Paying pupils (exclusive of preparatory class)	28	34	39	30	27	23
Junior free places	142	144	142	127	127	121
Senior free places	38	35	33	47	46	46
School free places	2	3	4	4	5	6
Preparatory class (all paying pupils)	..	..	..	..	6	6
	210	216	218	208	211	202

Statement of Area, Letting-value, and Capital Value of Reserves belonging to each Account.

(Capital values computed on a 5-per-cent. basis.)

	Acreage.	Annual Rent, 1908.	Annual Rent at 1st May, 1909.	Capital Value.
		£ s. d.	£ s. d.	£
College—				
Agricultural reserves	8,085 3 36	5,511 4 0	5,511 4 0	110,224
Town reserves	9 0 20	448 10 0	448 10 0	8,970
Pastoral runs (superior education)	99,294 0 0	2,213 5 0	2,213 5 0	44,265
Coldstream Reserve (physics and chemistry)	1,487 1 10	195 0 0	195 0 0	3,900
Total	108,876 1 26	8,367 19 0	8,367 19 0	167,359
Girls' High School	2,578 3 10	288 7 2	288 7 2	5,767
Boys' High School	8,939 0 32	3,933 15 2	3,966 0 10	79,321
Medical School	5,000 0 0	436 10 0	436 10 0	8,730
Museum, Library, and School of Technical Science	93,787 0 0	2,100 0 0	2,100 0 0	42,000
Endowment				
Total	219,181 1 28	£15,126 11 4	£15,158 17 0	£303,177

Comparative Statement showing the Number of Students attending the Various Lectures for the First Term of 1908 and of 1909.

	As at 22nd April, 1908.	As at 22nd April, 1909.		As at 22nd April, 1908.	As at 22nd April, 1909.
<b>CLASSICS.</b>			<b>FRENCH—continued.</b>		
Pass Latin (translation) .. .. .	97	109	<i>Honours Lectures.</i>		
Pass Latin (composition) .. .. .	70	81	French (composition) .. .. .	13	15
Greek (translation) .. .. .	5	6	French (authors) .. .. .	0	3
Greek (composition) .. .. .	5	6	French (old French) .. .. .	4	3
Honours Latin .. .. .	10	9	French (philology) .. .. .	3	7
Pass Latin (teachers' class) .. .. .	25	25	French (literature) .. .. .	2	5
Totals .. .. .	212	236	Totals .. .. .	125	143
<b>ENGLISH LITERATURE AND LANGUAGE.</b>			<b>GERMAN.</b>		
<i>Pass Lectures.</i>			German (books) .. .. .	13	10
Anglo-Saxon and Middle English .. .. .	63	43	German (philology and composition) .. .. .	7	9
Literature and set books .. .. .	113	144	German (commerce course) .. .. .	7	3
Essay Class .. .. .	67	92	German (elementary) .. .. .	0	7
Philology .. .. .	55	83	Honours German (philology) .. .. .	1	4
Prosody .. .. .	0	44	Honours German (literature) .. .. .	2	6
<i>Honours Lectures.</i>			Totals .. .. .	30	39
Anglo-Saxon .. .. .	5	4	<b>JURISPRUDENCE AND LAW.</b>		
Middle English .. .. .	4	0	Pass jurisprudence .. .. .	14	10
Philology .. .. .	6	3	Honours jurisprudence .. .. .	2	2
Literature and set books .. .. .	11	5	Law (real property) .. .. .	12	16
Anglo-Saxon (M.A.) .. .. .	3	3	Law (Roman law) .. .. .	4	3
Totals .. .. .	327	421	Law (evidence) .. .. .	4	3
<b>MATHEMATICS.</b>			Law (contracts) .. .. .	11	14
Pass pure mathematics (Preliminary) .. .. .	14	31	Law (commercial law) .. .. .	2	4
Pass pure mathematics (Upper Division) .. .. .	65	75	Totals .. .. .	49	52
Pass mechanics and hydrostatics .. .. .	23	23	<b>HISTORY AND ECONOMICS.</b>		
Mathematics (for engineering students), Stage 2 .. .. .	0	0	English history .. .. .	10	9
Mathematics (for engineering students), Stage 3 .. .. .	3	1	Constitutional history .. .. .	22	23
Honours mathematics, Section 1 .. .. .	3	0	History (commerce students) .. .. .	3	3
Honours mathematics, Section 2, and Stage 2 for engineers .. .. .	5	13	History (teachers' class) .. .. .	3	5
Honours mathematics, Section 3 .. .. .	1	6	Honours history .. .. .	5	8
Honours mathematics, Section 4 .. .. .	0	0	Economics (pass) .. .. .	30	36
Honours elementary mechanics and hydrostatics .. .. .	0	4	Economics (elementary) .. .. .	6	5
Totals .. .. .	114	153	Economics (honours) .. .. .	5	4
<b>CHEMISTRY.</b>			Currency and banking .. .. .	22	27
Chemistry (introductory) .. .. .	24	15	Statistical method .. .. .	0	3
Chemistry (pass) .. .. .	7	15	Geography .. .. .	12	9
Chemistry (elementary organic) .. .. .	8	9	Teachers' commercial geography .. .. .	8	10
Chemistry (advanced, Section I) .. .. .	0	0	Totals .. .. .	126	142
Chemistry (advanced, Section II) .. .. .	2	0	<b>ACCOUNTING.</b>		
Practical chemistry (elementary and teachers' pass) .. .. .	6	4	Accounting .. .. .	13	3
Practical chemistry (pass—general course) .. .. .	29	24	Accountancy .. .. .	6	7
Practical chemistry (elementary organic) .. .. .	4	2	Totals .. .. .	19	10
Practical chemistry (advanced) .. .. .	6	3	<b>MENTAL SCIENCE.</b>		
Totals .. .. .	86	72	Pass logic .. .. .	23	18
<b>SOUND, LIGHT, AND HEAT.</b>			Pass psychology and ethics .. .. .	35	29
Sound, light, and heat (pass) .. .. .	10	15	Honours logic, psychology, and ethics .. .. .	4	9
Sound, light, and heat (intermediate) .. .. .	3	1	Honours history of philosophy .. .. .	6	9
Sound, light, and heat (honours) .. .. .	0	2	Totals .. .. .	68	65
Practical sound, light, and heat (pass) .. .. .	10	10	<b>GEOLOGY.</b>		
Practical sound, light, and heat (honours) .. .. .	0	0	Historical and physical geology (second year's course) .. .. .	10	9
Totals .. .. .	23	28	Mineralogy and petrology (first year's course) .. .. .	11	8
<b>BIOLOGY.</b>			Palaontology (first year's course) .. .. .	7	5
Pass general biology .. .. .	41	33	Honours geology .. .. .	0	1
Honours general biology .. .. .	4	0	Totals .. .. .	28	23
Practical general biology .. .. .	42	34	<b>EDUCATION.</b>		
Pass botany .. .. .	10	16	Education .. .. .	47	37
Pass practical botany .. .. .	11	17	<b>MUSIC.</b>		
Honours botany .. .. .	5	2	Rudiments of music (junior—first-year students) .. .. .	2	3
Practical botany (honours and research) .. .. .	3	2	Harmony (intermediate—second-year students) .. .. .	8	4
Pass zoology .. .. .	3	4	Harmony, counterpoint (senior—third-year students) .. .. .	6	6
Pass practical zoology .. .. .	3	4	Rudiments of music, harmony, and counterpoint (evening classes) .. .. .	15	16
Honours zoology .. .. .	0	0	Advanced harmony, counterpoint, &c. .. .. .	2	8
Practical zoology (honours and research) .. .. .	0	0	Form of composition .. .. .	7	6
Dental anatomy .. .. .	7	0	Ear-training and musical dictation .. .. .	5	0
Dental surgery .. .. .	0	0	Teachers' certificate (Classes C and D) .. .. .	30	47
Totals .. .. .	129	112	Totals .. .. .	75	90
<b>FRENCH.</b>			<b>GRAND TOTALS.</b>		
<i>Pass Lectures.</i>			First term, 1908 .. .. .	1,458	
French (composition) .. .. .	19	23	First term, 1909 (22nd April) .. .. .	1,623	
French (authors) .. .. .	23	28			
French (sight translation and grammar) .. .. .	33	35			
French (literature) .. .. .	19	17			
French (commerce course) .. .. .	4	5			
French composition (teachers' class) .. .. .	5	2			

*School of Engineering and Technical Science.—Comparative Statement showing the Number of Students attending the Various Classes for the First Term of 1908 and of 1909.*

	As at 22nd April, 1909.			As at 22nd April, 1909.	
	1908.	1909.		1908.	1909.
Freehand mechanical drawing, Section I ..	36	36	Surveying, advanced (theory) ..	2	5
Freehand mechanical drawing, Section II ..	13	15	Surveying, advanced (field-work) ..	2	6
Freehand mechanical drawing, Section III ..	0	0	Surveying, advanced (plotting) ..	0	4
Elementary descriptive geometry ..	24	33	Building-construction ..	8	4
Descriptive geometry and the setting-out of work ..	9	8	Principles of civil engineering—		
Descriptive geometry, advanced ..	8	3	Section A, borough engineering ..	7	6
Mechanical drawing, Section I ..	29	26	Section B, railway engineering ..		
Mechanical drawing, Section II (mechanical) ..	13	12	Elementary electricity ..	24	19
Mechanical drawing, Section III (mechanical) ..	7	8	Electricity and magnetism (pass) ..	15	20
Mechanical drawing, Section II (electrical) ..	3	0	Electricity and magnetism (honours) ..	5	3
Mechanical drawing, Section III (electrical) ..	0	0	Electrical engineering (elementary, Section I) ..	12	12
Mechanical drawing, advanced ..	14	16	Electrical engineering (elementary, Section II) ..	3	5
Electrical drawing and designing ..	4	2	Electrical engineering (military) ..	0	1
The steam-engine (elementary) ..	43	44	Electrical engineering (intermediate) ..	5	7
The steam-engine (intermediate) ..	6	6	Electrical engineering (advanced) ..	3	3
The steam-engine (advanced) ..	8	7	Electrical engineering (problems class) ..	3	2
Elementary applied mechanics ..	14	13	Technical chemistry ..	4	2
Applied mechanics ..	8	7	The laboratories—		
Mechanics of machinery ..	10	6	Elementary applied mechanics ..	8	9
Hydraulics and pneumatics ..	9	8	Applied mechanics ..	6	5
Strength of materials (elementary) ..	22	17	Hydraulics ..	0	7
Strength of materials (intermediate) ..	10	11	Strength of materials and steam ..	12	5
Advanced strength of materials and bridge and roof construction ..	10	12	Elementary electrical engineering, Section I ..	10	12
Workshop practice (theory) ..	8	10	Elementary electrical engineering, Section II ..	2	5
Locomotive and railway engineering ..	6	0	Electrical engineering ..	2	3
Laboratory results (strength of materials and steam) ..	8	1	Elementary electricity ..	11	12
Surveying, elementary (theory) ..	8	5	Pass electricity and magnetism ..	13	15
Surveying, elementary (field-work) ..	8	4	Honours electricity and magnetism ..	6	2
Surveying, elementary (plotting) ..	6	4	Advanced electricity ..	0	1
			Totals ..	507	489

GIRLS' HIGH SCHOOL.

(Lady Principal, Miss M. V. Gibson, M.A.)

At the beginning of the school year the new rooms were ready for occupation, and were open to the public on Tuesday, the 28th January. On Wednesday, the 29th January, at 10 a.m., the whole school assembled in the large double upstairs room of the extension. The Chairman of the Board of Governors (Mr. G. W. Russell) and two members of the College Committee (Mr. L. B. Wood, M.A., and Dr. Erwin) were present, and addressed the girls, to whom the Lady Principal also spoke.

The vast improvement in comfort effected by the five commodious, well-lit, and well-ventilated class-rooms and the wide stairs and corridors has been highly appreciated by the staff and pupils. The whole school now meets for prayers in the assembly hall, and on days when the weather is unfit for out-door drill the physical-exercise classes are held in the upstairs corridor.

Want of funds has delayed the equipment of the science-room, but a sum sufficient for the purpose has been placed upon the estimates for 1909. Additional playground and cloak-room accommodation is still urgently needed, and numerous fittings and articles of school furniture, but when once the overdraft on the Building and Furniture Account has been met, the improved financial conditions provided by the Education Amendment Act offer hopes that these requirements will gradually be provided for.

As several applications for admission were made on behalf of children too young to be placed in the Upper Department, the Governors decided to form a Lower Department Preparatory Class at the beginning of the second term. It was placed under the care of Miss Mary Wills, a lady with considerable experience in primary-school work, and six pupils were enrolled. At the December examinations 3 of these passed the examination qualifying them for admission to the Upper Department.

The pupils attended the united Canterbury College celebration of Empire Day, on the 3rd June.

At the middle of the second term Miss E. Crosby, B.A., applied for leave of absence on account of ill health, but will be ready to take up her duties again at the beginning of next year.

The roll for the year has been as follows: First term, 208; second term, 211, of whom 6 were in Lower Department; and third term, 202, made up as follows: Senior free-place scholars, 46; junior free place, 122; pupils paying fees, 23; school free places, 6; and Lower Department, 6.

In the first week of November the technical classes were inspected by Mr. Isaac, Technical Inspector of the Education Department, and in the following week the Inspector-General and Dr. Anderson, the Assistant Inspector-General of the Education Department, spent several days at the School inspecting the general working of the classes and making an individual examination of candidates for senior free places. There were 36 presented for this examination, of whom 25 were exempted from further examination by the new clauses of the regulations for free places in secondary schools. Five others were required to sit for the regular Senior Free Place Examination in a specified subject, and all of these succeeded in passing, and 6 were required to take the whole examination, of whom

3 passed and 3 failed. Another candidate was awarded a junior free place on her work. In addition to these, 9 pupils entered for the regular Senior Free Place Examination, of whom all passed; 14 sat for the Junior Civil Service Examination and 13 passed, 8 being placed in the credit list. Five pupils sat for the Junior Free Place Examination, and 2 passed.

In the December University examinations 3 pupils took the Junior University Scholarship papers, Julia Pegg and Catherine Reynolds gained Senior National Scholarships, and also the two Gammack Scholarships, while Ada Fairbairn passed the Matriculation Examination in the credit list. Thirty pupils sat for the ordinary Matriculation Examination, and 22 passed, all but one taking Latin, and so qualifying also for the Solicitors' General Knowledge Examination.

Seven candidates entered for Education Board Senior Scholarships, and these were awarded to Mabel Jones, Rita Clark, Nesta Mason, Hilda Stewart, and Alice Callaghan.

At the November Canterbury College examinations 6 of the exhibitions for the year were won by past pupils of the school, as follows: Irene Wilson the exhibition in Latin, Alice Candy that in economics, Edith Jackson that for pure mathematics, Helen Leversedge that in French, Agnes Merton that in German, and Laura Christensen that in physical science. The last named was also bracketed with a fellow-student for the Sir George Grey Scholarship.

In the University degree examinations of December, 1907, the following degrees were gained by past pupils: Gwen Opie, degree of M.A., with second-class honours in mathematics; Nellie Slocombe, degree of M.A., with second-class honours in Latin and French; Priscilla Dyson, degree of M.A., with third-class honours in Latin and English; Isabella Griffin, degree of M.A., with third-class honours in English and French; Ellen Baxter, Jane Cardwell, Marion Reese, Kathleen Wills, all the degree of B.A.

#### BOYS' HIGH SCHOOL.

(Headmaster, Mr. C. E. Bevan-Brown, M.A.)

The school-roll for 1908 was as follows: For the first term, 220; for the second, 218; for the third term, 201. This includes the Preparatory Form, which had on its roll 20, 23, 22 for the three terms respectively. The school-roll at the present moment is 231, an increase of about 30 boys. In 1908 there were 94 holders of free places, 51 junior and 43 senior. In this first term of 1909 there are 126 holders of free places, 58 senior and 68 junior. Seventy-three new boys were admitted this term, 39 being holders of free places. The size of the classes in the Upper School is larger than ever.

The gymnasium was opened with a pleasant function on the 7th August, 1908, and has been used ever since. It is large enough for school meetings, and the prize-distribution was held there last December.

The school needs larger chemical laboratories, and a proper physical laboratory, the absence of which has been commented on by the Inspector-General. There is also wanted a reading-room and library, the present library being stowed away in a class-room. For the sake also of safety and the proper working of the school, a staircase and exit should be built in connection with the southern side of the western wing.

Mr. J. Hartley-Smith asked for leave of absence for two terms in May, 1908; immediately after it was granted he became dangerously ill. His work was taken till the end of the year by Mr. J. D. Davey and Mr. C. M. Bevan-Brown. At the beginning of 1909 it was found he was unable to resume work, and Mr. C. M. Bevan-Brown was appointed temporarily as *locum tenens*. Mr. Smith eventually, finding the doctor forbade work for a considerable time, resigned at the end of February, 1909. He had been a master of the school for fourteen years, always loyal, able, and industrious, working unselfishly and patiently under physical disadvantages: prior to that he was a pupil of the school, and was the first, with Mr. Speight, to win a University Scholarship and University honours.

At the end of 1908 the school also sustained a loss by the appointment of Mr. R. Speight as Assistant Curator in the Museum. He has been a master for over twenty years, and his work both inside and outside the school has been very valuable. The school very much regrets his loss and that of Mr. Smith. Mr. Speight has been able to remain on till the end of March until a successor could arrive.

In the middle of February, 1909, the Board elected two gentlemen to fill the vacancies just mentioned—viz., Mr. R. J. Thompson, B.A. Otago, First Assistant of the Thames High School, and Mr. Arthur Watt, M.A. (first-class honours in English and French), who was a Junior and a Senior Scholar of New Zealand University, and has for a year been teaching at Auckland. Mr. Watt, who takes up Mr. Smith's work, began work on the 21st March, 1909.

Mr. Tankard was away on leave for six months of 1908, and the first three months of 1909, and his place as gymnastic instructor was taken by Mr. Jackson.

Seventy-five boys in the Upper School presented themselves for outside examinations in December last. On the Junior University Scholarship list Mr. G. H. Robertson, who was with us five years, and left at the beginning of 1908 to go with his parents to Wellington (where for that year he attended Wellington College), was third scholar on the list; the 7 candidates who came straight from the school had been only one year in the upper sixth form; 1 was placed on the credit list, 5 qualified for matriculation, and 1 failed. The school has not done so poorly in this examination since 1894. For matriculation, &c., there were 24 candidates, and 17 passed. One of these qualified for medical preliminary; two who passed matriculation failed for medical preliminary. Forty-four candidates entered for Junior

Civil Service or senior free places, and 36 passed. Six of these were candidates for senior Board Scholarships, and two were successful in winning scholarships. Fourteen also of the above entered for Junior Civil Service proper, and all passed save one, 6 passing with credit. Of the remainder (senior free place and scholarship candidates), it will not be known how many passed with credit until the marks are issued, for though the examination is the same as that for the Junior Civil Service, the Government only publish in the credit list those who entered for the latter. We do not make a speciality of this latter examination, nor do our best boys enter for it.

The distinctions won by old boys since the last annual report are as follows: Mr. C. A. Cotton, M.Sc. (first-class honours geology), New Zealand University; Mr. J. Bartrum, M.Sc. (third-class honours electricity and magnetism); Mr. D. Florance, M.A. (first-class honours electricity); Mr. M. Gresson, LL.B. Out of 13 exhibitions awarded by Canterbury College in October last, 7 were gained by old boys—viz.: Mr. H. D. Broadhead (Greek), Mr. A. H. R. Amess (English), Messrs. G. W. D. Mulgan and H. Edgar (political science), Mr. C. M. Stubbs (mathematics), Mr. D. B. Macleod (chemistry), Mr. A. R. Ryder (biology).

Mr. D. B. Macleod was equal first with another candidate for the Sir George Grey Scholarship.

It may also be noted that out of 72 credit passes obtained by male students at the last College annual examination, 31 were obtained by pupils of this school.

#### CANTERBURY PUBLIC LIBRARY.

##### *Reference Department.*

In this department 1,045 volumes and pamphlets have been added, the total number of volumes being 18,221. On taking stock, 6 volumes were found missing.

*Annual Examination.*—I again draw your attention to the state of the binding. A large percentage of the books are in a very bad condition. The ruinous effect of coal-gas on leather bindings is all too apparent. If funds allowed, it would be better to bind, as repairing or recasing is at all times unsatisfactory.

The ventilation is a matter that should be attended to. The fumes from the gas make it almost impossible to read in the gallery, and the installation of the electric light would prevent the destruction of the books, and make the gallery so that the public could read with comfort.

The following new publications have been added: *English Historical Review*, *Educational Times*, *Antiquary*, *Australian Insurance and Banking Record*, *Banker's Magazine*, and *Engineering*.

On the 14th September the books bequeathed by the late Sir John Hall were received and placed in the room that had been constructed for them.

The Patent journals are regularly received, and are taking up a great deal of shelf-space, and increased accommodation will very soon be required. The room that has been set aside for Sir John Hall's books (which are nearly all duplicates of what are in the reference library) might be devoted entirely to the Patent papers, which are frequently consulted, and the books that are at present in there, and are seldom looked at, might be placed in the reference library, and some in the circulating, if allowable.

The demand for technical books on every subject is a matter that should receive attention. If this department is to answer the purpose of an educational institution, books on different subjects, the latest and best, should be procured.

In June an attempt to burn the building was made, but fortunately was discovered before much damage was done. Had it taken place at night the consequences would have been serious. The matter was placed in the hands of the police, but they were unable to find the culprit.

Shipments of books have been received from Mudie's, of London. They are books that in the ordinary way would not have been obtained locally.

This department contains a very fine collection of New Zealand books. Every effort should be made to complete the history of the colonies, and it is only by constantly watching the sales that this end can be gained. Every year they are getting more difficult to obtain.

More shelf-accommodation is needed. Some 500 volumes have had to be removed to the gallery over the reading-room to make room for accessions.

#### SCHOOL OF ENGINEERING.

(Professor, Robert J. Scott, M.I.M.E., M.I.C.E.)

*Attendance.*—During the year 175 individual students attended lectures, the hour attendances per week amounting to 1,085. Twenty-nine students were taking courses for the University degree or for the Associateship of the School, and 10 College students attended lectures in electricity and magnetism. Thirty-two lectures were delivered per week, and instruction was given in drawing and designing, experimental work in the laboratories, and in field-work for 126 hours, the total instruction hours per week amounting to 158.

*Additional Lectures.*—The number of lectures per week on the principles of civil engineering was increased from one to two. A special course in military electrical engineering was, by request, established, and attended by the members of the Canterbury Engineers. The fees for this course were



paid by the Defence Department. This development, and the increasing tendency shown by the Government department to make use of the school, both for the training of selected officers and for experimental purposes, has been a feature of the year.

#### *Results of Examinations.*

*University.*—At the University examinations in 1907, 5 students passed the final examination for the degree of Bachelor of Engineering, 3 passed the first part of the second examination, 4 completed the first examination, and 1 passed the first part of the first examination.

*Associateship.*—At the Associateship examinations of 1908, 1 student passed the final examination for the associateship in civil engineering.

The passes in the subjects of the associateship course taught in the School of Engineering were: In physics (B)—Electricity and magnetism, 3; freehand mechanical drawing, 5; descriptive geometry (advanced), 7; steam-engine (elementary), 5; steam-engine (intermediate), 3; applied mechanics, 6; mechanics of machinery, 6; hydraulics and pneumatics, 5; mechanical drawing (second year), 5; strength of materials (elementary), 4; strength of materials (intermediate), 2; strength of materials (advanced), 4; theory of workshop practice, 1; surveying (elementary), 1; building construction, 4; principles of civil engineering, 3; electrical engineering (intermediate), 1.

Associateship students taking subjects outside their regular courses attended lectures, passed examinations, and obtained certificates in surveying (elementary), 1; and principles of civil engineering, 1.

*Evening Students.*—116 certificates were awarded to students who attended evening lectures and passed examinations in the subjects named: Freehand mechanical drawing—first-class 10, second-class 4, total 14; descriptive geometry and setting-out work—first-class 6, second-class 4, total 10; mechanical drawing, Section I—first-class 5, second-class 11, total 16; mechanical drawing, Section II—first-class 6, second-class 4, total 10; mechanical drawing, Section III—second-class 3; steam-engine (elementary)—first-class 5, second-class 11, total 16; applied mechanics (elementary)—first-class 6, second-class 3, total 9; strength of materials (elementary)—first-class 5, second-class 2, total 7; steam-engine (intermediate)—second-class 1; strength of materials (intermediate)—second-class 1; applied mechanics—first-class 1, second-class 1, total 2; mechanics of machinery—first-class 1; hydraulics and pneumatics—first-class 1, second-class 1, total 2; theory of workshop practice—first-class 1, second-class 2, total 3; building-construction—second-class 1; principles of civil engineering—second-class, 1; electricity (elementary)—first-class 3, second-class 8, total 11; electrical engineering, Section I, C.C.—first-class 3, second-class 4, total 7; electrical engineering, Section II, A.C.—second-class, 1.

*Appointments obtained by Students.*—A number of appointments were obtained by students during the year. The most important was that of Assistant Professor of Mechanical Engineering at Syracuse University, U.S.A., for which Mr. A. R. Acheson was selected from a large number of American applicants. Mr. Acheson completed his course here in 1906, and did not subsequently attend any other educational institution.

Other appointments have been: Assistant Engineer, Bengal Railways; County Engineer, Selwyn County Council; outside Manager at Edinburgh for Messrs. Siemens Bros., electrical engineers; Assistant Engineer, Waihi Gold-mining Company; Demonstrator, Canterbury College; Engineer to Messrs. Turnbull and Jones; Surveyor, Dunedin Drainage Board; Draughtsman, Lyttelton Harbour Board; Draughtsman, Dunedin Drainage Board; Draughtsman and Surveyor, Christchurch City Council; Draughtsman, Lyttelton Borough Council; Lecturer in Mechanical Engineering, Wanganui; Testing Engineer to Auckland Harbour Board.

The Public Works Department applied to the school for two scientifically trained men capable of doing higher designing-work. Messrs. Cotton and Ponsonby were recommended for, and were appointed to, the positions.

Two students have entered into partnership in engineering business on their own account.

It is gratifying to find that in nearly all cases where past students have received promotion from the positions occupied by them their places have been filled by their juniors from the School [of Engineering.

*Testing.*—During the year a large number of tests have been made. These include a complete test of the suction-gas electric pumping plant recently installed by the Christchurch Drainage Board; tests of bricks and tailing-products for the Under-Secretary of Mines; tests of stone for the Geological Survey; of iron and copper, for the Westport-Stockton Mine; steel for ferro-concrete work, for the Wellington, and also for the Otago Harbour Board; steel, bricks, and lubricating oils, for the Government Railways; lubricating oils for the Christchurch Tramways; and a large number of cement, stone, and iron and steel tests for private individuals.

*Plant.*—The plant of the school has been carefully upkept, and is in good order, and a small amount of new apparatus has been procured, the principal items of which are: A vacuum-gauge test-pump with mercury column, a test-pump for hydraulic gauges with standard hydraulic gauge, a McLeod vacuum gauge, a mercury interrupter, 5 tachometers, a combined portable ammeter and voltmeter, 4 ammeters, 3 voltmeters, 4 carbon rheostats, a frequency indicator, a non-magnetisable clock, 6 thermometers, steel grips for testing-machine, a saturator, instrument-stands, and laboratory tools. Contracts were also let for the supply of 2,400 pounds' worth of experimental plant for the equipment of the hydraulics laboratory.

*Changes in the Staff.*—I have to record with regret the resignation of Mr. J. E. L. Cull, B.Sc. in Mechanical Engineering, an old student of the school, who for six years and a half occupied the position of Demonstrator in Mechanical Engineering, he having left to develop an iron-smelting process of which

he is the patentee. Mr. S. Steele, B.Sc. in Mechanical Engineering, has returned from the Wanganui Technical School to occupy the position vacated by Mr. Cull. I have also to record with regret the resignation of Mr. R. J. McKay, B.Sc. in Electrical Engineering, who has left to engage in the practice of his profession.

#### MUSEUM.

(Curator, Mr. Edgar R. Waite.)

In my report last year I drew attention to the fact that no additions had been made to the Museum buildings for the past thirty years, as a result of which the collections were, in many cases, in a very crowded condition. I now have the honour to report that the buildings have been considerably extended, but as these extensions were designed to accommodate absolutely new collections, they afford no relief to the congestion referred to. The suggested gallery to the Ethnological Room should be erected as soon as the necessary funds are available, but the cost of the skeleton of the Okarito whale and its mounting will be a heavy charge against next year's income.

*Reports.*—Several special reports were furnished during the year, the most important being one on the proposal to materially enlarge the Museum, and to redistribute the collections. Plans were prepared for three additional rooms, also for a gallery round the Ethnological Room. As the Canterbury Museum is an object of great interest to tourists and therefore a distinct asset to the country, and as the institution has never received financial assistance from the Government, it was felt that the Premier might be approached on the subject. His reply was not encouraging, but later he placed the sum of £400 at the disposal of the Board, and the generous action of the Government is much appreciated by the people of Canterbury. An exhaustive report on fire risks and methods of prevention was also prepared, but, in view of the municipal scheme for a high-pressure water-supply shortly to be inaugurated, it was not deemed necessary to carry the recommendations made into effect. I also reported on the unsatisfactory condition of the Museum grounds, and the employment, as suggested, of a gardener has done much towards keeping them in order.

*Staff.*—The Board having provided me with a personal assistant, Mr. R. D. Barker was added to the staff; I was thus relieved of much purely routine office-work. After nearly forty years' service you have granted Mr. W. J. Sparkes six months' leave of absence as from March, 1909. You have also had under consideration the creation of a new position in the Museum—namely, that of Assistant Curator, and you will probably make an appointment early next year.

*Collecting Tours.*—In February last I went to the West Coast accompanied by the taxidermist, in respect to a large whale reported to be stranded near Okarito, and 100 ft. in length. I found it to be a huge blue whale, and careful measurements showed the actual length of the skeleton to be 87 ft. Though I was, at the time, unable to secure the bones, they were afterwards obtained, as will be mentioned below.

In conjunction with the taxidermist I spent the month of July in the North Island, and obtained a very fine and valuable collection of articles connected with the Maoris, including thirty magnificent panels of *tukatuka*, *mere*, bone-handled axes and adzes, *taihai*, *patiti*, net-sinkers, bird-snares, preserving-pots with carved tops, pounders, examples of matting, *kitikiti*, kumara-pit door, also many choice slabs of carving, canoe-prows, *tekoteko*, &c. At Awaho we were fortunate in securing a whare formerly occupied by the famous chief Te Kooti. The carvings of the *koihi* are older, more ornate, and in every way much superior to those of the existing house. The principal Maori settlements visited were as follows: Several in the Hawke's Bay District, at New Plymouth, Rotorua, and the Bay of Plenty, including Whakatane, Opotiki, Opopi, Omarumuta, Torere, Tauranga, &c.

My annual leave of absence was spent on the West Coast Sounds, where I obtained collections of fishes and other zoological specimens for the Museum.

*Structural.*—The strong-room mentioned in my last report was completed early in the year, and the British war-medals, &c., presented by the Imperial Government, for the nightly housing of which the strong-room was principally erected, were shortly afterwards exhibited to the public. They prove to be of great attraction to visitors.

As above mentioned, an old whare was purchased at Awaho, and the beautifully carved *koihi* was erected in the Maori house, which was enlarged specially to accommodate it.

A large shelter is now in course of construction to receive the skeleton of the Okarito whale, the ground area of the new building measuring 2,800 square feet.

*Museum Work.*—A thorough revision of the collections in the Maori House was the principal work undertaken during the year, and advantage was taken of the acquisition of cases purchased at the close of the Christchurch Exhibition to greatly extend the casing of the room; this enabled me to display some of the collections to better advantage, and the educational value of the exhibits was much enhanced by the introduction of descriptive labels, in place of the mere names previously employed. The fine examples of *tukatuka* obtained during the North Island excursion were placed round the Maori House in the correct position, and have greatly improved its appearance; formerly this characteristic lattice-work was represented in the Museum by a small piece about 1 ft. square.

Casts of Assyrian objects with cuneiform inscriptions, standing in the Antiquity Gallery, were formerly being constantly defaced, presumably by boys; in order to prevent this, and to avoid trouble of renovation, I have had them enclosed by glass, some of the cases purchased from the recent Exhibition being admirably suited to the purpose. A special case to protect the cast of the sarcophagus of Queen Anknesraneferab was built, and I have pleasure to report that the whole of these interesting replicas are now adequately protected. Jourdain's picture, "Leda and the Swan," the canvas of which was broken some years ago by falling plaster, was successfully repaired by Mr. McGregor Wright. Four cases specially designed and labelled for children were placed in the foreign entomological series, and the displayed collection of insecta commenced the previous year was completed. Opportunity was

taken as occasion offered to replace some of the New Zealand birds with better specimens, and the cases throughout the Museum have been kept in clean condition by the members of the staff devoted to the purpose.

*Skeleton of Whale.*—Undoubtedly the largest single object the Museum will ever possess was obtained during the year. In February, as above mentioned, I visited Okarito, and saw the huge mammal stranded on the beach. It was in a very favourable position for removal, but, as neither labour nor suitable appliances could be locally obtained, serious work could not be attempted. Details as to position, size, methods of transport, &c., were obtained, and these, later, became valuable when a small syndicate was formed, and armed with necessary tools and gear, finally succeeded in obtaining all the bones with the exception of the right maxillary, and hopes are still entertained of recovering this bone, which is probably buried in the sand. The skeleton was purchased for £500. Of this sum, £300 was raised by subscription, Messrs. Edgar F. Stead and R. Turnbull (the vendors) each contributing £50; the balance was provided out of the funds of Canterbury College. The cost of erection and that of the shelter will be largely met by the grant of the Government previously referred to.

*Publication.*—The first part of the results of the "Nora Niven" trawling expedition has been received from the various specialists to whom the material was submitted, and is now in the hands of the Government Printer. It has been arranged that the work shall be published as Part 2 of the "Records of the Canterbury Museum," and it is expected to appear early next year.

*Additions.*—Among the many acquisitions to the collections the following may be mentioned: Mr. L. F. Ayson presented the skull of a strap-toothed whale (*Mesoplodon layardi*), in which the two teeth had grown until they met over the upper jaw; Mr. R. Speight presented andesitic rocks from the neighbourhood of Tongariro and Ruapehu; Professor R. J. Scott, a mounted example of the wandering albatros; Mr. L. A. Cotton, glacier granite and kelyte from Antarctica; and the Curator, a model of the egg of the great auk.

*Guide-book.*—The reduction in the price of the guide-book to 1s. resulted in increased sales, exactly one hundred copies having been disposed of during the year.

#### SCHOOL OF ARTS.

(Director, Mr. R. Herdman Smith, F.S.A.M. &c.)

I have the honour to report that the quality of the work of the students has considerably improved during the year 1908.

*Attendance.*—The students in attendance during the year 1908 numbered 1,160, an increase of 926 students over the year 1907.

The number of morning students amounted to 213, the number of afternoon students to 321, the number of evening students to 327, and the number of Saturday students to 299.

*Examinations.*—In connection with the advanced art examinations held by the Board of Education, South Kensington, London, 28 students received pass certificates, and in the examination for Art Class Teachers Certificates three finished works were accepted by the examiners; one finished work was also accepted for the Art Masters Certificate. The usual local examinations were held at the end of the year, and all the students submitted work for examination.

*Exhibition.*—An exhibition of students' work was held during February. The exhibits were appreciated by the public. The Press gave several favourable reports on the advancement of the work of the school as a whole.

*Scholarships.*—A bronze medal and eleven free scholarships were awarded on the year's work to students of the day and evening classes, also some 24 scholarships to pupils of the State schools.

*Drawing and Painting.*—Instruction was given in drawing and painting from life, still life, antique, and landscape. A special feature was made of costume study on the living model and figure composition. A series of anatomy lectures were given during the year.

*Design.*—Six classes per week were held for this subject, and many really excellent examples were executed. A booklet entitled "Maori Fairy Tales" was illustrated by students, and several commissions for posters and designs for advertising purposes were given by various local firms to the school, for students to design.

A start has also been made in pottery-painting, and several examples of under-glaze work were executed during the year. Several etchings were also executed on the school's new printing press.

A large feature of the work of this department was the preparation of designs for the crafts classes, such as cartoons for stained glass, working-designs for wood and stone carving, repoussé work, enamelling, embroidery, lace, gesso, and leather work, &c.

*Artistic Crafts.*—The work of this department comprised carrying out in material the working-designs made in the design department. Examples of Limoges and Cloisonné enamelling, jewellery, and general art metal work were executed. Excellent specimens of wood-carving, repoussé, gesso, and leaded-light work were made during the year by the students. Classes for these crafts were held in the morning, afternoon, and evening.

*Modelling.*—This is the first year that really serious work has been done in this important department. Several advanced students gave all their time to figure-modelling this year, with a result that many really fine examples of bas relief and work in the round have resulted. The general trade modelling classes have done good work throughout the year, and I hope to see the subject of modelling design taken up seriously another year.

*Architecture.*—Steady progress has been made in this department. The course embraces five evenings per week, and several students took the full course.

It was decided to grant a bronze medal for the best set of works in several subjects this year, and, as a result, some very excellent sheets were submitted at the end of the session.

*Signwriting and Decorating.*—Good work has been done in this department, especially in stencilled decoration and three-tone painting and poster-work.

*Cabinetmaking.*—The work of this section has chiefly been directed to drawing and design. Some excellent furniture studies in colour were executed by students of this department in the applied design classes.

*Teachers and Pupil-teachers.*—Classes were held on Saturday mornings as well as in the evenings for elementary drawing, design, brushwork, blackboard, modelling, and elementary still-life work. The accommodation of the school was severely taxed on Saturday mornings. A large room for blackboard work is urgently needed.

*Normal College Students.*—Special classes were held on Tuesday afternoons for blackboard, freehand and model drawing, and useful work was done by the students in this section.

*Arts and Crafts Guild.*—The Arts and Crafts Guild was continued on the same lines as those of former years, with the exception that, in addition to the monthly lectures, a monthly members' working-night was commenced. A subject was set, and the members illustrated the subject in various mediums. This addition proved very successful, and many excellent compositions were the result. The Guild's membership numbers upwards of 200, many of which are ex-students of the school.

*Staff.*—No resignations have been received during the year. The staff now numbers fourteen, all of whom worked loyally in the interests of the school.

Thanks are due to Messrs. William Sey and J. W. Gibb for prizes kindly donated for painters' and decorators' work and painting, and also to those gentlemen who assisted in making the monthly meetings of the Guild so instructive by lectures and demonstrations.

In conclusion, I have to thank the Board—firstly, for instituting two scholarships, value £25 each—one for pure art and one for applied art, which I am sure will be keenly competed for during the next year, and which will, perhaps, form a stepping-stone to a New Zealand Government travelling art scholarship, which is urgently needed if our art students in the Dominion are to keep pace with those in Australia, where such scholarships have been available for many years past, and have been the means of gaining for Australia a name for producing artists and sculptors of the first rank; secondly, for granting me leave of absence to visit the art schools of Europe during the coming year, and also for the grant to purchase specimens of the best students' works in the schools I visit.

## ACCOUNTS AND BALANCE-SHEET.

### STATEMENT OF BALANCES AT 31ST DECEMBER, 1908.

Cr.	Accounts.	£	s.	d.	£	s.	d.
School of Art Account .. .. .	.. .. .	618	8	2			
Boys' High School Maintenance Account .. .. .	.. .. .	145	19	10			
Boys' High School, preparatory department .. .. .	.. .. .	4	4	4			
Chemical Laboratory, Building Fund .. .. .	.. .. .	4,760	10	7			
Astronomical Observatory Account .. .. .	.. .. .	411	0	7			
School of Engineering and Technical Science Account .. .. .	.. .. .	2,084	13	1			
Girls' High School, Capital Account .. .. .	.. .. .	5,002	8	1			
Public Library, Capital Account .. .. .	.. .. .	1,666	8	6			
Public Library, Sinking Fund Account .. .. .	.. .. .	229	6	4			
Medical School, Reserves Account .. .. .	.. .. .	4,361	15	9			
Museum, Library, and School of Technical Science, Capital Account .. .. .	.. .. .	18,941	8	4			
Museum, Library, and School of Technical Science, Endowment Account .. .. .	.. .. .	223	3	3			
Museum Guide-book, sinking fund .. .. .	.. .. .	20	0	0			
Emily S. Foster Memorial Fund .. .. .	.. .. .	65	2	8			
Helen Macmillan Brown Memorial Fund .. .. .	.. .. .	98	7	6			
Thomas Miller Prize Fund .. .. .	.. .. .	100	16	11			
Joseph Haydon Prize Fund .. .. .	.. .. .	216	7	7			
					38,950	1	6
<i>Dr.</i>							
College Maintenance Account .. .. .	.. .. .	6,497	5	9			
Girls' High School Maintenance Account .. .. .	.. .. .	572	12	8			
Public Library Maintenance Account .. .. .	.. .. .	619	8	0			
Museum Account .. .. .	.. .. .	329	11	6			
					8,018	17	11
					£30,931	3	7
<i>Bank and Investments.</i>							
Drawing Account .. .. .	.. .. .	11,096	0	2			
Less outstanding cheques .. .. .	.. .. .	457	10	5			
					10,638	9	9
Mortgages of freeholds .. .. .	.. .. .				8,700	0	0
Mortgages of debentures .. .. .	.. .. .				5,700	0	0
Debentures (Foster and Brown Memorial Funds) .. .. .	.. .. .				150	0	0
Debentures (Observatory) .. .. .	.. .. .				300	0	0
Debentures (Miller Prize Fund) .. .. .	.. .. .				100	0	0
Debentures (Haydon Prize Fund) .. .. .	.. .. .				200	0	0
Fixed deposits, Bank of New South Wales .. .. .	.. .. .				5,142	13	10
					£30,931	3	7
<i>Liabilities.</i>							
Bank of New South Wales (No. 2 Account) .. .. .	.. .. .				10,834	0	0
Public Trust Department Loan .. .. .	.. .. .				4,000	0	0
Public Library scrip .. .. .	.. .. .				98	10	2
Emily Foster Memorial Fund .. .. .	.. .. .				65	2	8
Helen M. Brown Memorial Fund .. .. .	.. .. .				98	7	6
					£15,096	0	4



## CHEMICAL LABORATORY BUILDING FUND.

<i>Receipts.</i>		£ s. d.	<i>Expenditure.</i>		£ s. d.
Balance, 1st January, 1908	.. ..	81 1 9	Balance, 31st December, 1909	.. ..	4,760 10 7
Accrued rents from Coldstream Reserve (Hinds)	.. ..	4,567 13 10			
Interest on fixed deposit	.. ..	14 5 0			
Share of rent of Coldstream Reserve for 1908	.. ..	97 10 0			
		<u>£4,760 10 7</u>			<u>£4,760 10 7</u>
Balance, 1st January, 1909	.. ..	£4,760 10 7			

## PHYSICAL LABORATORY ACCOUNT.

<i>Receipts.</i>		£ s. d.	<i>Expenditure.</i>		£ s. d.
Share of rent of Coldstream Reserve for 1908	.. ..	97 10 0	Insurance	.. ..	2 0 0
College Maintenance Account—Transfer of balance	.. ..	27 8 8	Apparatus	.. ..	96 8 6
			General Expenses, viz.,—		
			Books, stationery, and stamps	.. ..	4 9 0
			Laboratory requisites	.. ..	3 0 10
			Fittings and repairs	.. ..	6 10 2
			Installing electric current	.. ..	12 4 6
			Sundries	.. ..	0 5 8
		<u>£124 18 8</u>			<u>£124 18 8</u>

## BIOLOGICAL LABORATORY ACCOUNT.

<i>Receipts.</i>		£ s. d.	<i>Expenditure.</i>		£ s. d.
College Maintenance Account—Transfer of balance	.. ..	214 15 9	Insurance	.. ..	3 19 4
			Fuel and lighting	.. ..	25 6 7
			Laboratory specimens and expenses	.. ..	69 7 6
			Apparatus	.. ..	104 9 3
			General expenses, viz.,—		
			Fitting and repairs	.. ..	4 1 7
			Keeping grounds in order	.. ..	1 12 0
			Washing and cleaning	.. ..	2 19 6
			Sundries	.. ..	3 0 0
		<u>£214 15 9</u>			<u>£214 15 9</u>

## ASTRONOMICAL OBSERVATORY ACCOUNT.

<i>Receipts.</i>		£ s. d.	<i>Expenditure.</i>		£ s. d.
Balance, 1st January, 1908	.. ..	410 16 8	Contribution towards cost of upkeep (College)	.. ..	16 8 9
Interest	.. ..	16 12 8	Balance	.. ..	411 0 7
		<u>£427 9 4</u>			<u>£427 9 4</u>
Balance, 1st January, 1909	.. ..	£411 0 7			

## SCHOOL OF ENGINEERING, ELECTRICITY, AND TECHNICAL SCIENCE ACCOUNT.

<i>Receipts.</i>		£ s. d.	<i>Expenditure.</i>		£ s. d.
Balance 1st January, 1908	.. ..	1,660 1 3	Salaries	.. ..	2,661 19 2
Contribution from Museum, Library, and School of Technical Science Endowment	.. ..	800 0 0	Apparatus for surveying, civil engineering, &c.	.. ..	8 0 5
Contribution from superior education reserves (College)	.. ..	850 0 0	Rent of building (College)	.. ..	130 0 0
Contributions from superior education reserves (Exhibitions)	.. ..	60 0 0	Exhibitions	.. ..	60 0 0
Government grants—			Contribution towards expenses of Registrar's office	.. ..	120 0 0
For specialisation	.. ..	2,000 0 0	Gas and electric light	.. ..	118 6 10
" technical instruction	.. ..	265 1 3	Insurance	.. ..	35 13 3
" material and apparatus	.. ..	269 0 0	Printing and stationery	.. ..	50 6 11
" buildings	.. ..	59 10 0	Advertising	.. ..	27 13 0
Students' fees	.. ..	828 3 6	Fuel (coal and gas)	.. ..	16 5 10
Students' fines	.. ..	0 13 0	Laboratory stores	.. ..	27 0 8
Share of testing fees	.. ..	51 17 3	Cleaning machinery	.. ..	138 19 11
Fees for certificate of associate	.. ..	5 5 0	Experimental work and apparatus (applied mechanics and mechanical engineering)	.. ..	123 3 10
Interest	.. ..	89 3 2	Experimental work and apparatus (electricity and electrical engineering)	.. ..	106 10 10
			Stores and chemical (electricity and electrical engineering)	.. ..	18 0 2
			Upkeep of plant, repairs to machinery	.. ..	103 17 8
			General expenses, viz.,—		
			Telephone subscription	.. ..	8 0 0
			Cab hire and telegrams	.. ..	2 5 6
			Chalk and office requisites	.. ..	3 18 0
			Sundries	.. ..	5 10 0
			Apparatus, hydraulic, &c.	.. ..	948 11 10
			Hydraulic Laboratory building (balance)	.. ..	29 7 6
			Technical chemistry (lectures)	.. ..	75 0 0
			Technical chemistry (apparatus)	.. ..	15 0 0
			Share of rent of section in Hereford Street	.. ..	20 0 0
			Official stamps	.. ..	5 10 0
		<u>£6,938 14 5</u>	Balance	.. ..	2,084 13 1
Balance, 1st January, 1909	.. ..	£2,084 13 1			<u>£6,938 14 5</u>









## PUBLIC LIBRARY CAPITAL ACCOUNT.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	..	1,666	8	6	Public Library Maintenance Transfer	..	66	12	9
Interest	..	66	12	9	Balance	..	1,666	8	6
		<u>£1,733 1 3</u>					<u>£1,733 1 3</u>		
Balance, 1st January, 1909	..	£1,666	8	6					

## PUBLIC LIBRARY SINKING FUND.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	..	168	11	2	Balance, 31st December, 1908	..	229	6	4
Allocation from Public Library Maintenance Account	..	54	0	0					
Interest	..	6	15	2					
		<u>£229 6 4</u>					<u>£229 6 4</u>		
Balance, 1st January, 1908	..	£229	6	4					

## JAMES GAMMAK TRUST (PUBLIC LIBRARY).

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	..	208	5	10	Allocation to Public Library Maintenance Account for purchase of books and binding	..	335	15	4
Revenue from estate	..	200	0	0	Proportion of Salaries, Fuel, Lighting, &c.	..	72	10	6
		<u>£408 5 10</u>					<u>£408 5 10</u>		

## MEDICAL SCHOOL RESERVES ACCOUNT.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	..	4,260	12	5	Contribution towards salary of Professor of Biology	..	400	0	0
Rent of reserves	..	496	10	0	Contribution towards expenses of Registrar's office	..	90	0	0
Interest	..	166	8	4	Contribution towards cost of inspection of reserves	..	10	0	0
		<u>£4,863 10 9</u>			Sundries	..	1	15	0
					Balance	..	4,361	15	9
							<u>£4,863 10 9</u>		
Balance, 1st January, 1909	..	£4,361	15	9					

## MUSEUM GUIDE-BOOK SINKING FUND.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	..	10	0	0	Balance, 31st December, 1908	..	20	0	0
Museum maintenance allocation	..	10	0	0					
		<u>£20 0 0</u>					<u>£20 0 0</u>		
Balance, 1st January, 1909	..	£20	0	0					

## MORTGAGES OF FREEHOLDS ACCOUNT.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 31st December, 1908	..	8,700	0	0	Balance, 1st January, 1908	..	8,700	0	0
		<u>£8,700 0 0</u>			Balance, 1st January, 1909	..	£8,700	0	0

## MORTGAGES OF DEBENTURES ACCOUNT.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 31st December, 1908	..	5,700	0	0	Balance, 1st January, 1908	..	£5,700	0	0
		<u>£5,700 0 0</u>			Balance, 1st January, 1909	..	£5,700	0	0

## GENERAL INVESTMENT ACCOUNT.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Interest	..	80	0	0	Balance, 1st January, 1908	..	2,000	0	0
College Maintenance Account, transfer of balance	..	2,000	0	0	Interest from Loans Account, transfer	..	80	0	0
		<u>£2,080 0 0</u>					<u>£2,080 0 0</u>		

## EMILY FOSTER MEMORIAL FUND.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	..	64	2	8	Prizes	..	1	15	0
Interest	..	2	15	0	Balance	..	65	2	8
		<u>£66 17 8</u>					<u>£66 17 8</u>		
Balance, 1st January, 1909	..	£65	2	8					

## HELEN MACMILLAN-BROWN MEMORIAL FUND.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	.. ..	99	10	0	Prizes..	.. ..	5	2	6
Interest	.. ..	4	0	0	Balance	.. ..	98	7	6
		<u>£103 10 0</u>					<u>£103 10 0</u>		
Balance, 1st January, 1909	.. ..	£98	7	6					

## THOMAS MILLER PRIZE FUND.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	.. ..	100	19	9	Prizes	.. ..	4	2	10
Interest	.. ..	4	0	0	Balance	.. ..	100	16	11
		<u>£104 19 9</u>					<u>£104 19 9</u>		
Balance, 1st January, 1909	.. ..	£100	16	11					

## JOSEPH HAYDON PRIZE.

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance, 1st January, 1908	.. ..	211	17	7	Prizes..	.. ..	4	0	0
Interest	.. ..	8	10	0	Balance	.. ..	216	7	7
		<u>£220 7 7</u>					<u>£220 7 7</u>		
Balance, 1st January, 1909	.. ..	£216	7	7					

## E. REPORT OF THE UNIVERSITY OF OTAGO, 1908.

("The University of Otago Ordinance, 1869.")

[In continuation of E.-7, 1908.]

*Visitor.*—His Excellency the Governor.*Council.*

Appointed by His Excellency the Governor in Council—His Honour Mr. Justice Williams, M.A., LL.M. (Chancellor); J. Allen, M.A., M.P. (Vice-Chancellor); J. Roberts, C.M.G.; T. M. Hooken, M.R.C.S., F.L.S.; D. Stewart; L. W. Harris.

Elected by graduates—Rev. A. Cameron, B.A.; T. K. Sidey, B.A., LL.B., M.P.; Rev. Professor W. Hewitson, B.A.; Robert Church, M.D., Ch.B.

Elected by the professors—Professor J. H. Scott, C.M., M.D., M.R.C.S., F.R.S.E.; Professor J. Shand, M.A., LL.D.

*Professors.*

Natural Philosophy, J. Shand, M.A., LL.D.; Chemistry, J. G. Black, M.A., D.Sc.; Anatomy, J. H. Scott, C.M., M.D., M.R.C.S., F.R.S.E.; Mining and Director of the School of Mines, James Park, M.A.I.M.E., M.I.M.M., F.G.S.; Biology (also Curator of the University Museum), W. B. Benham, D.Sc., Lond., M.A., F.Z.S.; Mental and Moral Philosophy, Rev. W. Salmond, M.A., D.D.; Mathematics and Mechanics, D. J. Richards, M.A.; English Language and Literature, T. Gilray, M.A., F.R.S.E., LL.D.; Physiology, J. Malcolm, M.D., Ch.B. Dentistry, also Director of the Dental School, H. Percy Pickerill, M.B., B.Sc., B.D.S., L.D.S.; Practice of Medicine, D. Colquhoun, M.D., M.R.C.P., M.R.C.S.; Medical Jurisprudence and Public Health, F. Ogston, M.D.C.M.; Pathology, W. S. Roberts, M.R.C.S.; Ophthalmology, H. L. Ferguson, M.A., M.D., &c.; Surgery, L. E. Barnett, M.B., C.M., F.R.G.S., Eng.; Metallurgy and Assaying, D. B. Waters, A.C.S.M.; Geology and Mineralogy, P. Marshall, D. Sc., M.A.; Education, D. R. White, M.A.

*Lecturers.*

French, Geo. E. Thompson, M.A.; German, F. H. Campbell, M.A.; Hebrew, Rev. M. Watt, M.A., D.D.; Midwifery and Diseases of Women, F. C. Batchelor, M.D., M.R.C.S., L.R.C.P., L.M., L.S.A.; Materia Medica, E. E. Blomfield, M.D., B.S., Lond., M.R.C.S., L.R.C.P., Eng.; Mental Diseases, F. T. King, M.B., C.M., B.Sc.; Clinical Medicine and Clinical Surgery, the Honorary Medical and Surgical Staff of the Dunedin Hospital; Constitutional History, A. R. Barclay, M.A., LL.B.; Jurisprudence, Wm. Grant Hay, LL.B.; Political Economy, H. D. Bedford, M.A., LL.B.; Tutor in Medicine, W. M. Macdonald, M.B., C.M.; Tutor in Surgery, W. Newlands, M.B., Ch.B., F.R.C.S., Edin., B.Sc., M.A., N.Z.; Classics, T. D. Adams, M.A.; Lecturer on Law, Jas. M. E. Garrow, B.A., LL.B.

*Registrar*—W. A. Mason.

## THE CHANCELLOR OF THE UNIVERSITY OF OTAGO TO HIS EXCELLENCY THE GOVERNOR.

YOUR EXCELLENCY,—

University of Otago, August, 1909.

In compliance with the provisions of "The University of Otago Ordinance, 1869," I have the honour to forward to Your Excellency the report of the proceedings of the University of Otago for the year ending the 31st March, 1909.

*Council.*

On the 4th April, 1908, Dr. J. H. Scott was elected by the Professors to the seat on the Council vacated by Professor Sale. On the 21st November Professor Hewitson was re-elected by the graduates as their representative on the Council.

During the year the Vice-Chancellor, Mr. J. Allen, M.P., was appointed to represent the Council on the Senate of the New Zealand University in the place of Professor Sale, and Dr. Church and Mr. D. Stewart were appointed the Council's representatives on the Otago High Schools Board.

*Staff.*

The Council regrets to inform your Excellency that after many years of faithful service Dr. F. C. Batchelor resigned his position as Gynæcologist to the Hospital on the 12th January, 1909.

On the 7th December, 1908, Dr. P. Marshall, who had been Lecturer, was appointed Professor of Geology and Mineralogy.

Leave of absence was granted to Dr. J. H. Scott for six months, to visit the Old Country, and to Mr. C. W. Hay (Hon. Dental Surgeon) for nine months, to visit Europe.

Several members of the staff have applied for an increase in their salaries, and the Council has the applications under consideration, and hope to make some ameliorations; but it regrets that the straitness of its finances still compels it in some cases to pay inadequate salaries, or no salaries at all, in return for efficient services.

*Report of Chairman of the Professorial Board.*

The report of the Chairman is forwarded herewith. It contains statistics of attendance, general statement of academic results, winners of scholarships, successes of former students, remarks on research scholarships, on the general life of the University, and on the chief needs of the University at the present time.

### *Research Scholarship.*

The Research Scholarship recently provided by Parliament was awarded to A. Gordon Macdonald, A.O.S.M., B.E., Min., who is at present engaged in an investigation on the "Distribution and Economic Value of the Brown Coals of Otago."

The Berwick-Moreing post-graduate place for 1908 was awarded to Mr. Norman Shand, A.O.S.M., who has been placed at the New Zealand Talisman Mine, at Karangahake.

### *Dental School.*

It is with much pleasure I report that the Dental School was officially opened by the Hon. G. Fowlds, Minister of Education, on the 4th of April, the Prime Minister, Hon. Sir J. G. Ward, being also present.

The school gives promise of being very successful. The Council has been fortunate in securing the services of Dr. Pickerill as Director, and the following honorary dental surgeons: F. Throp, H. Dodgshun, T. A. Hunter, Dr. H. Ziele, C. W. Hay, O. V. Davies, F. Armstrong, J. Glendining, J. Dunlop, H. D. Brewer, M. A. Thompson, and A. J. Chrystall. Mr. J. Dunlop resigned his position on the 14th July, 1908.

The staff has been strengthened by the appointment of Mr. N. P. Hawkins, of Birmingham, as Mechanical Assistant, and the Council is indebted to Mr. W. M. Knott, of Birmingham, who was good enough to select Mr. Hawkins.

During the year application was made to the Government to provide an additional sum of £2,231 to meet the overdraft on account of the building and additional requirements, and my Council noted with satisfaction that £2,100 was provided in the year's appropriation by Parliament.

The proposed alteration to the building, which, in the opinion of my Council, will be most economical, will involve an additional amount of between £400 and £500, which it is hoped the Government will make provision for.

### *Mining School.*

The contract for the new building, for £4,363, was signed on the 4th April, 1908, and the building is now completed. Further particulars will be found in the report of the Director of the School, which is attached.

I have much pleasure in drawing attention to the generous offer of the Institution of Mining and Metallurgy, London, which has advised the Council that two post-graduate scholarships of £50 each, tenable for one year, are annually open to graduates of the Otago School of Mines.

### *Medical School.*

It is so essential to the success of the Medical School that every facility should be granted for students to gain experience in the General Hospital and the Maternity Home in Forth Street that I again draw attention to the necessity for the Council of the University being represented on the Board of Hospital Trustees and on the Charitable Aid Board, and I would respectfully urge that legislative provision be made for this purpose.

### *Veterinary School.*

The public-works appropriations contained provision for £1,000 on account of £3,000 for buildings for the Veterinary School, and the Consolidated Fund appropriations £300 on account of annual cost (£1,200).

Correspondence has continued with the Minister of Education, and plans of proposed buildings have been submitted, but there is great difficulty in making satisfactory provision for the school with only £3,000 for buildings. The correspondence is still proceeding, and the Council hopes it will soon produce satisfactory results.

### *Law School.*

Students of law communicated with the Council during the year asking for further provision for instruction in law subjects. At the present time lectures are given on constitutional history and law.

### *Jurisprudence and Political Economy.*

The Lecturers, as remuneration, receive only the fees paid by the students. The Council would be glad to make better provision were funds available.

### *The Museum.*

The Hocken wing has been completed, but has not yet been officially opened or handed over to the Council.

The provision made for the upkeep of the Museum is quite inadequate, and I call attention to the Museum Account, which shows year by year a transfer from the University funds towards the maintenance of the Museum, and would again urge that further provision should be made for Museum requirements.

### *Finance.*

The balance-sheet, duly audited, is attached.

In December last the debenture debt, amounting to £11,000, became due; and £7,600 was renewed for two years at 5 per cent., being an increase of  $\frac{1}{2}$  per cent. As the holders of 3,400 pounds' worth of debentures desired payment, the Council made provision by the issue of debentures to a like amount,

which fall due on the 31st December, 1909. The Council respectfully urge the Government to make provision on this year's estimates to pay off the 3,400 pounds' worth of debentures when they come due at the end of this year.

Correspondence has been forwarded to the Acting Prime Minister setting forth the very generous assistance given to the University by the people of Otago and Southland, and on the other hand the amounts provided by Parliament.

The Council also ask that the annual vote towards the Mining School should be continued at £750, and should not be reduced to £500.

#### *Beverly Bequest.*

In accordance with the will of the late Arthur Beverly the Council has adopted a scheme for the disposal of the income, which is as follows:—

1. 10 per cent. of the gross revenue to be added each year to the corpus of the fund.
2. That the following Beverly Scholarships be provided:—

(a.) *Entrance Scholarship.*—To be awarded to the candidate who passes for Matriculation in the New Zealand University, either in the Junior Scholarship Examination, including mathematics, or the New Zealand University Matriculation Examination, including Euclid and algebra, as pass subjects; to be awarded annually; to be tenable for three years, and to amount to £20 in the case of the candidate living within the City of Dunedin or within easy access of the University, and to £45 in the case of the candidate's home being in the country. This scholarship may not be held concurrently with any bursary or scholarship other than "free education," and shall be awarded at the discretion of the University Council. The holder of this scholarship shall study for a B.A. degree, shall keep terms each year, and at the end of the second year must take the first section of the B.Sc. degree. If he fails, the Council may withdraw the scholarship.

(b.) *Mathematics, Mechanics, Junior Physics.*—One scholarship to be awarded, of £20 for the town student, and £45 for the country student; to be tenable for the remainder of the three years' course, and which may be extended at the discretion of the Council for another year, provided the holder proceeds to "honours." The scholarship to be given in alternate years to the candidate who, being otherwise qualified, is reported by the Professor as best in senior mathematics and mechanics, or junior physics, and who is in the first or second academical year. In the coming year this scholarship will be awarded for senior mathematics and mechanics. The Scholarship to commence at the next ensuing session after being awarded. The holder shall study for a B.Sc. degree, shall keep terms each year, and at the end of the second year must take the first section of the B.Sc. degree. If the holder fails, the Council may withdraw the scholarship. It may not be held concurrently with any bursary or scholarship other than "free education."

(c.) *Higher Mathematics and Advanced Physics.*—Scholarships of the value of £50 each may be awarded annually to the best eligible candidate in the classes of higher mathematics (including mechanics) and to the best eligible candidate in the classes of advanced physics. Candidates must have completed their third academical year before their election to the scholarship. The scholarships shall be tenable for one year, during which the holders must continue their studies as candidates for honours under conditions to be prescribed by the Council, and the scholarships shall not be held with any other scholarships.

*Worthiness of Candidates.*—Before awarding any Beverly Scholarship the Council shall satisfy itself—(a.) By a report from the teacher or the Professor of the subject in respect of which the scholarship is offered, or otherwise, that the candidate is worthy on the ground of character, ability, and diligence of holding it; and (b) by a written declaration or by such evidence as the Council may require that he or she studies to the best advantage without the aid afforded by the scholarship.

3. *Demonstrator in Physics.*—That a Beverly Demonstrator in Physics be appointed, at an annual salary of £200, under conditions to be defined by the Council.

4. *Provision for Apparatus.*—That each year, for the next two years, there be allotted £100 for apparatus for the teaching of physics, and £50 for apparatus for the teaching of mechanics.

5. *Additions to University Library.*—That the sum of £50 be allotted annually for expenditure on books for the library, the books to deal with the subjects mentioned in Mr. Beverly's will.

6. *The Balance.*—The balance to be disposed of from time to time as the Council may direct.

Under the several headings, the minimum demanded per annum made on the fund will amount to £470, and the maximum £620.

#### *Superannuation.*

The Senate of the New Zealand University communicated with the Professorial Board and the Council on this question; and, as a result, the following resolution was agreed to by the Professorial Board and the Council: "That this Council is strongly in favour of urging the Government to give University Professors, Lecturers, and other officials an opportunity of coming under the provisions of "The Teachers' Superannuation Act, 1906." The Council, however, is of opinion that, since the reasons for insisting on retirement at the age of sixty-five years, irrespective of efficiency, do not apply to the University Colleges, the governing body of each College should have power to postpone, by special resolution, the retirement of any of its teachers or other officers. The Council is convinced that this provision would be in the best interests of the University Colleges; and it is obvious that it would materially diminish the burden on the Superannuation Fund."

*Requirements of the University.*

The increase in the number of students attending the University owing to the closer attachment with the Training College makes the provision of two additional class-rooms, each capable of accommodating not less than 100 students.

*An Urgent Matter.*

The question of providing a Student's Union building, similar to those which have been instituted in non-residential universities at Home, and containing common-rooms—reading and committee rooms, a luncheon-room, cloak-rooms—and, if possible, a gymnasium, has been forced upon the Council by the extreme inadequacy of the existing accommodation. Local efforts are being made to raise funds for this good purpose, and it is hoped that, with a Government subsidy of £1 for £1, sufficient accommodation will be provided to supply this long-felt want.

JOSHUA STRANGE WILLIAMS, Chancellor.

## PROFESSORIAL BOARD: REPORT OF THE CHAIRMAN (PROFESSOR THOMAS GILRAY, M.A., F.R.S.E.).

I HAVE the honour of submitting a general report on the work and history of the University during the academic year that ended on the 31st March, 1909. I greatly regret that severe pressure of work has prevented me from presenting this report at an earlier date.

*Statistics of Attendance.*

The Registrar has supplied the following statistics for session 1908 :—

Number of students in arts and science .. .. .	230
"    in medicine .. .. .	81
"    in dentistry .. .. .	14
"    in mining .. .. .	14
<b>Total .. .. .</b>	<b>339</b>
Number of male students .. .. .	236
"    female students .. .. .	103
<b>Total .. .. .</b>	<b>339</b>
Matriculated students—	
Males .. .. .	201
Females .. .. .	100
<b>Total .. .. .</b>	<b>301</b>
Non-matriculated students—	
Males .. .. .	35
Females .. .. .	3
<b>Total .. .. .</b>	<b>38</b>

*General Statement of Academic Results.*

It gives me great pleasure to inform the Council that session 1908 was in many respects a very successful year. As a result of the Arts and Science Examinations held by the Home examiners in November, 1908, and of the Examinations in Medicine, held in January, 1909, by examiners resident in New Zealand, 10 of our students have taken the degree of Bachelor of Arts, 3 have taken the degree of Bachelor of Science, 1 has taken the degree of Bachelor of Laws, 9 have taken the degrees of Bachelor of Medicine and Bachelor of Surgery, 1 has taken the degree of Master of Arts without honours, 9 have taken the degree of Master of Arts with honours, 2 have taken the degree of Master of Science, 1 has taken the degree of Master of Laws, and 1 has taken the degree of Doctor of Medicine. This makes a total of 37 degrees for 1908. In Senior Scholarships, we did not do so well last session as usual, although one of our students—Henry Havelock Cornish—was successful in winning two scholarships. But in the highest academic test of all, the winning of first-class honours, 1908 is our record year. On several previous occasions we have gained 4 firsts; 1908, however, is, I believe, the first occasion on which we have gained 5 firsts.

*Otago University Winners of New Zealand University Scholarships (1908).*

Senior Scholarship in English—Henry Havelock Cornish.  
 Senior Scholarship in Mental Science—Henry Havelock Cornish.  
 Medical Travelling Scholarship—Thomas William James Johnson.

*Otago University Students that have taken the Degree of Master of Arts with Honours.*

First class in Latin and French	..	..	..	..	..	1
Third class in Latin and French	..	..	..	..	..	1
Third class in Mental Science	..	..	..	..	..	1
First class in English and French	..	..	..	..	..	2
Second class in English and French	..	..	..	..	..	1
First class in Mental Science	..	..	..	..	..	2
Second class in Latin and English	..	..	..	..	..	1

*Otago University Graduates for 1908, exclusive of Honours Lists already given.*

1. Master of Arts	..	..	..	..	..	..	1
2. Bachelors of Arts	..	..	..	..	..	..	10
3. Bachelors of Science	..	..	..	..	..	..	3
4. Bachelor of Laws	..	..	..	..	..	..	1
5. Bachelors of Medicine and Surgery	..	..	..	..	..	..	9
6. Masters of Science	..	..	..	..	..	..	2
7. Master of Laws	..	..	..	..	..	..	1
8. Doctor of Medicine	..	..	..	..	..	..	1

I have special pleasure in mentioning here that one of our students, Miss Mary H. E. Gordon, was at the last annual meeting of the Senate held in Auckland awarded the Macmillan Brown Memorial Prize, for the best poem on the "Meeting of Milton and Galileo." If this had been an ordinary award, it might have been passed over; but never before in the history of this prize, which was first awarded in 1898, have such warm encomiums been passed on the successful composition. As I have read the poem myself, I have great pleasure in saying that I consider it a remarkable production. Miss Gordon was previously well known to me as a student in my classes, the distinctive feature of her work being essays characterized by great originality and singular imaginative power.

*Winners of Scholarships, Medals, and Prizes in the University of Otago. (Session 1908)*

1. The Richardson Scholarship—William Montgomery Stewart.
2. The Gray Russell Scholarship—Henry Whiteoak Slater.
3. The Women's Scholarship—Mary Shand Watt.
4. The Macandrew Scholarship (political economy)—John Alexander Moore.
5. Sir George Grey Scholarship (science)—George Thomas Maunder.
6. New Zealand Research Scholarship—Alexander Gordon Macdonald.
7. Stuart Prize (physics)—Gladys Christian Mary Cameron.
8. Ulrich Memorial Medal (mineralogy and petrography)—George Thomas Maunder.
9. MacGregor Prize (mental science)—William Marsland Uttley.
10. Parker Memorial Prize (biology)—Francis Oreti MacGibbon.
11. The James Clark Prizes—
 

James Moir Paterson (English),	} equal (mental science).
Henry Havelock Cornish (Latin),	
Francis Boyd Adams	
John Hilton Murdoch	

*Games and Athletics.*

So far, the members of our first fifteen team of Rugby footballers have not recovered from the severe losses they sustained about two years ago, when many of our best footballers left for the Home-country, where they have since given a good account of themselves. The men's and women's University hockey clubs are very flourishing institutions, and have supplied a felt need in the University. In 1908 the men's club again secured the premier position among the Dunedin clubs, and thus won, for the third time, the MacLean Challenge Cup for hockey. Tennis and fives have also been played as usual.

*Successes of former Students.*

In September last Dr. Percy Herring, an old Otago University student, was appointed Professor of Physiology in the ancient University of St. Andrew's. It is a striking proof of the essential unity of Empire that one of the youngest of the British colonies should supply a Professor to the oldest of the Scottish Universities.

One of the most distinguished of our scientific students, Dr. Mellor, has recently published a book on the higher mathematics, which has been recognised by the leading Home journals as a work of altogether exceptional merit.

Mr. R. A. Farquharson, M.Sc., the third New Zealand Rhodes Scholar, has taken the degree of B.A. at Oxford University, with honours in mineralogy and geology.

Several of our University footballers have distinguished themselves in Britain. A number of these are medical students connected with the London hospital teams. Colin Macdonald Gilray, of University College, Oxford, has won his "blue" as an Oxford Rugby footballer, and played in the last annual historical match against Cambridge University, where he met in friendly rivalry George Martin Chapman, of Caius College, Cambridge, a former Otago student, and a son of Judge Chapman.



*Institutions and General Life of the University.*

In addition to the athletic clubs, the other University institutions for the benefit of students, such as the executive of the Students' Association, the Debating Society, the Christian Union, and the Kahanga Club, have met regularly as usual, and have had very successful sessions.

I have very great pleasure in saying that the executive of the Students' Association is a hard-working body, and has the interests of the students keenly at heart. It co-operates very cordially with the Professorial Board in all measures for the benefit of students. Personally, I feel grateful to the executive for the great interest it has shown in University affairs; and I fear that many students do not realise how much they are indebted to this body for looking so well after their wants.

I have great satisfaction in expressing my appreciation of the general tone and good conduct of the students during the past year. The cordial relations existing between the teaching staff and the students have contributed in a marked degree to the great and increasing success and efficiency of Otago University as an educational institution.

Before passing from direct reference to the students, I wish, on behalf of my colleagues and myself, to express our profound regret that last session two very promising medical students were removed by death—I refer to the late David J. M. Dunbar and Lyell Hector. We tender our sincere sympathy to the bereaved relatives of these young men, and also to their fellow-students.

*Chief Needs of the University at the Present Time.*

As the Professorial Board has to report specially to the University Council on our chief needs, I shall say nothing under this head, except to emphasize the fact that our chief need at the present time is two large additional class-rooms. We have now (session 1909) 420 students in attendance. This is an increase of about 100 on last year's attendance; and, as the increase is due mainly to a cause that is likely to be permanent—viz., the desire of the Education Department to connect the Training Colleges as intimately as possible with the University Colleges—the urgent need of additional class-rooms must be apparent to every one. The University of Otago can no longer efficiently discharge its functions with its present altogether inadequate accommodation.

*Outstanding Events in the History of the University during the Year 1908.*

(1.) On the 6th April, 1908, the Dental School, which had been at work for a considerable time before, and the existence of which is due mainly to the untiring effort of Mr. T. K. Sidey, M.P., was formally opened by the Hon. George Fowlds, Minister of Education, the public interest in the event being shown by the fact that the building was packed in every part, and that many citizens were unable to obtain admission. Interesting addresses were delivered by James Allen, Esq., M.P. (Vice-Chancellor of the University of Otago), the Minister of Education, the Prime Minister, Professor Pickerill, T. K. Sidey, Esq., M.P., and Frank Armstrong, Esq. It is only just to acknowledge the generous support given from the first to the Dental School by the Government.

(2.) As the Dunedin Training College is now intimately connected with the University, it should also be noted that, on the same day on which the Dental School building was formerly opened, the Prime Minister laid the foundation-stone of the College in presence of a large and distinguished assembly. The building has since been completed, and, in view of its splendid equipment on the most approved modern lines, it must be regarded as an invaluable addition to our educational institutions. Under the able direction of Professor White, the Training College is sure to prosper.

(3.) During the year under review, the handsome structure designed for the use of the Mining School, which we owe to a grant from the Government, and which is now approaching completion, was in process of erection. We cordially congratulate the Director of the Mining School and his colleagues and students on the prospect of being housed in a building admirably suited for Mining School work.

(4.) Towards the close of last session, after addressing the executive of the Students' Association on the importance of doing something practical with the view of ultimately securing the erection of a students' building, I asked a number of ladies connected with the University to meet me, and urged them to organize a bazaar in aid of the Building Fund. After some discussion, this was agreed to. A few days later a large and enthusiastic meeting of ladies was held in the University library, which was addressed by Mr. E. K. Lomas, M.A., M.Sc. (President of the Students' Association), Miss Charlotte Harrison, B.A., and myself. The meeting pledged itself to organize a bazaar. Mrs. James Allen was elected president of the bazaar committee, and Mrs. Patrick Marshall was elected secretary. The movement was then formally brought under the notice of the University Council, which had previously considered the general question of the importance of a students' building, and which gave its cordial support to the proposal that active measures should now be taken to collect funds. A preliminary meeting of citizens was held in the University library on the 15th December, under the presidency of James Allen, Esq., M.P. (Vice-Chancellor of Otago University). Speeches warmly supporting the movement were delivered by Mr. Allen, Mr. Solomon, K.C., Dr. Benham, Mr. Whampoa Fraser, Professor Pickerill, and Dr. Barnett, and the meeting appointed the following gentlemen as members of the executive: His Honour Mr. Justice Williams, president; Mr. James Allen, M.P., Mr. John Roberts, C.M.G., Mr. Leslie Harris, and Professor Gilray, vice-presidents; the Rev. W. Hewitson, Mr. George Fenwick, Mr. Mark Cohen, the Rev. Andrew Cameron, and Mr. Solomon K.C.; Mr. E. K. Lomas, M.A., M.Sc., and Mr. Whampoa Fraser, hon. secretaries; and Mr. J. M. E. Garrow, B.A., LL.B., hon. treasurer. The following gentlemen were appointed as an advisory committee, to assist the ladies in arranging for the bazaar: Professor Pickerill (convener), Professor Gilray, Dr. Russell Ritchie, Councillor Barr, Mr. J. M. E. Garrow, Mr. W. Downie Stewart, and Mr. E. K. Lomas. I may say that the

ladies promoting the bazaar have shown remarkable enthusiasm in their work, and that there is every reason to believe that the bazaar will be a great success. The advantages of the bazaar will by no means be confined to the amount of money raised; the bazaar will bring the needs of our students prominently before the public, and will greatly increase the interest, not only of the citizens of Dunedin, but of many residents in Otago and Southland, in our University. I should also mention that the students expect to raise a considerable sum of money by means of shilling subscription cards.

(5.) Session 1908 is a memorable year in the history of the Otago University, because on the 14th December the University Council, at a special meeting, adopted a scheme for the distribution of the annual income arising from the Beverly Bequest. The scheme adopted by the Council provides for an annual entrance scholarship, and a scholarship tenable for the remainder of the three-years course to be awarded in alternate years to the candidate that does best in senior mathematics and mechanics or in junior physics. The scheme also provides for scholarships in higher mathematics and in advanced physics, and for the appointment of a Beverly Demonstrator in Physics at an annual salary of £200; and it makes provision for apparatus for the teaching of physics and of mechanics, and for additions to the University library of books dealing with the subjects mentioned in Mr. Beverly's will. The scheme adopted by the Council is so thoroughly on the lines of the late Mr. Beverly's will that it met with practically unanimous approval.

(6.) Another important event in the history of last session was the awarding of the first Otago University Research Scholarship, the Government having founded four of these scholarships in connection with the New Zealand University Colleges. These scholarships are of the value of £100 a year for a period of two years, which may be extended to three years if it is thought desirable. It would be difficult to overestimate the value of these scholarships in connection with the development of the industries of the Dominion. In view of the high price of living in New Zealand, however, I agree with my colleague, Professor Park, in thinking that, in order to attract the ablest students, it would be much better to offer these scholarships every second year instead of yearly, and to raise the annual value of them to £150.

SCHOOL OF MINES: REPORT OF THE DIRECTOR (PROFESSOR JAMES PARK, M.INST.M.M.,  
M.A.INST.M.E., F.G.S.).

The Director reports as follows:—

The Mining School for the year ended 31st December, 1908, showed an attendance of 26 students, of whom 20 were matriculated undergraduates of the University of New Zealand. Of the 26 registered students, 9 were entered for the A.O.S.M. course; 9 for the certificate in geology, 4 for the certificate in practical astronomy, 2 for the certificate in dental metallurgy, and 1 each for the certificate in general metallurgy and assaying. Five students in their final year completed the full course in the division for which they had entered.

*Annual Examinations.*

Twenty-six students presented themselves for examination in 18 subjects, and all passed except one in mineralogy and one in mathematics.

*Diplomas and Certificates.*

Eight graduates of the Mining School, having passed the prescribed classes and presented satisfactory evidence of time spent in practical work, as required by the regulations, were awarded the diploma of Associate, and certificates, as under: Ernest Douglas Isaacson, A.O.S.M. in Mining; Hugh Roy Macdonald, A.O.S.M. in Mining; Alexander Gordon Macdonald, A.O.S.M. in Mining; George Dey, A.O.S.M. in Mining; Philip Hastings M'Douall, A.O.S.M. in Mining; Fred. Wesley Thomas, A.O.S.M. in Metallurgy; Arthur Mosley, A.O.S.M. in Metallurgy; Philip Hastings M'Douall, A.O.S.M. in Metallurgy; Hugh Roy Macdonald, Certificate of Land and Mine Surveyor; Edward Fletcher Roberts, Certificate of Land and Mine Surveyor; Fred. Wesley Thomas, Certificate of Metallurgical Chemist and Assayer; Robert Lee, A.O.S.M. in Mining, and Certificate of Land and Mine Surveyor; Harold Hamilton, A.O.S.M. in Geology; William Row Frost, A.O.S.M. in Mining; Isaac William Henry Sergeant, A.O.S.M. in Metallurgy; John Francis M'Padden, A.O.S.M. in Metallurgy; and Algernon Spencer, A.O.S.M. in Metallurgy, and Certificate as Land and Mine Surveyor.

The diplomas granted in the divisions of mining, metallurgy, and geology since 1887 are as follows:—

					Issued up to end of 1907.	Issued in 1908.	Total.
Mining	..	..	..	..	82	7	89
Metallurgy	..	..	..	..	42	6	48
Geology	..	..	..	..	14	1	15
					—	—	—
					138	14	152

*Post-graduate Work.*

The Government Research Scholarship for Otago for the year 1908, of the value of £100 a year, tenable for two years, was awarded to Mr. A. Gordon Macdonald, A.O.S.M., B.E.(Min.), who is as present engaged in an investigation on the "Distribution and Economic Value of the Brown Coals of Otago." The Berwick-Moreing post-graduate place for 1908 was awarded to Mr. Norman Shand, A.O.S.M., who has been placed at the New Zealand Talisman Mine, at Karangahake.

*Appointments obtained in 1908.*

The following old students of the Mining School obtained responsible positions during the past year: Charles A. Cotton, A.O.S.M., M.Sc., Director, Coromandel School of Mines; Patrick Fitzgerald, A.O.S.M. Consulting Engineer, Collins Street, Melbourne; A Gordon Macdonald, Acting-director, Westport School of Mines; J. A. Bartrum, A.O.S.M., M.Sc., Assistant Geologist, New Zealand Geological Society; Herbert Black, A.O.S.M., Metallurgist, Lady Miller Mine, Norseman, West Australia; Norman R. Fisher, A.O.S.M., B.E. (Min.), General Manager, Haileybury Mines, Ontario; G. Aubrey Gow, A.O.S.M., Assistant Manager, Miguboud, Maatschappy, Sumatra; Herbert Black, Metallurgist, Chaffers G.M.C. (Limited), Boulder, West Australia; J. Allan Thomson, A.O.S.M., B.A., B.Sc., Lecturer in Geology, Victoria College, Wellington; J. E. Williams, A.O.S.M., Consulting Engineer, Sir J. Pollock Company, (Limited), London; J. Campbell Neill, A.O.S.M., Superintendent Government Prospecting Parties. It is not always easy, or possible, to obtain information relating to the places to which old students in foreign places are appointed, but so far as obtainable the appointments secured during the past eight years—the period in which a record has been kept—is as follows: 1901, 8; 1902, 7; 1904, 11; 1905, 13; 1906, 14; 1907, 16; 1908, 11: total, 88. Altogether 88 responsible places have been obtained by 72 individual students. The occupations represented in the above appointments are as under: Consulting engineers, 7; mining engineers, 9; assistant mining engineers, 5; general mine-managers, 4; mine-managers, 9; inspectors of mines, 2; geological surveyors, 5; mine-surveyors, 5; land and topographical surveyors, 2; metallurgists, 15; dredgemasters, 2; directors of mining schools, 12; lecturers at mining schools, 11: total, 88.

*New Mining School Building.*

The new building is a handsome structure containing eight laboratories, three lecture-rooms, a museum, students' library, photographic room, store-rooms, lavatories, and cellars. It is lit throughout with electric light, and when the fittings and apparatus are placed in position it will rank among the best equipped and commodious mining schools in Australasia. It is hoped that everything will be ready for the formal opening in June of this year. The occupation of the new buildings will improve our local status. The Otago School of Mines has always occupied a prominent place among Australasian mining institutions, and it is pleasing to find that it possesses some distinction even further abroad. At the last Mining Conference, held at Chicago, the Otago School of Mines, in the discussion that took place on the training of mining engineers, was grouped among the leading mining schools in the English-speaking world.

*Course in Electrical Engineering.*

The New Zealand University, on the recommendation of the English examiners in mining engineering, sitting in conference in London at the end of 1906, has very wisely added applied electricity to the course for the B.E. degree, and it will now be necessary for the Otago School of Mines to make provision for the new requirement. The applications of electricity to mining and metallurgy are many, and daily increasing, and in all up-to-date mining schools instruction in practical electricity forms an integral part of the regular course. This will necessitate a revision of the existing mining and metallurgical associate courses, which have now been in use without amendment for eight years. Experience has shown that improvements can be effected in several directions, and steps will be taken at an early date to prepare the amended courses for incorporation in the calendar for 1910. Applied electricity cannot be taught without electrical machines and apparatus, and until these are procured our mining students will be required to take the course in electrical engineering given at the Dunedin Technical School, where a good course of instruction is taught by Mr. E. E. Stark, D.Sc., E.E., M.A.M.Inst. E.E. Satisfactory arrangements with this end in view have already been made with Mr. A. Marshall, B.A., Director of the Technical School.

*Tanna Hill Geodetic Station.*

This station was linked up by triangulation with the Government geodetic initial station A, at Taieri West, the latitude and longitude being reduced in terms of the Carrington spheroid. Bearings taken in terms of Taieri West meridian, cleared of convergence were checked by observations to A Hydri, B Trianguli (Aust.), and S. Octantis, the results showing a difference of only 3 sec. of arc as between the computed and observed bearings. The following data are recorded for the information of surveyors and engineers: Tanna Hill, latitude 45 deg. 52 min. 11.3 sec. S.; longitude 170 deg. 32 min. 19.0 sec. E.; convergence of meridian Tanna Hill to Taieri West, initial 10 min. 0.01 sec. E.; bearing Tanna Hill to Flagstaff, 314 deg. 49 min. 57 sec.; bearing Tanna Hill to Signal Hill, 63 deg. 10 min. 30 sec.; bearing Tanna Hill to axis of clock in Town Hall tower, Octagon, 225 deg. 46 min. 57 sec. (All bearings are given in terms of Taieri West initial.)

With the object of facilitating the computation of differences of latitude and longitude and the reversed geodetic azimuth between trigonometrical stations, the author has computed the value, in links, of a second of arc of latitude and longitude for every degree and half degree of latitude from the equator to 60 deg. latitude. The values are set out in terms of a spheroid with a compression of 1 in 294, and are contained in a table on one page of the author's "Text-book on Theodolite Surveying and Levelling" in both the English and American editions. At the present time differences of latitude and longitude and reversed azimuths are computed in India by the Everest spheroid, in Great Britain by the Clarke spheroid of 1858, and in the United States of America by the Clarke spheroid of 1866, involving in each case the use of long and elaborate tables of constants. The author's table gives results that for minor and major triangles do not differ more than a fraction of a second with those obtained by the use of the longer P.Q.R. tables involving the application of three or four constant factors, and effects a considerable saving of time, besides diminishing the tendency to err in computation.

*Laboratory.*

During the past year 71 samples of ore and mineral substances were assayed for the public by Mr. Waters at schedule rates, and in the same period 47 samples of rock, mineral, &c., were examined and reported on by Professor Park, 58 by Professor Marshall, and 50 by Mr. Waters—all free of charge.

*Original Research by the Staff.*

By Professor Park: (1) "Text-book of Theodolite Surveying and Levelling"; English edition—Charles Griffin and Co. (Limited), London; American edition—J. B. Lippincott Company, Philadelphia. (2) "Geology of Queenstown District of Lake Wakatipu Division"; Bulletin No. 7. New Zealand Geological Survey; illustrated with 38 plates, 33 figures, and 14 coloured maps and plans; Government Printer, Wellington. (3) "An Outline of New Zealand Geology"; now in press. (4) "Notes on the Geology of Hauraki Goldfields"; jubilee number of *Australian Mining Standard*, 18th November, 1908; also *New Zealand Mines Record*. (5) "On the Distribution of Ores in Horizontal Lines in Vertical Depth"; *Trans. N.Z. Inst.*, vol. xxxix, p. 90. (6) "Notes on the Formation of Zones of Secondary Enrichment in Certain Metalliferous Lodes"; *Trans. N.Z. Inst.*, vol. xxxix, p. 93. (7) "Notes on the Origin of Metal-bearing Solutions concerned in the Formation of Ore-deposits"; *Trans. N.Z. Inst.*, vol. xxxix, p. 98.—Professor Marshall: (1) "Report of Research Committee on Glacial Action in Australasia"; *T.A.A.A.S.*, vol. xi, p. 283. (2) "Distribution of the Igneous Rocks of New Zealand"; *T.A.A.A.S.*, vol. xi, p. 366. (3) "Geology of Centre and North of North Island, New Zealand"; *Trans. N.Z. Inst.*, vol. xl, p. 79. (4) "The Gabbro of the Dun Mountain, Nelson"; *Trans. N.Z. Inst.*, vol. xl, p. 320. (5) "The Vicinity of Lake Te Anau and Milford Sound"; "*Geographical Journal*," London, vol. xxxii, p. 363.—Mr. Waters, A.O.S.M.: "The Present Status of Coal-power"; pp. 59; illustrated; *New Zealand Mines Record*, 1908, and pamphlet; Government Printer, Wellington.

*Acknowledgments.*

In conclusion, the Director of the School of Mines wishes to place on record his appreciation of the zeal and ability with which Professor P. Marshall, Mr. W. B. Waters, and the assistants have carried out the work of their several departments during the year covered by this report.

The report was referred to the Mines Committee.

## UNIVERSITY MUSEUM: REPORT OF THE CURATOR (DR. W. BENHAM, D.Sc., LOND., M.A., F.Z.S.).

*The Hocken Wing.*

This important addition to the Museum and to the City of Dunedin is now completed. It is a distinctly handsome building, and the lighting is surprisingly good. I instructed the architect to use prismatic glass for the windows, which I had noticed highly recommended by museum experts in Europe and America; the result surpasses our expectation. The Exhibition Hall, on the ground floor, which measures 75 ft. by 40 ft., and is 15 ft. high, is illuminated by windows at each end and along one side. There is no dark corner in the hall; every part is equally and excellently lighted, and no shadows are cast, which will be of great advantage when the cases are placed in position. The picture gallery above is similarly lighted, but the library has clear glass windows on two sides, and being a smaller room is equally well lit. A gas-stove has been placed in this room for the convenience of readers in the winter. The fittings for the upper floor, assigned for the reception and exhibition of Dr. Hocken's books and pictures, maps, &c., are now being made. The Hocken Library Trustees have resolved that when the gift is installed a public opening will take place, at which the collection and building will be formally transferred to the University Council. The basement, which I propose to have fitted partly as a laboratory, partly as a museum for teaching purposes, so that the specimens may be more accessible to us than at present, is also illuminated on one side by prismatic glass, while the windows on the east side, below which the work benches will be placed, have clear glass.

*Museum Work.*

In order to allow communication between the existing halls and the new wing, it was necessary to remove the long cases from the north wall on each floor. The long mammal-case, on the ground floor, was cut into two portions, which were then moved apart and re-erected on each side of the 10 ft. doorway. The work of making this alteration was very carefully and well done by Messrs. Hayward Bros. The two cases containing the native fishes, on the gallery above, had to be removed to the old Art Gallery, as they are too long to remain in the gallery after the entrance had been cut through. This work necessitated, of course, the emptying and rearranging of the cases, which occupied myself and the taxidermist for some weeks.

*Additions to the Exhibits.*

During the summer session I held a class of the natural history of New Zealand for teachers, and in order to illustrate the lectures and demonstrations I had a considerable number of new insects, spiders, and crustaceans mounted and placed on the shelves. Of insects there were added twenty species, some of which are represented by preparations illustrating their life history, some fifteen crus-

tacea, mostly common aquatic and terrestrial *Amphipoda* and *Isopoda*; several *Myriapods* and spiders, including the tubes formed by one of our trap-door spiders, *Arbanitis gilliesii*. The mollusca received about two dozen new species, many rare and new to science, presented to the Museum by Mr. Suter, as well as the interesting *Xenophora pallidula*, whose spiral shell is partially concealed from its enemies by the attachment by the owner of fragments of other shells, &c. Two corals were placed in the case, one of which, a hydrocoralline (*Labiopora*), from Preservation Inlet, has not been recorded since its description by Gray in 1872, from a specimen collected during Ross's voyage to the antarctic regions. Of Echinoderms I was able to add five species, of which three are new to science, the result of my examination of the material obtained during the "Nora Niven" expedition.

The additions to the general zoology section are of less importance. The lama, received a year or two ago, has been set up in a very lifelike attitude; a box-tortoise (*Cistudo*) and a soft-shelled tortoise (*Trionyx*), skulls of lemur and a mole, stuffed rat and weasel, and a few other specimens.

The dentition series has been increased by a skull of the pig, with bone removed to show the series of teeth, complete sets of human teeth, the milk and permanent, are useful to the dental students.

The palaeontological department now contains a set of models of the shells of Brachiopods, showing the arm-loop, so difficult for students to grasp, so important from a systematic point of view. A set of casts of fossil fruits and flowers of Carboniferous plants, though not in the public portion of the Museum, are in the laboratory for illustration of the lectures on the subject. A series of fossil Cephalopods has been placed in the cases. No novelties have been placed on exhibition in the department of ethnology, owing to lack of cases.

#### *Work of the Taxidermist.*

The enumeration, even if given in detail, of the numerous specimens added to the collection would fail to indicate the amount of work performed by the taxidermist. Every specimen mounted needs a greater or less amount of thought as to the way in which it shall be displayed so as to exhibit its characters in the best manner. Dexterous manipulation is required so as to carry this idea out, and it is often necessary to make a number of trials before the specimen is mounted to our satisfaction; the whole work demands patience, skill, and a keen eye for effect. I think any one who will look at the native insects and other animals mounted in alcohol will admit that they reflect the greatest credit on the taxidermist. One of the most noticeable additions to the foreign zoological series is the stuffed lama, the domesticated variety of the huanaco, of Peru. Many people suppose it is a simple thing to stuff and mount a bird or mammal; let them compare the work in our Museum with the specimens seen in private houses, and they should be able to note the vast superiority of the work of a skilled taxidermist over that of an amateur. Take this lama for example: Before it was skinned Mr. Jennings took various careful measurements for his guidance at a later stage of the work. When the skin has been cured, a "mannikin," or wooden frame, roughly representing the body, is made; iron supports of a suitable length must be bent at the proper angle to form the axis round which the legs will be built. The skin has then to be placed in position, and a good deal of tow must be stuffed between it and the wooden mannikin, so as to produce the soft curves of the body, and constant reference has to be made to a photo or good picture of the living animal in order to get the true shape and attitude. It is now that the measurements of girth, length of body, legs and neck, and so on, are used, in order that the creature may retain as far as possible the true proportions and correct form. All this requires much experience and training, as well as accuracy of eye, deftness of finger, combined with patience and persistence. Again and again, it may be, the pose of neck or bend of leg has to be altered, but the result is well worth the time and labour bestowed upon it. Mr. Jennings has also carried out several pieces of osteological work during the year; the skeletons of the armadillo and the hyrax have been remounted, and the skull of the young elephant repaired. The excavation of the bones of skulls added to the dental series has required much delicate work.

#### *Living Tuataras.*

During the year I obtained permission from the Minister in Charge of Internal Affairs to receive three living tuataras for transmission to Professor Sedgwick, of Cambridge. These I kept alive in the Museum for some weeks, and they provoked so much interest that I determined to retain one as a permanency. This unique reptile, confined now to a few islands off the northern part of the Dominion, is an object of constant study to the public.

#### *The Reports.*

The publication and distribution of the annual report, even in the unattractive form of a reprint from the daily paper, has led to the receipt of valuable exchanges from museums and scientific institutes in various parts of the world, several of which have sent in exchange their scientific publications to the enrichment of the library. I hope that in the near future the Council will permit me to have an illustrated report in a more imposing form prepared for distribution to museums throughout the world.

#### *Summary of Acquisitions.*

(a.) *New Zealand Zoology.*—The register contains 222 entries during the year, which include about 80 species collected by myself during a visit to Stewart Island early in 1908; about 30 species of insects collected in the North Island by Mr. R. Browne, a former student of this University; a large number of specimens presented by members of the teachers' class; a small collection of moths, flies, and beetles from the Auckland Islands, presented by Mr. G. V. Hudson; and about two dozen species of rare deep-sea shells from Mr. Suter. Many of these are, of course, duplicates of those already

in the collection. Many are not exhibited; they are stored for work in the future, such as Mr. D. Miller is at present doing, in working out our native flies. Others are useful for exchange with workers or museums in other quarters of the globe; but all are most welcome.

(b.) *Foreign Zoology*.—There are only 24 entries, which include specimens from Harvard University received in exchange for a set of our common Echinoderms. Mr. G. M. Thomson gave a set of Australian crabs, and I have received the eggs of a few introduced birds.

(c.) *Palæontology, Botany, &c.*—In these departments there are only 19 entries—viz., some fossil Cephalopods purchased for use by the students, wax models of the fruits and flowers of certain Carboniferous plants, a few minerals, and a number of fossils.

(d.) *Ethnology, &c.*—The five entries in the register comprise a North Queensland painted shield, an old flint-lock pistol, a Japanese zither (presented by Miss Busck), Canadian mocassins (presented by Mrs. Sale), and dies of seals struck in commemoration of Sir Walter Raleigh (presented by Mr. Theomin). Among articles deposited I may mention a fine head and horns of a koodoo (loaned by Mr. F. W. Knight) and a curious Norwegian fiddle in box (by Miss Busck), a kava-bowl from Fiji, and bows and arrows from the Solomon Islands.

#### *Remounts, Repairs, &c.*

In addition to the work of setting up new specimens, a good deal of work is thrown on the taxidermist by the need of constantly overhauling the collections. Alcohol evaporates, and must be replaced from time to time; skeletons are apt to be damaged, and must be repaired; the cases have to be examined and cleaned; while the addition of a new specimen entails perhaps the rearrangement of an entire case. The insect-cabinets must be looked over and new naphthaline added. These things are part of the routine work of the taxidermist, and the work has been carried out with every care for the preservation of the specimens.

#### *General.*

An increasing demand on the time of the Curator by people asking for the identification of specimens or for information of one kind and another relating to natural history indicates a growing interest in the subject, and I believe that this is not entirely unconnected with the fact that the Museum is used as a means of education by a number of teachers, both in town and country.

The Museum has, as usual, been open daily (Sundays included) throughout the year, with the exception of Christmas Day, Good Friday, and Labour Day. It is not only the children that visit us; the grown-ups are quite as numerous, if indeed they do not outnumber the youngsters. For this the University deserves more credit than the community seems to give it. The Museum is essentially a University institution, whose funds available for the upkeep and improvement are very slender. It is nevertheless freely open to the public, from which it receives no grant or subsidy.

#### *List of Donors of New Zealand Specimens.*

I have sent formal acknowledgment and thanks to the thirty donors of specimens of natural history, and I take this opportunity of once more stating that such specimens are always welcome:—

Miss Adams, Otokia—wetas.

E. J. Bell, Shag Point—marine spiders and nests.

Captain Bollons (G.s. "Hinemoa")—large shells from the Three Kings.

R. Browne, Wanganui—various insects, spiders, peripatus, mudfish, &c.

F. E. Buckland, Akaroa—*Ichneumon* flies.

E. Burn, Waipahi—various insects, spiders, &c.

Miss Chalmers—earthworm.

W. K. Chambers—worms, shells, &c., from Campbell Island.

Professor Chilton, Christchurch—marine worms.

Miss Christie, Outram—wetas and fossil fern leaves.

Miss Dodd, Mosgiel—*Ichneumon* fly.

J. Findlay, Hampden—stick insect.

Fish Hatchery Board, Portobello—larvæ of flounders, eggs of octopus, various fish, and Annelids.

Dr. F. Fitchett, Dunedin—beetle in laurel.

Dr. Fulton—nest of tui.

A. Hamilton, Director, Dominion Museum—moths, in exchange.

G. Howes, F.E.S., Wellington—moths.

W. Hubbard—vegetable caterpillar.

G. V. Hudson, F.E.S., Wellington—beetles, flies, and moths from the Auckland Islands.

James Jeffrey, Anderson's Bay—larva of lamprey, shells, several insects, spiders, &c.

J. Matthieson, Middlemarch—wetas.

D. Miller, Dunedin—flies and other insects.

Miss J. Miller, Canvastown—insects, fossils, &c.

J. Nelson, Pukeuri—trap-door spider and nest.

E. Reynolds, Dunedin—caterpillar of moth.

Professor Sale—birds' eggs.

W. W. Smith, New Plymouth—earthworms.

S. G. Stanton, Dunedin—beetles from the North Island.

H. Suter, Auckland—shells, earthworms, Annelids, &c.

H. Travers, Wellington—*Ooperipatus*.

THE DENTAL SCHOOL: REPORT OF THE DIRECTOR (PROFESSOR H. PERCY PICKERILL, M.B., Ch.B., B.D.S., L.D.S., Eng.)

THE school has continued to progress during the past twelve months, During this time there have been 19 students in attendance, 8 of whom are taking the full course for the B.D.S. degrees, and the remaining 11 being post-graduate students.

*Staff.*

Mr. Dunlop has resigned from his position on the staff, and Mr. C. W. Hay has been granted twelve months leave of absence, in order to visit Europe. An assistant in mechanical dentistry, Mr. Hawkins, has been added to the staff. Mr. Hawkins came from England, and commenced his duties at the beginning of January, and has continued to fulfil them with complete satisfaction. Students are now (especially those working for the degree) able to have more supervision and assistance in the important subject of mechanical dentistry than was possible before, and their comparative progress has been very marked.

*Clinical Work.*

The number of fresh patients placed on the books of the school during the year was 639. The total number of operations performed during the year was 3,381. Of this number, 850 were permanent fillings, 500 were simple extractions, 183 anæsthetic cases, and 260 operations in connection with the insertion of 128 dentures. The number of patients attending continues to be more than can be adequately dealt with.

*Equipment.*

Since the last report the Government have voted a sum of £2,100 for the proper equipment of the school. This will enable the school to be equipped in a thoroughly modern manner with electrical appliances and pathological laboratory, a sufficiency of suitable operating chairs, as well as in a number of other ways bringing the school quite up to date.

THE MEDICAL SCHOOL: REPORT OF THE DIRECTOR (PROFESSOR J. SCOTT, M.D., M.R.C.S.).

THE number of students attending classes this winter is 92. Of these, 8 belong to the Dental School. Eleven of our students passed their final examination this year, and have received the degree of M.B., Ch.B., from the New Zealand University. Most of these are now acting as house surgeons to the larger hospitals throughout the Dominion, while some have gone to England to continue their studies. The degree of M.D. was conferred upon one candidate, Dr. Patrick. The travelling scholarship offered by the New Zealand University has been awarded to Dr. Johnson, who is at present one of the house surgeons to the Dunedin Hospital.

The clinical laboratory recently instituted at the Hospital is doing good work under the care of Dr. Roberts, and is found to be of use not only to the medical staff and to the students, but also to the practitioners of the town. A lecture-room has also been provided at the Hospital, and teaching is now being carried on under much more satisfactory conditions than in former years.

Dr. Batchelor, Lecturer on Midwifery and Diseases of Women, has resigned his position. His successor has not yet been appointed.

ACCOUNTS AND BALANCE-SHEET.

BALANCE-SHEET of the UNIVERSITY OF OTAGO for the Year ending 31st March, 1909.

		Receipts.		Expenditure.		Balance on 31st March, 1909.			
	£	s.	d.	£	s.	d.	£	s.	d.
Balance, 31st March, 1908	..	474	7	8	..	9,025	0	0	..
Part debenture	..	8	16	7	..	5,450	0	0	..
	..	483	4	3	..	3,575	0	0	..
Rents—									
Burwood and Marara	..	1,300	0	0	..	868	0	0	..
Barewood	..	1,125	0	0	..	..	..	..	..
Benmore	..	3,000	0	0	..	..	..	..	..
Forest Hill, Hay	..	40	0	0	..	868	0	0	..
Forest Hill, Miller	..	8	6	8	..	..	..	..	..
Ran 79c, Barewood	..	17	16	3	..	..	..	..	..
Castle Street Reserve	..	273	0	0	..	..	..	..	..
Professors' houses	..	235	0	0	..	..	..	..	..
	..	5,999	2	11	..	..	..	..	..
Government Specialisation Fund	..	2,000	0	0	..	..	..	..	..
Transferred to Dental School Account, £500; transferred to Medical School Account, £1,500	..	2,000	0	0	..	..	..	..	..
Interest on invested funds	..	597	10	0	..	..	..	..	..
Transferred to Wolf Harris Endowment Fund	..	94	0	0	..	..	..	..	..
Hot-water supply (refund)	..	..	..	..	..	28	14	11	..
Church Board of Property	..	..	..	..	..	1	2	3	..
Goldfields revenue	..	1,800	0	0	..	18	18	10	..
Timber licenses	..	43	15	6	..	11	2	0	..
Incidental receipts	..	4	18	0	..	95	0	5	..
Interest on Mrs. Lothian's legacy	..	7	8	3	..	177	4	6	..
Beverley Trust (cash)	..	30	0	0	..	50	1	10	..
	..	919	13	8	..	..	..	..	..
Fees	..	4,118	1	1	..	..	..	..	..
Less transferred to Medical School Account, £117 9s.; less transferred to School of Mines Account, £55 13s.	..	233	2	0	..	..	..	..	..
Analysis fees	..	..	..	..	..	..	..	..	..
	..	3,884	19	1	..	..	..	..	..
	..	50	0	0	..	..	..	..	..
Salaries, professors and lecturers	..	..	..	..	..	..	..	..	..
Less—Museum (Curator), £250; Medical School, £3,000; Dental School, £500; School of Mines, £1,700	..	..	..	..	..	..	..	..	..
Salaries, assistants	..	..	..	..	..	..	..	..	..
Less—School of Mines, £78; Medical School, £28 2s. 6d., £221 5s., £132; Dental School, £131 4s. 2d.; Museum, £277 8s. 4d.	..	..	..	..	..	..	..	..	..
Salaries, office and janitor	..	..	..	..	..	..	..	..	..
General expenses	..	..	..	..	..	..	..	..	..
Water, fuel, and light	..	..	..	..	..	..	..	..	..
Repairs (main building)	..	..	..	..	..	..	..	..	..
Insurance	..	..	..	..	..	..	..	..	..
Less—Dental School, £2 13s. 6d., Medical School, £11; School of Mines, £1 4s.; Museum, £7 6s.	..	..	..	..	..	..	..	..	..
Apparatus and material—									
Biological	..	..	..	..	..	..	..	..	..
Anatomical	..	..	..	..	..	..	..	..	..
Chemical Laboratory	..	..	..	..	..	..	..	..	..
Physical	..	..	..	..	..	..	..	..	..
Physiological	..	..	..	..	..	..	..	..	..
Printing and stationery	..	..	..	..	..	..	..	..	..
Less—Medical School, £3 4s. 4d.; School of Mines, £2 1s.; Dental School, £42 10s. 6d.; Museum, £2 6s.	..	..	..	..	..	..	..	..	..
Class fees (professors and lecturers, and refunded)	..	..	..	..	..	..	..	..	..
Repairs to professors' houses	..	..	..	..	..	..	..	..	..
Bank charges	..	..	..	..	..	..	..	..	..
Government commission (Land Fund)	..	..	..	..	..	..	..	..	..
Transferred to Interest Account	..	..	..	..	..	..	..	..	..
Library	..	..	..	..	..	..	..	..	..
Building Account	..	..	..	..	..	..	..	..	..
Subscription to Maternity Home	..	..	..	..	..	..	..	..	..
Law-costs	..	..	..	..	..	..	..	..	..
Transferred to School of Mines	..	..	..	..	..	..	..	..	..
Dental School	..	..	..	..	..	..	..	..	..
Medical School	..	..	..	..	..	..	..	..	..
Museum Account	..	..	..	..	..	..	..	..	..
Land Sale Investment Account	..	..	..	..	..	..	..	..	..
Balance on 31st March, 1909—									
Current Account	..	..	..	..	..	..	..	..	..
Beverley fund of fixed deposits	..	..	..	..	..	..	..	..	..
	..	388	0	1	..	..	..	..	..
	..	668	15	0	..	..	..	..	..
	..	1,056	15	1	..	..	..	..	..
	..	£13,732	11	8	..	..	..	..	..





## TAIERI SCHOLARSHIP ACCOUNT.

				£	s.	d.					£	s.	d.		
Balance, 31st March, 1908—							Proportion of bank charge	..	..				0	1	0
Debentures .. ..	..	..	..	316	7	8	Balance, 31st March, 1909—						316	7	8
Current account .. ..	..	..	..	48	11	4	Debentures .. ..	..	..	..	..	..	61	6	9
Interest .. ..	..	..	..	12	16	5	Current account .. ..	..	..	..	..	..			
				<u>£377 15 5</u>									<u>£377 15 5</u>		

## WOMEN'S SCHOLARSHIP ACCOUNT.

				£	s.	d.					£	s.	d.		
Balance, 31st March, 1908—							Scholarship .. ..	..	..				20	0	0
Debentures .. ..	..	..	..	601	19	5	Proportion of bank charge	..	..				0	1	0
Current account .. ..	..	..	..	47	15	0	Balance, 31st March, 1909—						601	19	5
Interest .. ..	..	..	..	24	3	10	Debenture .. ..	..	..	..	..	..	51	17	0
				<u>£673 18 3</u>			Current account .. ..	..	..	..	..	..	<u>£673 18 3</u>		

## MACANDREW SCHOLARSHIP ACCOUNT.

				£	s.	d.					£	s.	d.		
Balance, 31st March, 1908—							Proportion of bank charge	..	..				0	2	6
Debentures .. ..	..	..	..	793	19	1	Balance, 31st March, 1909—						793	19	1
Current account .. ..	..	..	..	159	6	11	Debentures .. ..	..	..	..	..	..	192	3	5
Interest .. ..	..	..	..	32	19	0	Current account .. ..	..	..	..	..	..	<u>£986 5 0</u>		
				<u>£986 5 0</u>									<u>£986 5 0</u>		

## MACGREGOR SCHOLARSHIP ACCOUNT.

<i>Receipts.</i>				£	s.	d.	<i>Expenditure.</i>				£	s.	d.		
Balance, 31st March, 1908—							Scholarship .. ..	..	..				4	0	0
Debentures .. ..	..	..	..	124	19	4	Proportion of bank charge	..	..				0	0	5
Current account .. ..	..	..	..	7	1	8	Balance, 31st March, 1909—						124	19	4
Interest .. ..	..	..	..	5	1	10	Debentures .. ..	..	..	..	..	..	8	3	1
				<u>£137 2 10</u>			Current account .. ..	..	..	..	..	..	<u>£137 2 10</u>		

## STUART PRIZE FUND ACCOUNT.

				£	s.	d.					£	s.	d.		
Balance, 31st March, 1908—							Holder .. ..	..	..				3	0	0
Debentures .. ..	..	..	..	100	0	0	Proportion of bank charge	..	..				0	0	3
Current account .. ..	..	..	..	8	7	11	Balance, 31st March, 1909—						100	0	0
Interest .. ..	..	..	..	4	9	6	Debentures .. ..	..	..	..	..	..	9	17	2
				<u>£112 17 5</u>			Current account .. ..	..	..	..	..	..	<u>£112 17 5</u>		

## ULRICH PRIZE FUND ACCOUNT.

				£	s.	d.					£	s.	d.		
Balance, 31st March, 1908—							Proportion of bank charge	..	..				0	0	3
Debentures .. ..	..	..	..	65	0	0	Balance, 31st March, 1909—						65	0	0
Current account .. ..	..	..	..	11	11	7	Debentures .. ..	..	..	..	..	..	14	3	3
Interest .. ..	..	..	..	2	11	11	Current account .. ..	..	..	..	..	..	<u>£79 3 6</u>		
				<u>£79 3 6</u>									<u>£79 3 6</u>		

## PARKER MEMORIAL PRIZE FUND ACCOUNT.

				£	s.	d.					£	s.	d.		
Balance, 31st March, 1908—							Balance, 31st March, 1908—						0	0	7
Debentures .. ..	..	..	..	50	0	0	Current account .. ..	..	..	..	..	..	0	0	2
Interest .. ..	..	..	..	1	19	7	Proportion of bank charge	..	..				0	0	2
Cash .. ..	..	..	..	0	0	7	Balance, 31st March, 1909—						50	0	0
				<u>£52 0 2</u>			Debentures .. ..	..	..	..	..	..	1	19	5
				<u>£52 0 2</u>			Current account .. ..	..	..	..	..	..	<u>£52 0 2</u>		





## F. REPORT OF CANTERBURY AGRICULTURAL COLLEGE, 1908.

("The Canterbury College and Canterbury Agricultural College Act, 1896.")

[In continuation of E.-11, 1908.]

*Visitor.*—His Excellency the Governor.

### *Board of Governors.*

Appointed by His Excellency the Governor—E. Richardson.

Elected by members of the Legislature—Hon. E. C. J. Stevens (Chairman); M. Murphy, F.L.S.; and H. A. Knight.

Elected by governing bodies of agricultural and pastoral associations—T. Blackley; J. McMillan; and G. Jameson.

### *Staff.*

*Director.*—W. Lowrie, M.A., B.Sc.

*Lecturer on Veterinary Science.*—A. Taylor, M.A., M.R.C.V.S.

*Lecturer on Chemistry.*—G. Gray, F.C.S.

*Lecturer on Biology.*—F. W. Hilgendorf, M.A., D.Sc.

*Farm Overseer.*—W. Street.

## REPORT OF THE DIRECTOR.

SIR,—

I have the honour by direction of the Board of Governors, in pursuance of "The Canterbury College and Canterbury Agricultural College Act, 1896," to submit the following report on the work of this institution for the year ending 31st December, 1908, and the balance-sheet for the same period.

The attendance of students was maintained at or near the limit of accommodation throughout the year, and altogether fifty-five students were enrolled, or one less than the preceding year. The work of the students, both in the College and on the farm, was quite satisfactory, and in the stock-judging competition for young farmers, arranged by the Canterbury Agricultural and Pastoral Association at its November show, students from the College obtained two first and two second prizes among a large number of competitors. Eight students completed the course in December, and, of these, five satisfied the examiners, and were awarded the diploma of the College. Their names and addresses are as follows: E. N. Grimwade, Auckland (gold-medallist); A. Ariell, Auckland; E. B. Warburton, Palmerston North; G. Price, Hawke's Bay; G. W. Gilbert, England.

During the year the buildings and implements were kept in their usual efficient state, and new sheep-yards and sheep-dip were constructed; extra shearing-accommodation was also provided, and the water-supply to the College was augmented. The College land has been generously and thoroughly farmed. Several trials were made of the relative values of manures and seeds, these experiments—as, indeed, every other operation of the farm—being conducted on commercial principles. The results of the experiments were of considerable interest to the farmers, who met at the College at the invitation of the Board of Governors at the annual distribution of the prizes in December.

The farm stock has maintained a high level of merit, as is evidenced by the fact that the College stock won the Macfarlane Challenge Shield, awarded by the Canterbury Agricultural and Pastoral Association to the competitor gaining the most points for live-stock of all kinds at its annual November show. The English Southdown Breeders' Cup and several other prizes also came to the College. These prizes were all won by stock bred on the College farm.

Early in the year arrangements were made to let on fourteen-year leases most of the college lands situated at Hakataramea, and this step has resulted in an increased income to the College. Mr. W. Lowrie, who was appointed to the position of Director to the College in 1901, resigned at the end of 1908, to proceed to the duties of Director of Agriculture to the Government of Western Australia. His departure was extremely regretted by the Board of Governors and by all sections of the farming community, and the many eulogistic speeches and handsome presents he was the recipient of indicate that by every one his connection with the College was regarded as having been of the greatest benefit to the institution.

The Hon. the Minister of Education, Wellington.

I have, &c.,

R. E. ALEXANDER, Director.





