1899.

NEW ZEALAND.

EDUCATION:

THE UNIVERSITY OF OTAGO.

("THE UNIVERSITY OF OTAGO ORDINANCE, 1869.")

[In continuation of E.–7, 1898.]

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

Visitor.—His Excellency the Governor.

Council.

Appointed by His Excellency the Governor in Council—His Honour Mr. Justice Williams, M.A., LL.M. (Chancellor); E. B. Cargill (Vice-Chancellor); R. Burns, F.R.C.S.; Hon. W. H. Reynolds, M.L.C.; T. M. Hocken, M.R.C.S.; G. G. Russell; J. Allen, B.A., M.H.R.; H. Clark.

Elected by graduates—D. White, M.A.; Rev. A. Cameron, B.A.

Elected by the professors—Professor G. S. Sale, M.A.; Professor J. Shand, M.A., LL.D.

Professors.

Classics, G. S. Sale, M.A.; Natural Philosophy, J. Shand, M.A., LL.D.; Chemistry, J. G. Black, M.A., D.Sc.; Anatomy and Physiology, J. H. Scott, M.D., M.R.C.S.; Mining and Mineralogy, G. H. F. Ulrich, F.G.S. Biology (also Curator of the University Museum), W. B. Benham, D.Sc.; Mental and Moral Philosophy, Rev. W. Salmond, M.A., D.D.; Mathematics (also Lecturer on Political Economy), F. K. de M. Gibbons, M.A.; English Language and Literature, T. Gilray, M.A.

Lecturers.

Jurisprudence, W. D. Milne, M.A., LL.B.; French, A. Dallas; German, W. Heinemann, Ph.D.; Constitutional History and Law, A. R. Barclay, B.A., LL.B.; 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.; Midwifery and Diseases of Women, F. C. Batchelor, M.D., M.R.C.S., L.R.C.P.; Materia Medica, J. Macdonald, L.R.C.P., L.R.C.S.; 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.C.S.; 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; Metallurgy and Assaying, P. Fitzgerald, A.O.S.M.; Applied Mechanics, W. Cutten; Mine and Land Surveying, M. Begg; General Geology, J. R. Don, M.A., D.Sc.

Registrar—A. Hamilton.

The CHANCELLOR, UNIVERSITY of OTAGO, to His Excellency the GOVERNOR.

YOUR EXCELLENCY,— University of Otago, Dunedin, 1899.

In compliance with the provisions of "The Otago University Ordinance, 1869," I have the honour to forward to your Excellency the following report of the proceedings of the University of Otago for the year ending the 31st March, 1899:—

The classes still show the steady rate of increase reported in the recent returns, the numbers attending in the 1898 session being,—

	Matriculated.	Not Matriculated.	Total.
Males	183	35	218
Females	51	0	51
Grand total			269

The degrees obtained by the students at the examinations of the New Zealand University are as follows:—

Doctor of Laws: William Deans Milne.

Doctor of Medicine: William Allan Chapple (Wellington).

Bachelors of Medicine: Eugene O'Neill, Ernest Williams, William Sutherland.

Masters of Arts: George Edward Thompson, first-class honours in languages; Marian Beatrice Thomson, second-class honours in mental science; Alexander Lamont Wyllie, third-class in mental science; Andrew Galloway Cameron Miller, second-class honours in political science; Thomas Alexander Hunter, first-class honours in mental science; Charlotte Eliza MacGregor, second-class honours in languages; Leslie Edward Williams, second-class honours in languages; Reginald Moore, second-class honours in mental science; Caroline McLeod and John O'Shea, first-class honours in languages; John Smaillie Tennant and Annie Bauchop, second-class honours in languages; Francis Wallace Dunlop, first-class honours in mental science.

Bachelors of Arts: John Hugh Alexander McPhee, George Thorncroft Palmer, John Brunton, Theophilus Benjamin Strong, Margaret Collier Perrin, Joseph Robert Shore, John George Fullarton, Angus Marshall, Violet Maud Greig, Ralph Townley Little, Robert John Thompson, Isabella Margaret MacKellar, Lawrence Thompson, Arthur Edward Jones.

Bachelors of Science: William Newlands, Sydney Chalmers Allen, James Hamilton Hall Baillie, Leonard Arthur Line.

Bachelor of Laws: Colin Campbell Hutton.

Honours in science were gained by Joseph William Mellor, B.Sc.; and Henry Fawsitt Skey, B.Sc.

The Tinline Scholarship was awarded to Violet M. Greig, and a Senior Scholarship to J. R. Shore.

Endowments.—The tenancy of the endowments remains the same, and the rentals have been duly received. The amount in arrears, mentioned in last year's report, has been paid; there is, however, a small sum again due on the same account.

Loan.—The chief work on the University site has been the construction of a concrete retaining wall along the side of the Water of Leith, by means of which the Leith is confined to its original channel, and the destruction of the block by floods prevented. Shortly after completion (in February) a very severe flood occurred in the stream, and the wall thus practically tested seemed to serve in every way the purpose for which it was built. A large portion of the area of the block thus protected has been filled in to a level with the adjacent streets, and has been surveyed into suitable building sections, which are now offered for lease under exceptionally favourable terms. The leasing-powers originally possessed by the University being inadequate to present requirements, and embracing only a portion of the block now prepared for lease, a Bill was introduced into Parliament to give amended and increased powers of leasing. The Bill was passed, but, by an error discovered too late, the area over which the leasing powers were given was incorrectly defined in the schedule. At present, therefore, the Council has only the power to lease the section fronting Albany Street. When Parliament re-assembles, a short amending Bill will be introduced correcting the error. In carrying out the plans for the work, it was found necessary, owing to the character of the river-bed, to carry the foundations 2 ft. deeper than originally proposed, and some additional work was required in blasting the rocks in the bed of the Leith. Altogether the expenditure on the work, including plans, surveys, &c., has been £1,243 3s. 1d. The loan being £1,000, the additional amount has had to be paid from current account. To complete the work, it would be desirable to fill in the whole of the area, and to trim the hill on the other side of the Leith into a site available for future buildings for the extension of the University. This, however, would involve the expenditure of £500.

School of Mines.—The report of the Director of the School of Mines, attached to this report, will give the particulars of the work done by the students. The number in attendance still keeps up, and shows no sign of decrease. The necessity for providing special accommodation for a large class in petrography caused the Mines Committee to undertake certain alterations in the building, by which ample space and light is now available for main surface-work. Very little quartz-crushing has been done at the battery, reasons for which are given in the report of the Director. In making the necessary alterations, which involved considerable expense, the Council were assisted by a grant from the Minister of Mines, without which the work would have had to be carried on at a great disadvantage. The school received a valuable present of chemical appliances and balances from the Hon. Lee Smith, M.L.C., who presented them in compliance with the wish of his son, a very promising student, who died early in the year. An alteration has been made in the regulations making matriculation compulsory for the School of Mines, excepting students who obtain Government scholarships, and those over twenty-one years of age.

University.—By the permission of the Government, the Council were able to avail themselves of the services of the Agent-General in making the necessary arrangements for the engagement of Professor William Blaxland Benham, D.Sc., London, who arrived in the colony about the beginning of June. In the meantime the classes in botany and biology were carried on by Mr. J. S. Tennant, M.A., B.Sc., and Mr. W. Manson, M.A., B.Sc.. in a very satisfactory manner. It was found necessary to effect a number of repairs at the house recently occupied by Professor Scott, and which was taken by Professor Benham on his arrival. The outside woodwork at the Museum was also painted and the roof repaired.

The students having subscribed towards the cost, a bicycle-shed was erected at the University.

The following scholarships were awarded this year after the examinations:—Richardson Scholarship: Alexander Kinder. Walter Scott Scholarship: Jessie Reid. Women's Scholarship: Eva M. Randle. It was found necessary to reduce the amount hitherto paid to these scholarships, as the funds, being invested in bank deposits, carry only a low rate of interest. It was resolved that the amounts paid be equal to the interest received on capital value of each fund.

Council.—The Council received with regret the resignation of Sir Robert Stout, and in the resolution accepting it with regret "trust that he will afford to Victoria College, Wellington, the same valuable assistance and support which he has always given to this University." Mr. H. Clark, of Clarksville, was appointed by the Government a member of Council to fill the vacancy.

The Medical Faculty have reported that a new *post-mortem* room is urgently needed at the hospital. A deputation was appointed to wait on the Trustees, and it was resolved to vote £50 towards the cost.

The following documents are enclosed with this report: The audited balance-sheet of the University for the year ending the 31st March, 1899; the report of the Chairman of the Professorial Board; the report of the Dean of the Medical School; the report of the Director of the School of Mines; and the report of the Curator of the Museum.

JOSHUA STRANGE WILLIAMS, Chancellor.

Report of the Chairman of the Professorial Board.

Sir,—

The present seems a suitable occasion for laying before you a few facts connected with the progress of the University of Otago during the past few years. For the purpose of a brief review, I take the last five years—*i.e.*, from 1894 to 1898, inclusive. Beginning with the number of students in attendance, I find that it has steadily increased during these five years—the total numbers being 211 in 1894, 226 in 1895, 234 in 1896, 257 in 1897, and 269 in 1898. In dealing with scholarships, honours, and degrees, I reckon them according to the year in which the candidates sat for examination. During the last five years our students have gained twenty scholarships, which gives an average of four for each year; six students have taken the degree of Master of Arts with first-class honours; and twenty-two students have taken the same degree with second-class honours. A distinction very rarely taken in connection with the New Zealand University is the diploma that confers honours in science. No student in any of the colleges took it between 1894 and 1897. At the examination in 1898, however, two of our students took this diploma, one with first-class and the other with second-class honours. During the five years we are considering, thirty-six of our students took the degree of Master of Arts, fifty-six the degree of Bachelor of Arts, one the degree of Doctor of Science, thirteen the degree of Bachelor of Science, one the degree of Doctor of Laws, eight the degree of Bachelor of Laws, fifteen the degree of Bachelor of Medicine, and one the degree of Doctor of Medicine. This gives a total of 131 degrees, which yields an average of twenty-six for each year. It is gratifying to find that so large a number of our Bachelors of Arts proceed to the higher degree of Master of Arts. Some may be surprised that, in a school so well attended as the Medical School, only fifteen have taken the degree of Bachelor of Medicine. This, however, is easily explained. A large proportion of our medical students, after spending a few years with us, go to Britain—generally to Edinburgh—to finish their medical studies, where many of them have carried off high distinctions, and have thus done credit to their early training. In regard to scholarships and honours, Canterbury College and the University of Otago are pretty equal during the five years under review. Canterbury College has gained nineteen scholarships for our twenty; eleven of her students have taken the degree of Master of Arts or the diploma in science with first-class honours for our seven, whereas in the degree of Master of Arts and the diploma in science with second-class honours we are exactly equal—twenty-three each. It will thus be seen that there is practically no difference, except in first-class honours, where Canterbury College has the advantage. In justice to the local institution, however, it should be mentioned that Canterbury College has enjoyed two great advantages over the other New Zealand University Colleges. It has two high schools under the direct control of its governing body; and, owing to its exceptionally favourable geographical position, it is fed by a much larger number of high schools than any of the other University Colleges. I trust that all contests between Canterbury College and the University of Otago, whether in scholarship or athletics, will always be conducted in a spirit of friendly rivalry, and with the most perfect good humour. We are both aiming at the elevation of our New Zealand youth; and in both cases the results show that the two institutions are doing excellent work, and are entitled to enjoy the confidence of the public. Among the honours gained by previous Otago graduates during the period under review, the following are worthy of special mention:—Mr. Don has taken the degree of Doctor of Science; Mr. Milne has taken the degree of Doctor of Laws; Dr. Chapple has taken the degree of Doctor of Medicine; Mr. Mellor has gained the Exhibition 1851 Science Scholarship, of the value of £150, tenable for two years; Mr. Adams has passed the Indian Civil Service Examination; and Mr. Salmond has been appointed Professor of Law in the University of Adelaide. A pleasing feature of our University history during recent years is the great success of the Mining School, the attendance at which is steadily rising from year to year. It is gratifying to know that many young men trained in the school are now occupying good positions in various parts of the world. I have much pleasure in mentioning that the school received, some time ago, a valuable gift of appliances and balances from the Hon. A. Lee Smith, M.L.C., who presented them in compliance with the wish of his son, a promising student in the school, whose early death is deeply regretted by all who knew him. The chief change in the teaching staff that has taken place recently was caused by the death of our lamented colleague, Dr. Parker, whose great services to the University and to science were suitably recognised at the time by the Press and by various public bodies. Shortly after his death a careful and sympathetic appreciation of his life-work appeared in *Nature*, which was written by his friend, Professor Howes; and, not long after his death, scientific literature was enriched by the publication of an elaborate and beautifully illustrated "Text-book of Zoology," prepared by Dr. Parker and Professor Haswell, of Sydney University. During Dr. Parker's illness, and during the time that elapsed between his death and the arrival of Dr. Benham in the colony, very valuable services were rendered to the University by two of our own graduates, Mr. Tennant and Mr. Mawson, who successfully conducted classes in botany and biology. Dr. Heinemann, the lecturer on German, having resigned his appointment at the beginning of the present session, his place was taken by another of our graduates, Mr. Howell, an accomplished German scholar, whose class, however, suffers from the fact that the teaching of German is almost entirely abandoned in Otago schools. It is to be hoped that we are on the eve of a revival of this important study. A number of our ablest young men, after passing through our University Colleges, now go to Europe to pursue their studies, and it is a great disadvantage to them that they have no opportunity here of learning German. Every student knows that it is impossible to get to the bottom of almost any subject without a knowledge of German. As the present is a time of great commercial prosperity in the colony, it may not be out of place if I indicate in a word or two the most pressing needs of the University. Our library is deplorably behind the times. The University Council is unable to allow an annual grant for its extension, and it is not too much to say that it would require £100 a

year to keep the library up to the mark. As we have no public library here, Dunedin students are worse off in this respect than students in the other three cities. No substantial addition has been made to the library since the time of the Mainwaring Brown bequest, and the subsequent donation of books given in his memory by some of his relatives. We are urgently in need of additional classrooms. At present, in some classrooms at least, the work is carried on in circumstances that are prejudicial to health, and there is even difficulty in finding accommodation of any kind for some classes—classes having had to meet, from time to time, in the library, a room quite unsuitable for class-teaching. A large hall in which to conduct examinations and hold such meetings as the present is also a great desideratum. Not only is the library starved, but the scientific laboratories are by no means adequately equipped with instruments, books, and materials. It is impossible to make the scientific teaching in some of the classes what it ought to be until the teachers have trained demonstrators to assist them in their work. Not a few of our graduates are thoroughly competent to fill such appointments, but there is no money to pay them. In Canterbury College, I believe, there are some annual exhibitions for the support of students studying for honours, but there are none here. Some of our ablest students would benefit greatly, and would have altogether different future careers than they are likely to have under present conditions, if there were a few scholarships or exhibitions on the scale, say, of the Exhibition Science Scholarship, to enable them to pursue post-graduate studies in Britain or in Germany. The University of Otago has now been in existence for nearly thirty years; and, although it has been generously treated by the Provincial Council of Otago and by the Presbyterian Church of Otago and Southland, it owes surprisingly little to private beneficence, the most notable exception being the foundation of a valuable scholarship by an honoured member of our own council, Mr. George Gray Russell. The period during which our University has been in existence has been a period of unexampled liberality to academic institutions in Great Britain. A University College has been founded in Scotland, several have been founded in Wales, and quite a large number in England. All of these colleges, I think, owe their existence to the liberality of men that have taken a large and enlightened view of the duties and responsibilities attaching to the possession of great wealth. We do not expect such princely benefactions in a new country like New Zealand, but surely it is not too much to hope that some of the wealthy men of Otago will do something to assist in the higher education of the youth of our colony. No nobler use could be made of wealth than this, and no form of generosity is more calculated to give keen pleasure and satisfaction to the donor. Benefactors of schools and colleges not only confer a priceless benefit on their own time, but their gifts are also rich in blessings to generations yet unborn.

I have, &c.,

THOS. GILRAY, Chairman of the Professorial Board.

The Chancellor of the University of Otago.

REPORT ON THE MEDICAL SCHOOL.

SIR,—

The attendance on classes during the present session is shown as follows: Physics, 17; practical physics, 17; biology, 19; practical biology, 19; chemistry, 20; practical chemistry, 20; anatomy, 35; practical anatomy, 35; physiology, 35; practical physiology, 19; pathology, 16; practical pathology, 16; surgery, 32; operative surgery, 30; clinical surgery, 47; practice of medicine, 29; clinical medicine, 34; medical jurisprudence and public health, 12; *materia medica*, 20; midwifery and diseases of women, 29; ophthalmology, 7; mental diseases, 7.

The total number of students attending the school is now eighty. Of these seventeen have passed the second professorial examination of the New Zealand University; fifteen have passed the first professorial examination; and twenty-nine have passed the intermediate examination.

W. Sutherland, E. J. O'Neill, and E. H. Williams having completed this course, and having passed all the required examinations, have been admitted to the degrees of M.B., Ch.B. of the University of New Zealand. Mr. O'Neill has since been appointed Junior Resident Surgeon to the Dunedin Hospital, while Messrs. Sutherland and Williams are now in England further prosecuting their studies. The degree of M.D. was also conferred on W. A. Chapple, M.B., Ch.B., a former student of the school, at the meeting of the New Zealand University Senate held in February.

The classes have all been conducted in the usual regular manner, and I have nothing of any importance to note in connection with them. Extension in various directions is still much needed, as has been fully explained in previous reports, but nothing has been done. I am pleased, however, to say that I believe one long felt want, a new *post-mortem* theatre at the hospital, will soon be supplied.

I have, &c.,

The Chancellor, University of Otago. JOHN H. SCOTT.

REPORT of the DIRECTOR of the SCHOOL of MINES.

SIR,—

I have the honour to submit my annual report regarding the attendance, work, and results of the annual examination of the School of Mines during the past session (1898), together with remarks on practical teaching facilities, requirements, and other points affecting the future progress of the school.

The number of old students on the register expected to continue their studies during the past session was thirty-seven, and sixteen new ones entered, bringing the expected attendance number up to fifty-three. However, five of the old students did not return, a sixth, after a few days' attendance, became seriously ill and died, and of the new students one, after a few weeks' irregular attendance, was compelled, on account of illness, to give up further study, whilst a second gave up the school after three months' attendance, thus reducing the total number of regular students to forty-five; and if to this number be added two—namely, one student who only took the evening class in assaying; the other, H. Black, who, although having gone through the whole of the curricula of mining and metallurgy last year, as mentioned in my report, attended classes in several subjects a second time (thus enabling him to convert the third-class examination certificates he previously obtained in the respective subjects into first- and second-class ones)—the attendance number of students during the past session was forty-seven.

Owing to the prevalent epidemics of influenza and measles, which attacked a number of the students, especially during the first part of the session, the various classes were not so well attended as in previous years, which accounts no doubt for a number of the failures in several subjects at the recent examinations, as shown in the table further on. With regard to these failures I cannot, however, omit to remark that I consider most to be due, on the part of some of the students, to insufficient preliminary knowledge at entry of the school; on the part of others to inattention at lectures and want of proper study; and on the part of yet another section to insufficient study through having taken too many subjects—*i.e.*, more than those prescribed, with the intention of securing during a three years' course, besides the diploma in mining, the certificate of metallurgical chemist and assayer. The recent decision of the Council requiring the passing of an entrance examination, and an attendance of four years in the case of students desiring to obtain more than one diploma or certificate, will doubtless check the number of failures in future.

Of the sixteen new students who, as previously explained, were reduced to fourteen, one, working for the B.Sc. degree of the University of New Zealand, took only general geology, with the intention of taking other mining classes afterwards, and another attended only three subjects—namely, practical and theoretical chemistry and general geology, in the two latter of which he failed; whilst a third student attended all the classes of the first year's curriculum, but did not sit for examination in any other subject but practical chemistry, in which he passed. The other eleven students attended all the first year's classes, and, with the exception of two, who failed in mathematics, passed all the examinations. The thirty-one older students consisted of fourteen who, having last year passed in mathematics and chemistry, adhered mostly to the prescribed curriculum for the second year's course, but in the recent examinations one failed in mining, theoretical mechanics, theoretical physics, and surveying; another failed in mining, mineralogy, theoretical physics, and general and special metallurgy; a third failed in mineralogy and surveying; a fourth failed in theoretical physics and general metallurgy; and two failed in mining. Amongst the seventeen remaining older students were four who, through failure in mathematics at last year's examinations, were prevented from attending several of the classes of the second year's course, whilst the other thirteen consisted of students of three, four, and five years' standing, most of whom should have completed their studies this year. But some did not attend all the prescribed lecture courses, whilst others failed in the examinations, probably through having taken more than the prescribed classes. Some have even failed a second time in the same subjects. Thus, it happens that only four of the thirteen can leave the school as having successfully completed their studies for the chosen divisions, whilst the other nine students, in order to obtain certificates, will have to return—some for attending classes they missed, some for re-examination in the subjects they failed in, or for attending the respective classes a second time. The four students who are leaving the school are as under:—

Francis A. Cutten: He passed well in all the subjects of the mining, metallurgical, and geological divisions, and that of metallurgical chemist and assayer, and he is at present entitled to claim the diploma of Associate in Geology and the certificate of metallurgical chemist and assayer. For obtaining the diplomas of Associate in Mining and Metallurgy he still requires, however, to do nearly all the practical work in mines and metallurgical establishments prescribed for these divisions. In the recent examinations he distinguished himself in securing first classes in six and good second classes in two of the eight subjects he required to attend for finishing his studies.

Ormsly G. Adams: This student passed the examinations in all the subjects of the mining division and that of metallurgical chemist and assayer, having shown special ability and application in accomplishing this work during three years' attendance at the school. In the recent examinations he distinguished himself in gaining first-classes in six, and two good second-classes in two of the eight subjects he required to attend to finish his course. He is entitled to claim the certificate of metallurgical chemist and assayer; but requires to engage for several months more in practical mining work for qualifying him to claim the diploma of Associate in Mining. During the past session he satisfactorily acted as my assistant in the classes of mineralogy and petrography.

Geoffrey G. Sale: By passing well all the prescribed examinations for the mining division, and of that of metallurgical chemist and assayer, he is at present entitled to claim the certificate of the latter division: but he requires still to engage for two or three months more in practical mining work, in order to qualify him for obtaining the diploma of Associateship in Mining.

Adam Hay: Having passed the examinations in all the subjects of the mining division, and that of metallurgical chemist and assayer, he is entitled to claim the certificate of metallurgical chemist and assayer; but he has still to engage for several months more in practical mine work before he becomes qualified for obtaining the diploma of Associateship in Mining. He showed ability and application in finishing his studies for two certificates in the course of three years.

The numerical attendance at all the classes and the results of the recent examinations are shown in the following table:—

Subjects.	Attendance.	Entered for Examination.	Results of Examinations.			
			1st Class.	2nd Class.	3rd Class.	Failures.
General (University)—						
Mathematics...	17	16	...	3	8	5
Theoretical mechanics... ...	15	15	...	...	12	3
Theoretical physics	12	12	...	...	5	7
Practical physics	12	12	1	2	7	2
Theoretical chemistry... ...	13	13	5	4	3	1
Practical chemistry	13	13	6	5	2	...
Quantitative chemical analysis ...	11	11	3	7	1	...
Theoretical biology	1	1	1	...	...	...
Practical biology	1	1	1	...	...	...
Special (School of Mines)—						
Mining, first course	28	28	...	8	9	11
Mining geology	12	11	4	5	2	...
General geology	16	15	9	4	1	1
Palæontology	1	1	...	1	...	...
Mineralogy	17	17	1	3	10	3
Petrography	9	9	...	5	4	...
General metallurgy	18	18	7	3	7	1
Special metallurgy	18	18	4	4	4	6
Practical assaying, first course ...	17	17	10	7	...	...
Practical assaying, second course	6	6	3	...	3	...
Blowpipe analysis	20	20	8	5	7	...
Applied mechanics	11	11	2	2	7	...
Surveying, first course... ...	15	15	1	3	5	6
Surveying, second course ...	9	8	2	3	3	...
Model-drawing	12	12	6	6	...	...
Practical plane geometry ..	12	12	8	4	...	...
Solid geometry	14	14	5	5	3	1
Machine-drawing	19	19	5	5	7	2
Totals	349	345	92	94	110	49

All the new students who entered for the first year's course, and some of the older ones, who had not previously taken ambulance, attended the evening class established by the St. John Ambulance Association, and by successfully passing the examination gained certificates of first-aid, as required by the regulations.

Only one occasional student, as before mentioned, attended an arranged evening class in assaying, but only for a short time.

Nearly all the students requiring to engage in practical mining and metallurgical work during the vacation, in order to complete the stipulated working terms of twelve and nine months respectively, have, so far as I could ascertain, found working-places in coal- and gold-mines and cyanide establishments, partly in Otago, partly on the West Coast, and some in the Hauraki goldfields (North Island), while two have gone to the Mount Bischoff tin-mine, Tasmania. And, as in previous years, it requires thankfully to be acknowledged that the general manager of the Union Steam Ship Company granted those students who had to travel by sea a liberal reduction in the cost of a return ticket, and extended the time of the latter to six months.

With regard to the number of students likely to attend classes next session, only an uncertain forecast can be made. Supposing that all these return who have completed their first and second year's courses, and, in addition, those older ones who, according to the register, have not quite finished their studies for any diploma or certificate, the number would be forty-one, and as three applications for entry of new students have already reached the Registrar, the number would come to forty-four. It is, however, very likely that some four or five of the older students who did so badly in the recent examinations will not return, a decrease which would leave thirty-nine or forty, to be increased again by the uncertain number of other new students applying for entry before the commencement of next session. Thus there is strong probability that the attendance number next session will not fall short, and may perhaps exceed that of the past session—*i.e.*, forty-five to fifty.

As in previous years, Dr. Don, the lecturer in general geology, arranged to make with his students three geological field excursions, but bad weather prevented the second, to the Green Island coalfields. However, to make up for this, an additional day was devoted to the third excursion. The first excursion embraced the examination of the volcanic rocks of the Otago Peninsula around Portobello, whilst the other, occupying three days, comprised the inspection of the sedimentary rocks of Moeraki, Hampden, and the Oamaru district. Dr. Don has still further improved the arrangements for illustrating his lectures by the preparation of

about two hundred additional optical lantern slides, and by a collection of fossils and rock specimens, chiefly from the Oamaru district. The examination of his class of sixteen students proved highly satisfactory in resulting in nine first-classes, four second-classes, one third-class, one failure, and one absent.

The rearrangement of tables, working benches, and, more so, the addition of two smelting and three cupelling furnaces, with separate iron chimneys, and the provision of twenty-four lockers for use of the assaying students, has been of the greatest advantage in the carrying on of the large assaying classes by the lecturer, Mr. Stephens. One important defect in the laboratory needs still be supplied—*i.e.*, certain additional apparatus for the class in advanced assaying, of which Mr. Stephens has already sent in notice, with specification.

Through the sad death, after a long and painful illness, of a very promising second year's student, the son of the Hon. Lee Smith, the assay laboratory, at his dying request, has been presented by Mr. Smith with the private assaying plant used by the deceased. It includes, besides crucibles, chemicals, tools, &c., a small assay furnace and two balances, one of which, of a very good make, supplies a long-felt want in the laboratory.

The classes in surveying have now become so large that Mr. Begg, the lecturer, has informed me of his inability to carry them on properly with the use of only one theodolite. The necessity of providing a second instrument of this kind has been seriously felt for several sessions past, but I have now to bring it under the notice of the Council at Mr Begg's urgent request. The cost of an instrument such as required would be about £16.

Regarding my own classes in mineralogy and petrography, more especially the latter, I beg to inform the Council that, from the experience I gained with a class of nine students during the past session, it will be quite impossible for me to carry on classes of fourteen or more students during the next and succeeding sessions under the same conditions and circumstances. It might have been thought that the attendance of the class would fall off after next session, and that during the latter additional assistance might meet the difficulties of carrying the class on under the same conditions as before; but the decrease in the number of new students, if it should happen, would certainly not have any effect upon this class for the next two or three years; and additional assistance could not do away with insufficiency of light and free space for moving about. In fact, with the class of nine students during the past session, the space available for the use of eight microscopes with the light from only three windows and for the working of two section-grinding machines proved so inadequate that moving about of myself and an assistant from one student to another without disturbing others in their work was hardly possible, whilst through double-banking of several microscopes, which had to be resorted to, there was a constant scramble for light, and thereby hindrance of proper progress in the subject. Besides this, there is always danger that through working of the grinding machines emery dust and splashes may reach the nearest microscopes and injure them, whilst the students' sitting benches and desks, as well as the mineral cases in close proximity, become dirtied all over with splashes from these machines. The only way, in my opinion, to meet the difficulties mentioned is an addition to the building—*i.e.*, a lean-to of about 6 ft. in width all along the gable wall of the large and small lecture-rooms, with a number of windows, or, still better, a glass front facing the lawn-tennis court. This would be a permanent improvement, and serve for more than fourteen students, whilst also giving more light to the far end of the large lecture-room, where during dark winter mornings it has proved hitherto rather deficient.

Another serious defect requiring removal before next session is that, through several years' working of the seven students' microscopes, the Nicol prisms of all have more or less come out of their proper positions, and can only be readjusted by an optical expert under my direction. There is, fortunately, such a man in Dunedin, whom I have interviewed, and whom it would be necessary to engage for the work.

I may also point out another expense which requires to be faced in the near future—namely, the replacement of a number of drawings of mining machinery and appliances, necessary for the mining lectures, as the present ones, through over fifteen years' use in copying by the students, are now becoming too much soiled and torn for serving much longer.

The new grinding-machine constructed by Schlaadt Brothers, engineers, Dunedin, has proved a great success, and less in cost than if a new machine of the old type had been procured from Berlin, Germany.

The Otago School of Mines Association, about the formation of which I reported last year, has, to my knowledge, not made any progress since, and one of the main objects of the association —viz., that of preparing a register of the addresses and positions of our past students—has consequently not been accomplished. I may, therefore, as I did in previous years, mention what I ascertained during the year about the careers of some of these associates of our school. Edward Paterson, in the service as consulting expert of an English mining syndicate, and last year in Auckland, is at present in a similar position in British Columbia; P. Fitzgerald, our former lecturer in metallurgy, is in charge of large cyanide works at Brown Hill, Western Australia; Herbert Stephens is manager of cyanide works at the Lachlan Goldfields, New South Wales; Arthur Mosley has the management of cyanide works at Reefton, New South Wales; Sheddan Brugh has a good post in the Queensland Smelting Company, Maryborough, Queensland; H. C. Boydell is in charge of a metallurgical laboratory in Sydney, New South Wales; D. B. Waters is mine-manager of the Shotover Quartz-mining Company, Otago; D. V. Allen is battery-manager of the Morning Star Reef Company, Preservation Inlet; A. Purdie has the position of lecturer in the University and Technical School, Adelaide, South Australia; Thomas Esdaile is lecturer in the School of Mines, Bendigo, Victoria. Most of the other associates seem to be still in their old positions, as mentioned in former reports.

The work done for the public in assays, analyses, and with the testing plant, since my last year's report, by Mr. F. B. Stephens, and by myself in the determination of minerals and rocks, was as follows:—

REPORT of ASSAYS performed at the OTAGO SCHOOL of MINES at FIXED RATES by F. B. STEPHENS from 20th November, 1897, to 20th November, 1898.

Nov. 26. Sample of quartz from W. J. Hopkins, Christchurch.
Jan. 17. Sample of quartz from J. Logan, Dunedin; sixteen samples of gold bullion for Bank of New Zealand.
Jan. 27. Assay and testing of sample of tailings by cyanide process; sample of quartz with arsenical pyrites from Preservation Inlet; three samples of quartz from Robert Hay, Dunedin.
Feb. 20. Four samples from W. G. Hopkins, Christchurch; sample of quartz from A. Williams, Christchurch; two samples quartz from George Richardson, Invercargill.
Feb. 22. Copper-pyrites from Hon. H. Reeves, Nelson, for gold, silver, and copper.
Feb. 23. Sample of iron-pyrites, for gold, from D. Reid, jun., Dunedin; sample of tailings from D. Reid, jun., Dunedin.
Feb. 28. Sample quartz from W. G. Hopkins, Christchurch.
Mar. 8. Sample quartz from Hindon.
Mar. 10. Fifteen samples of bullion from Bank of New Zealand.
Mar. 15. Sample of tailings from Scott, Common, and Co.
Mar. 16. Berdan tailings, Morning Star Mine; sample quartz from A. Williams, Christchurch; two samples of pyrites from Mineral Springs, Taieri; sample of quartz from F. Gough, Mornington.
Mar. 17. Sample of quartz from Preservation Inlet; sample of quartz tailings from Cromwell.
Mar. 18. Two samples of quartz from H. A. MacDonald, Invercargill; 11 cwt. quartz from James O'Dowd, Riverton, crushed for a return of 9 dwt. 9 gr. per ton.
April 20. Sample of quartz from James Brown, Invercargill.
April 22. Sample of quartz from James Harvey, Invercargill.
April 27. Sample of quartz from Phillips, Preservation Inlet.
May 2. Three samples of tailings from C. G. S. McDoul, Oamaru.
May 5. Two samples from Richard Allen, Invercargill.
May 11. Sample of quartz from James Brown, Invercargill.
May 13. Sample of quartz from James Brown, Invercargill.
May 16. Sample of quartz Chicago Mine, Thames.
May 23. Two samples of quartz from H. A. Bruce, Christchurch.
June 13. Sample of pyrites from Wm. Brown, Dunedin.
June 22. R. Story, Merrivale: Four samples of quartz and mullock.
July 20. Sample of quartz from W. B. Compton.
Aug. 5. Sample of alluvial from E. Trythall, Dunedin; sample of quartz from R. Story, Merrivale.
Aug. 8. Two samples of limestone from J. A. Chapman.
Aug. 9. Four samples of tailings from Bendigo.
Aug. 30. Sample of quartz from W. Winnotautau.
Sept. 3. Six samples of quartz from O.P.Q. Company.
Sept. 6. Two samples of quartz from Thos. Aitken.
Sept. 26. Sample of quartz from D. Booth, Hampden.
Sept. 28. Sample of limestone from W. Sharp, Invercargill.
Oct. 7. Sample of tailings from Cromwell; sample of tailings from Murray Russell.
Oct. 11. Sample of pyrite from D. Reid, jun.
Oct. 13. Sample of quartz from H. MacDonald, Invercargill.
Oct. 17. Sample of quartz from L. O. Beal, jun.
Oct. 21. Sample of quartz from M. Wadsworth.
Oct. 27. Four samples of tailings from Coromandel.
Nov. 3. Sample of sand from Harty and Co.
Nov. 6. Sample of ironstone from Alex. Smaill, Dunedin.
Nov. 16. Two sample of berdan tailings from Reeves, Dunedin; three samples of quartz from W. Batchelor, Invercargill.
Nov. 19. Three samples of quartz from D. Reid, jun., Dunedin.

Parcels of Ore Treated by the Testing Plant.

Mar. 19. Crushed 11 cwt. of quartz for James O'Dowd, Riverton.
May 2. Tested 2 tons of sand from W. Cutten, Dunedin.
June 3. Crushed 1 ton of quartz for John Wren, Esq.
Nov. 28. Tested 4 tons of sand from Coromandel Harbour, and performed ten assays on same.

The limited extent to which the testing plant, as just shown, has been made use of by mining men during the year is—as it was last year—doubtless due to the boom in dredging enterprises which, for the time, have driven prospecting for auriferous quartz reefs into the background. There is, however, some hope for an early improvement in this respect.

Determination of Mineral and Rock Specimens (made by myself and not charged for).

Feb. 1. White mineral from Windsor Park Estate sent by editor of *Witness*, proved to be common quartz of no value.
Feb. 8. Grey and white coating on rocks near St. Bathans, forwarded by editor of *Witness*, turned out to be impure iron alum, probably formed through decomposition of pyrite.
Mar. 11. Samples of rock supposed to be asbestos, sent by editor of *Witness*, proved to be talosse schist.

uly 2. Determination of five rock specimens from Catlin's River, sent by editor of *Witness;* the specimens were found to be quartrite and varieties of granite.
July 12. Examination and report on a rock specimen from Chasland, Lower Catlin's, sent by Andrew Chesney, supposed to contain some kind of metal; this proved to be coarse-grained, rather micaceous, sandstone, the mica having been mistaken for metal.
July 15. Ore specimens sent by W. Hookey, Gibbston, proved to be stibnite with ceroanite and quartz.
July 29. Black mineral from the western district of Southland, sent by Nicholas Winn, Otautau; was supposed to be tin ore, but turned out to be magnetite.
Oct. 8. White and yellow coating on rock specimens, sent by editor of *Witness*, proved to be alum and basic iron sulphate.
Oct. 25. Two mineral samples—one friable and highly ferruginous, the other firm, less ferruginous and feeling soapy—sent by editor of *Witness*. These proved to be clay resembling bolus.
Nov. 12. Sample of rock detritus supposed to contain gold, forwarded by editor of *Witness*, proved to be non-auriferous.
Nov. 19. Mineral found in a gold-mine, sent by editor of *Witness*, proved to be mica (muscovite) of no value.
Nov. 20. A sample of powdery mineral matter, sent by editor of *Witness*, proved to contain a considerable percentage of lime-carbonate, rendering it valuable for farming, but not rich enough in lime for mortar-making.

Information and Reports on Various Subjects (furnished by myself and not charged for).
Feb. 1. Information to editor of *Witness* about the characteristics of the metal thallium, its uses, market value, and demand.
Feb. 8. Information to editor of *Witness* about suitable text-book for the study of geology.
Mar. 11. Information to editor of *Witness* concerning the mode of occurrence and the nature of the rocks in which asbestos is found; also as to the outward appearance and the commercial value of the better varieties of the mineral.
Mar. 30. Answer to query by editor of *Witness* about the use and value of mundic (iron pyrites).
July 4. Information to Mr. W. Hookey, prospector, Gibbston, regarding certain ore specimens he found.
Aug. 13. Answer to Mr. W. Hookey's query how to prosecute prospecting for auriferous quartz reefs.
Aug. 21. Information to Mr. N. Winn, Otautau, about advisability of working a lode of magnetite and a pyrite-bearing quartz reef.
Aug. 24. Information to Mr. R. McMoran, prospector, regarding minerals occurring and likely to occur in the Big Bay District, West Coast, Middle Island.

Donations to the Mining Museum.

P. Morgan, Director School of Mines, Waihi: Forty-five rock specimens and several pieces of auriferous quartz illustrating the rock formations of the Waihi District, North Island.

F. B. Allen, Director Thames School of Mines: Five rock specimens and twenty-six specimens of minerals from the Thames District, including finely crystallized selenite, barite, brown spar, marcasite, &c.

A. Sligo: Two specimens of massive cassiterite from North-East Dundas, Tasmania.

H. Walcott, Curator, Melbourne Industrial Museum: A valuable collection of some thirty specimens of minerals from Victoria, Tasmania, New South Wales, and Queensland, many finely crystallized, including phacolite, analoime, genelite, &c.

F. Kayser, Manager Mount Bischoff Tin-mine, Tasmania: Some twenty large specimens, comprising massive tin ore, topaz rock, green tourmaline, gossan, &c., being part of the collection shown in the last Dunedin Industrial Exhibition.

The Chairman of the Mining Committee (Mr. Smith), last Industrial Exhibition: About thirty specimens of rather rare minerals, including crocoite, gibbsite, cerussite, axinite, &c., from the Mount Zeehan district, Tasmania; also chalcedony and opal, from the Canterbury Opal Mine, and a number of large pieces of massive copper ores from the Mount Lyell district, Tasmania.

Captain Malcolm: About twenty large pieces of different rocks—gabbro, granite, amphibolite, &c.—collected on a prospecting tour from Milford Sound, across the ranges, to Lake Te Anau.

Herbert Buckland: Specimen of wood converted into pyrite from the gold-drift of St. Bathan's, Otago.

A. Chisholm: A large number of rock-chips, from the Hauraki Goldfields, North Island, suitable for the class in petrography in preparing thin sections.

J. M. McLaren, Director, Coromandel School of Mines: Several specimens of native arsenic and about a dozen specimens of rocks from the Coromandel district.

W. Goolet: Two samples of stream tin, from the neighbourhood of Greymouth, West Coast; specimens of stibnite, arseno-pyrite, diallege, talo schist, chromite, schoelaceous granite, awaruite sand, native copper, and eight specimens of interesting rocks from the East Coast and the neighbourhoods of Greymouth and Nelson; also several crystals of cassiterite from Stewart Island.

Charles Rilstone, Manager O.P.Q. Mine, Waipori: Pictorial map of workings on the Comstock lode, Nevada, United States, showing the new method of so-called "square timbering" for the support of large worked-out spaces.

Most of the specimens enumerated have been labelled and arranged in the wall glass cases, the available free space in which is now becoming rather limited. On this account a special collection of fine mineral specimens has been arranged in a small glass case in the small lecture-

room, and the large ore-pieces from Tasmania have been placed on shelves fixed in the large lecture-room wherever access and sufficient light could be secured for their inspection. A great nuisance in this room is the quick and persistent accumulation of dust coming through the open cracks in the walls and ceiling. Papering of the room would, no doubt, in a great measure mitigate the nuisance, which primarily is due to the corrugated iron roof and sides of the building.

I have, &c.,

The Chancellor, University of Otago. G. H. F. Ulrich, F.G.S.,
Director, School of Mines.

Report of the Curator of the Otago University Museum.

On my arrival in Dunedin at the end of May, 1898, I formally commenced my duties as Curator of the Museum, but my work in connection with the University classes prevented me from doing any serious Museum work till the long vacation.

My first desire is to make as complete a collection as possible of our New Zealand animals of all classes. The birds and the few marine mammals that frequent our shores are well represented, but the invertebrates require many additions.

In order to exhibit as prominently as possible our marine mammals, I had to make certain alterations in the disposition of some of the skeletons in the centre of the main hall. Those of the ungulata I transferred to the ethnological annex, so as to make room for those of the cetacea and the seals that occur round the islands. In order to effect this change, it was necessary to remove from the annex the cumbrous geographical models of the islands, which appeared to me to be occupying a space quite incommensurate with their value, either as objects of interest or of education. Other minor alterations in the arrangement of some of the cases not only allowed me room for the change, but, it appears to me, made it possible to exhibit the objects in these cases in a better light and to better effect.

These changes effected, I transferred all our skeletons of the hoofed mammals to the centre of the annex; and I gathered together from various corners of the main hall all our skeletons of seals and whales, and have arranged them in the central enclosure. The stuffed specimens of these animals are grouped near at hand. I am on the look-out for such specimens as we do not already possess.

The skeleton of the sea-elephant (*Macrorhinus leoninus*), collected some years ago by Mr. Hamilton on the Macquarie Island, has been set up and placed in the inclosure. Although it lacks one fore-limb and one hind-limb, it is of sufficient value and interest to be exhibited, and I am using efforts to obtain the limb-bones from the Macquaries. Drs. Colquhoun and Roberts most kindly brought over the limb-bones of a young specimen recently, but they are too small for our skeleton.

The most noteworthy addition, however, is the complete specimen of the nearly-extinct bird the Takahe (*Notornis hochstetteri*), that has been most generously presented to the Museum by the Government. The specimen has been stuffed and placed in the collection. The skeleton and organs of digestion are in the store-room.

Two specimens of the egg of the moa have also been acquired. One, considerably broken, has been deposited by Mr. Turton; the other is absolutely complete, and is thus unique—the only complete moa's egg known to exist. This egg was obtained during the working of a gold-dredge on the River Molyneux. Mr. A. Black, a citizen of Dunedin, and one of the proprietors of the dredge, very patriotically obtained it from the finder for the small sum of £50, contributing £5 towards its purchase. The balance was paid by the Otago Institute, and the egg is deposited by the Council of the Institute until the University has repaid that body.

A series of rare native invertebrate animals was presented by Dr. Dendy, who collected them on the New Brighton beach after a storm. A considerable number of invertebrates has been added to the collection, chiefly the result of my own collecting expeditions along the coast, in the harbours, at Kaikoura, in the s.s. "Plucky," and elsewhere. Perhaps the most interesting is a specimen of *Lepas fascicularis*, presented to me by the light-keeper at the Nuggets during my recent visit. Mr. Richard Henry has, too, collected several very interesting forms at Resolution Island, some new to New Zealand. Amongst them I may mention an illuminating fish of the genus *Lampranyche*, and a flashing shrimp, *Nyebiphane*.

The trawling expeditions of the s.s. "Plucky" resulted in the discovery of several new forms of animal life, belonging to the groups of gasteropods, dorids, holothurians, starfish, and annelids. Most of them have been mounted, and are on exhibition.

Amongst the "foreign" animals I may mention the addition of a stuffed specimen of the gavial, from the Ganges; and of a tortoise from Australia, presented by Mr. G. M. Thomson. I have, quite recently, acquired the body of a baboon that died in a menagerie. I have, too, added to the specimens of stuffed mammals the skulls of many genera not hitherto represented, so as to exhibit the dentition of the more important members of the various groups.

A series of animals has been purchased from the Naples Zoological Station, partly for Museum purposes, partly for work in connection with the classes. A series of decapod crustacea has been received from the Turin Museum, in exchange for a series of New Zealand crustacea that I collected for the purpose.

I must not omit to refer to a collection of opal in matrix, presented by Mr. D. Theomin, who obtained the series from the White Cliffs, N.S.W. These have not yet been placed on view. Further, the Museum has received from the Trustee of the late Dr. Stuart a snuff-mull, originally belonging to Robert Burns. This, together with a small case to hold it, is now placed in the Ethnological room.

A good deal of work has been done in connection with storing our duplicate specimens. Hitherto all our spirit specimens were accumulated in the large cellar below the Museum. I have,

however, transferred all New Zealand specimens to another room, where shelves have been fitted to receive them. They are now available for study in comparative comfort. I have gone through and listed our stock of New Zealand animals, and have labelled and named those requiring this attention.

The usual repairs to skeletons, re-filling of jars with alcohol, re-labelling of specimens, and other work necessary for the maintenance of the collections in good order, have been carried out.

The Museum has been visited by a very large number of people; indeed, I have been quite surprised at the crowds that visit us on holidays and Sundays, and I must note, too, the orderliness of the people. It would be a matter of some interest to provide a turnstile, so as to have an accurate record of the number. I believe the fact would surprise many of our townsfolk.

The skylights still give a good deal of trouble in bad weather, and the floor of the annex is sometimes partially covered with water after a spell of rain.

WM. BLAXLAND BENHAM.

BALANCE-SHEET of the UNIVERSITY of OTAGO for the Year ending 31st March, 1899.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance forward from 31st March, 1898	1,424	13	7	Salaries—			
Rent of Reserves—				Professors	4,991	13	4
Burwood and Mararoa	1,300	0	0	Lecturers	1,375	0	0
Barewood	900	0	0	Registrar	250	0	0
Benmore	3,000	0	0	Attendants	367	8	0
Forest Hill	53	10	4	Apparatus—			
Castle Street house	20	0	0	Chemical laboratory	193	5	1
Leith Street house	27	10	4	Physics laboratory	5	19	2
Professors' houses	230	0	0	Biological laboratory	7	8	9
Run 79c, Barewood	27	0	0	Medical School	195	18	8
Church Board of Property	1,800	0	0	Fees—Professors and lecturers	2,282	19	9
Fees	3,000	17	5	Repairs and alterations to building	51	10	4
Interest on fixed deposit	49	0	4	Library	55	3	7
Goldfields revenue	331	8	6	Insurance	51	16	8
Incidental receipts	49	10	4	Water, fuel, and light	187	18	11
Burwood Timber Account	14	15	6	Printing, advertising, and stationery	56	5	6
Refund of advance to Richardson Scholarship Account	20	0	0	Incidentals	37	7	5
				Transferred to Interest Account	720	0	0
				Expenses, Leith Street house	29	3	3
				" Castle Street house	7	0	0
				Interest on overdraft	10	7	6
				Law-costs	92	2	5
				Special expenditure—			
				Repairs, professors' houses	32	17	3
				Passage of professors, &c.	262	8	7
				Expenses, inspection of run	3	6	3
				Expenditure on prize	4	0	0
				Transferred to Museum Account	36	13	9
				" Reclamation Works Account	243	3	1
				Balance, 31st March, 1899	697	9	1
	£12,248	6	4		£12,248	6	4

SCHOOL OF MINES ACCOUNT.

Receipts—	£	s.	d.	Expenditure—	£	s.	d.
Government grant	500	0	0	Repairs and maintenance, &c.	447	4	4
Special Government grant	53	6	2	Salary of assistant	62	10	0
				Balance, 31st March, 1899	43	11	10
	£553	6	2		£553	6	2

MUSEUM ACCOUNT.

Receipts—	£	s.	d.		£	s.	d.
Rent of reserve	550	0	0	Expenditure—Salaries and maintenance	586	13	9
Goldfields revenue	67	9	0	Balance, 31st March, 1899	67	9	0
Transferred from General Account	36	13	9				
	£654	2	9		£654	2	9

RICHARDSON SCHOLARSHIP ACCOUNT.

	£	s.	d.		£	s.	d.
Balance, 31st March, 1898	765	12	5	Expenditure—Payment to holder	12	10	0
Interest on mortgage	42	0	0	Fixed deposits	769	14	5
" fixed deposit	5	14	9	Refund	20	0	0
Refund	20	0	0	Balance, 31st March, 1899	31	2	9
	£833	7	2		£833	7	2

SIR WALTER SCOTT SCHOLARSHIP ACCOUNT.

	£	s.	d.		£	s.	d.
Balance, 31st March, 1898	291	17	11	Expenditure—Holder	7	10	0
Interest on fixed deposit	9	19	6	Balance	294	7	5
	£301	17	5		£301	17	5

Taieri Scholarship Account.

	£ s. d.		£ s. d.
Balance, 31st March, 1898	258 17 8	Expenditure—Nil	..
Interest on fixed deposit	8 14 6	Balance, 31st March, 1899, fixed deposit ..	267 12 2
	£267 12 2		£267 12 2

Women's Scholarship Account.

	£ s. d.		£ s. d.
Balance, 31st March, 1898	550 13 7	Expenditure—Holder	25 0 0
Interest on fixed deposit..	19 2 1	Balance	554 15 2
			£579 15 2
		Less overdraft	9 19 6
	£569 15 8		£569 15 8

Macandrew Scholarship Account.

	£ s. d.		£ s. d.
Balance, 31st March, 1898	757 2 3	Expenditure—Holder	20 0 0
Interest on fixed deposit..	24 5 1	Repayment to General Account	20 0 0
		Balance	741 7 4
	£781 7 4		£781 7 4

Macgregor Prize Fund Account.

	£ s. d.		£ s. d.
Balance, 31st March, 1898	112 14 1	Expenditure—Nil	..
Interest on fixed deposit..	3 10 0	Balance	116 4 1
	£116 4 1		£116 4 1

Stuart Prize Fund Account.

	£ s. d.		£ s. d.
Balance, 31st March, 1898	106 0 0	Expenditure—Holder	6 0 0
Interest	4 19 2	Balance	104 19 2
	£110 19 2		£110 19 2

Interest Account.—Loan No. 3 (Building Purposes) £15,000, and Reclamation £1,000, at 4½ per cent.

	£ s. d.		£ s. d.
From General Account	720 0 0	Interest paid on £16,000	720 0 0

Reclamation Works Account.

	£ s. d.		£ s. d.
Balance, 31st March, 1898	1,000 0 0	Expenditure	1,243 3 1
Transferred from General Account ..	243 3 1		
	£1,243 3 1		£1,243 3 1

Balances.

Cr. Accounts.	£ s. d.	*Cr.* Bank.	£ s. d.
General Account	697 9 1	Museum Account	67 9 0
School of Mines Account	43 11 10	Richardson Scholarship Account.. ..	31 2 9
Museum Account	67 9 0	Macandrew Scholarship Account.. ..	41 1 7
Richardson Scholarship Account.. ..	800 17 2	Sir Walter Scott Scholarship Account ..	9 7 5
Sir Walter Scott Scholarship Account ..	294 7 5	Macgregor Prize Fund Account	16 0 0
Taieri Scholarship Account	267 12 2	General Account	269 15 10
Women's Scholarship Account ..	544 15 8	Fixed deposit, Dunedin Savings-Bank ..	104 19 2
Macandrew Scholarship Account.. ..	741 7 4	Women's Scholarship Account	288 15 0
Macgregor Prize Fund Account	116 4 1	Scott Scholarship Account	285 0 0
Stuart Prize Fund Account	104 19 2	Richardson Scholarship Account.. ..	769 14 5
		General Account	2,793 17 4
			£4,677 2 6
		Less outstanding cheques	988 10 1
			3,688 12 5
		Dr. Overdraft, Women's Scholarship Account	9 19 6
	£3,678 12 11		£3,678 12 11

A. Hamilton, Registrar.

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

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