SESS. II.—1891.
NEW ZEALAND.

EDUCATION:
THE UNIVERSITY OF OTAGO.

[In Continuation of E.-6., 1890.]

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

The CHANCELLOR to His Excellency the GOVERNOR.

MY LORD,— University of Otago, Dunedin, 10th June, 1891.

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 this University for the year ending the 31st March, 1891. The usual courses of lectures, as laid down in the calendar, have been delivered in the various branches of study taken up by the students attending the University in arts, law, medicine, and mining.

The degrees obtained by the students are thus announced by the Senate of the University of New Zealand: M.A. Degree—H. P. Cox, with first-class honours in mental science; J. A. Johnson, with third-class honours in mental science; L. A. Line, with second-class honours in mental science; J. McNickle, with second-class honours in mathematics; P. G. Morgan, with second-class honours in Latin and French; J. Watt, with third-class honours in zoology. Senior scholarships were awarded to A. Stenhouse in zoology, and J. G. Stuart in political science. B.A. Degree—Helen Alexander, D. Burnside, A. Campbell, A. Crawford, Catherine Ferguson, J. H. Gray, J. H. Henderson, J. Mackenzie, Katherine Moss, F. D. Pearce, J. Rennie, C. F. Salmond, A. Stenhouse, J. G. Stuart, J. S. Tennant, W. F. Waters, Marion S. W. White. B.Sc., First Section—J. Chisholm. LL.B., first examination—F. T. Little, J. G. Stuart. LL.B., second examination—F. F. Haggitt, C. Mouatt, B.A. B.A., First Section—F. H. Campbell, W. H. Clark, E. C. Cutten, Grace F. Davidson, W. Eudey, W. Gray, Agnes F. Hallenstein, F. J. Heatley, I. W. W. Hunter, Jane B. Jamieson, G. Liddell, C. Lillie, M. McLeod, W. Mendelson, G. Miller, C. North, Joanna Paterson, N. Paterson, T. A. Paterson, J. Porteous, C. R. D. Richardson, Jessie H. Rutherford, J. A. Scott, F. Siedeberg, A. Spence, Elizabeth M. Watson, Barbara M. Watt.

The scholarship-holders attending the University are: Senior scholarships—A. Stenhouse, J. G. Stuart; junior scholarships—Miss R. M. Davey, Miss M. N. Gellatley; Gray-Russell Scholarship—A. R. Falconer; local scholarships—Richardson, Thomas D. Pearce, Walter Scott, A. H. Adams; normal school exhibitioners — John Pringle, John Brunton, G. King, E. G. Lillie, A. Spence, J. Porteous, and M. A. Sinclair.

In order to complete the staff of the School of Mines the Council received assistance from the Government towards the expense of procuring a duly-qualified lecturer on assaying and metallurgy from England, and Professor Robert Austin, at the request of the Agent-General for New Zealand, acting for the Council, selected Mr. D. Wilkinson, Bessemer Medallist of the Royal School of Mines, England, F.C.S., &c. Mr. Wilkinson, after selecting some material for the laboratory in London, travelled by way of America, visiting the chief centres of mining industry on his way, and commenced his duties in Dunedin in February.

A large building has been erected during the past year for the special accommodation of the School of Mines, at a cost of over £1,000. The building is well provided with the requisite furnaces and fittings for practical work, and the necessary appliances for class-teaching. A full syllabus of the course of study is appended in Schedule A. During the vacation most of the students have gained practical experience in mines in various parts of the colony. There are at present twenty-one students attending the classes in the school.

This year, in accordance with the decision of the Council, the session commenced on the first Monday in April, a month earlier than heretofore. By this arrangement the number of lectures will be increased, and a somewhat longer period will be given at the midwinter vacation.

In the early part of the year Mr. Mansford, who had long and faithfully served the University as Registrar, passed to his rest, and the Council appointed as his successor Mr. A. Hamilton, of Napier.

In the teaching-staff several changes have taken place. Professor Sale, one of the original members of the University staff, was granted six months' leave of absence in consequence of his failing health. The Council appointed the Rev. A. R. Fitchett as a *locum tenens*. Dr. Maunsell,

the lecturer on surgery, also received leave of absence, and Dr. Barnett was appointed to carry on the duties of the lectureship for this session. The lecturer on the German language, Dr. Bulau, resigned the appointment which he had held for many years. The Council have not yet chosen his successor.

In connection with the staff of the School of Mines the following appointments have been made: Lecturer on geology, Alexander Purdie, M.A.; lecturer on applied mechanics, John Thomson, B.E.; lecturer on mine and land surveying, Matthew Begg. Messrs. A. R. Barclay, B.A., LL.B., and W. A. Stout, B.A., LL.B., were reappointed lecturers on constitutional history and law, and on the law of property, respectively. To these must be added Mr. D. W. Wilkinson, the lecturer on assaying and metallurgy, engaged specially from England, with the co-operation of the Government, for the furthering of the mining interests of the colony. Although the Government have seen fit to abolish the office of Government Analyst, formerly held by Professor Black, the chemical laboratory is still available for public service; Professor Black performing all analyses requiring wet reagents, and Mr. Wilkinson, all analyses of ores and coals at the School of Mines.

Among the benefactions received during the past year from other sources may be mentioned a contribution for physical apparatus from the Presbyterian Church Board of Property of £60 7s. 4d., and the expenditure of the legacy of £100 left by the late Professor Mainwaring Brown on books for the library in the department of English literature.

The Council have been much engaged during the past year in considering the internal administration and arrangements of the various faculties, and have decided to constitute a faculty of medicine, for the better organization and conduct of the medical classes of the University and in the Hospital. The Council have appointed Professor J. H. Scott as the first Dean of the Faculty of Medicine, and the Chairman of the Hospital staff for the time being Vice-Dean,—Dr. Coughtrey being the first occupant of the office. (Schedule B.) The Council have also made arrangements for receiving monthly reports and returns of lectures, &c., from all professors and lecturers.

The Council have pleasure in reporting that the Museum of the University has been greatly increased in area by the erection a temporary wing, and a great number of valuable exhibits have been received from the Government of this colony, and from the Government of New South Wales. The work of arranging these has been ably carried out by Professor T. J. Parker, F.R.S., the curator, and his efficient staff. The present condition of the Museum is a credit to the University, and to all concerned.

The Art Society of Dunedin have deposited their collection of pictures in a public art gallery, which has been erected by public subscriptions, and forms part of the Museum addition. The whole is under the care of the Museum Curator.

The balance-sheet for the year ending the 31st March, 1891, is appended.

I have, &c.,

D. M. Stuart, D.D., Chancellor.

His Excellency the Earl of Onslow, G.C.M.G., &c., Governor of New Zealand.

SCHEDULE A.—SCHOOL OF MINES.

Regulations and Plan of Instruction.

1. The session is the same as in the arts course, commencing in the first week in April, and lasting for six months. The mode of instruction is by systematic courses of lectures in the prescribed branches of study, in connection with written and oral examinations, by practical work in the laboratories; and also, according to circumstances and opportunities, by inspection of mines, and by field excursions.

2. The classes are open to all persons over fifteen years of age. There is no entrance examination, but students enrolling themselves are expected to possess a fair knowledge of English and arithmetic, as well as some acquaintance with elementary mathematics, since otherwise they will derive little benefit from the lectures, and can scarcely hope to pass examinations which are held at the termination of each year's course.

3. The fees are the same as those charged in the arts course—namely, £3 3s. for each course of lectures occupying not less than three hours per week during the whole session, £1 10s. 6d. for any course occupying two hours per week, and £1 1s. for a course of one hour per week. In addition to the class fees, students are required to pay a college fee of £1 1s. per session. All fees must be paid in advance to the Registrar, including also 5s. for microscope fee.

4. There are four divisions in the mining school—the mining, the metallurgical, the geological, and the mine surveying. In the first three divisions the course of study can be completed in three years, and in the fourth division in two years, provided students enter in years ending with an odd number, as 1, 3, 5, 7, 9, and strictly follow the curriculum prescribed for each division. They may enter in intermediate years, but owing to certain lecture courses being given only in alternate years they will require an additional year for passing through the curriculum, unless they take more than the ordinary number of classes. Students who pass the examinations in any of the first three divisions obtain the distinction or title with diploma of "Associate of the University School of Mines, Otago." On passing successfully the examination in the fourth division they are entitled to receive the certificate of "Mining Surveyor."

5. Students may qualify themselves for certificates in two or more of the above-named divisions by attending the lectures, passing the examinations in the special subjects, and conforming to the rules regarding practical work (see Regulation 10) prescribed for the respective divisions. For example: A student following the course laid down for the associateship in the mining division may obtain also a certificate in the metallurgical division by attending the classes of metallurgy and going through the extended course of metallurgical laboratory practice specially prescribed for the latter division. It will not, however, generally be possible to complete such combined course within three years.

6. Instruction in drawing is provided at the School of Art. Certificates from the master of the School of Art that the prescribed courses in drawing have been gone through to his satisfaction will be required in all cases.

7. Examinations in the different branches of study are held in the month of October in each year, and students who have attended any course of lectures in the Mining School, and who have passed the examination in such course, will receive certificates to that effect. If a student fail to pass the October examination in any subject, an opportunity will be given him to pass in the same subject in October of the following year; and if he again fail to pass, he will be required to attend the lectures in that subject a second time.

8. It is competent for the Professorial Board to grant exemption from attendance at any course of lectures in the mining school to such students as produce satisfactory evidence that they have received sufficient instruction in the subject of which these lectures treat; but such students are, notwithstanding, required to pass the October examination in that subject.

9. Students who have passed the first section of the degree examination in the New Zealand University, and graduates of the New Zealand University, or of any University recognised in the statutes *ad eundem* of the New Zealand University, shall be exempted from examination in subjects which they have already passed at their respective Universities, but none shall be exempted from examination in physics, natural science, or chemistry, unless he has gone through a practical as well as a theoretical course of instruction. Those who are entitled to complete exemption from attendance at lectures and examinations in subjects indicated above, and who enter subject to the provision stated in Regulation 4, can complete the course of study in any of the first three divisions of the mining school in two years by following the special curriculum prescribed for the chosen division.

10. Students who have passed the class examinations in all the branches of study prescribed for any division are entitled, without further examination, at the termination of their course to the diploma or certificate of that division; provided that students of the mining division shall be required before receiving their diplomas to produce satisfactory evidence that they have spent at least twelve months in practical study in mines, and that students of the surveying division shall be required to produce satisfactory evidence that they have had six months' practice in mine and land surveying.

11. The certificates of all the divisions of the school are signed by the Chancellor or Vice-Chancellor of the University, the Chairman of the Professorial Board, and the Director of the School of Mines, and are sealed with the seal of the University.

12. The following are the courses of study prescribed for the respective divisions:—

I. Associateship.—Mining Division.

First Year's Lectures.—Mathematics, 5 hours; general geology, 2 hours; mining geology, 3 hours; theoretical chemistry and chemical technology, 5 hours; applied mechanics (first course), 1½ hours; mine and land surveying (first course), 2 hours; drawing, 4 hours: total hours per week, 22½ hours.

Second Year's Lectures.—Theoretical mechanics, 3 hours; physics, 4 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; mining (first course), 4 hours; applied mechanics (second course), 1½ hours; mine and land surveying (second course), 2 hours; surveying practice, 0; drawing, 2 hours; ore-dressing (part of first course metallurgy), 0.

Third Year's Lectures.—Physics, 4 hours; petrography, 3 hours; mining (second course, including mechanical gold extraction), 4 hours; chemical laboratory, 5 hours; assaying and metallurgical laboratory, 0; drawing, 2 hours.

Special Curriculum for University Graduates and Students coming under Regulation 9.

First Year's Lectures.—General geology, 2 hours; mining geology, 3 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; applied mechanics (first course), 1½ hours; mine and land surveying (first course), 2 hours; assaying and metallurgical laboratory, 0; drawing, 4 hours.

Second Year's Lectures.—Petography, 3 hours; mining (first and second course), 8 hours; applied mechanics (second course), 1½ hours; mine and land surveying, 2 hours; surveying practice, 0; ore-dressing (part of first course metallurgy), 0; drawing, 4 hours.

II. Associateship.—Metallurgical Division.

First Year's Lectures.—Mathematics, 5 hours; general geology, 2 hours; mining geology (first part, about three months), 3 hours; theoretical chemistry and chemical technology, 5 hours; applied mechanics (first course), 1½ hours; drawing, 4 hours: total hours per week, 20½.

Second Year's Lectures.—Theoretical mechanics, 3 hours; physics (lectures), 4 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; metallurgy (first course, including ore-dressing), 3 hours; applied mechanics (second course), 1½ hours; chemical laboratory, 5 hours; drawing, 2 hours: total hours per week, 23½.

Third Year's Lectures.—Physics (laboratory), 4 hours; metallurgy (second course), 3 hours; mechanical extraction of gold (last parts of second course mining), 0; assaying and metallurgical laboratory, 0; drawing, 2 hours.

Special Curriculum for University Graduates and Students coming under Regulation 9.

First Year's Lectures.—General geology, 2 hours; mining geology (first part, about three months), 3 hours; metallurgy (first course, including ore-dressing), 3 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; applied mechanics (first course), 1½ hours; drawing, 4 hours: total hours per week, 18½.

Second Year's Lectures.—Metallurgy (second course), 3 hours; applied mechanics (second course), 1½ hours; mechanical extraction of gold (last part of second course mining), 0; assaying and metallurgical laboratory, 0; drawing, 4 hours.

III. Associateship.—Geological Division.

First Year's Lectures.—Mathematics, 5 hours; general geology, 2 hours; mining geology, 3 hours; theoretical chemistry and chemical technology, 5 hours; mine and land surveying (first course), 2 hours; drawing, 4 hours: total hours per week, 21.

Second Year's Lectures.—Physics (lectures), 4 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; mine and land surveying (second course), 2 hours; surveying practice, 0; biology (lectures and laboratory), 10 hours; drawing, 2 hours.

Third Year's Lectures.—Theoretical mechanics, 3 hours; physics (laboratory), 4 hours; petrography, 3 hours; palæontology, 3 hours; chemical laboratory, 5 hours; drawing, 2 hours; geological field practice, 0.

Special Curriculum for University Graduates and Students coming under Regulation 9.

First Year's Lectures.—General geology, 2 hours; mining geology, 3 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; mine and land surveying (first course), 2 hours; drawing, 6 hours: total hours per week, 18.

Second Year's Lectures.—Petrography, 3 hours; biology (lectures and laboratory), 10 hours; palæontology, 3 hours; mine and land surveying (second course), 2 hours; surveying practice, 0; geological field practice, 0; drawing, 2 hours.

IV. Certificate of Mining Surveyor.

First Year's Lectures.—Mathematics, 5 hours: general geology, 2 hours; mining geology, 3 hours; theoretical chemistry and chemical technology, 5 hours; mine and land surveying (first course), 2 hours; drawing, 4 hours: total hours per week, 21.

Second Year's Lectures.—Theoretical mechanics, 3 hours; physics (lectures and laboratory), 8 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; mine and land surveying (second course), 2 hours; survey practice, 0; drawing, 4 hours.

SYNOPSIS OF CLASSES IN THE SCHOOL OF MINES.

Mathematics (Professor Gibbons).—Daily, 4.30 p.m. to 5.30 p.m. Fee, £3 3s.—Euclid: Six books, with geometrical exercises. Algebra, to the binomial theorem. Trigonometry, to the solution of plane triangles, including the use of logarithms. Text-books: Todhunter's Euclid, Todhunter's Algebra, and Lock's Trigonometry.

Mechanics (Professor Shand).—Monday, Tuesday, Thursday, and Friday, 4.30 p.m. to 5.30 p.m. Fee, £3 3s.—Text-books: Goodwin's Statics, Garnett's Dynamics, Besant's Hydrostatics.

Physics (Professor Shand).—Monday, Tuesday, Wednesday, and Thursday, 7.30 p.m. to 8.30 p.m. Fee, £3 3s.—The lectures are the same as in the arts course.

Biology (Professor Parker).—The lectures are the same as in the arts course.

Palæontology (Professor Parker).

Theoretical and Technological Chemistry (Professor Black).—Daily. Fee, £3 3s. (1.) The general principles of chemical notation, combination and nomenclature. (2.) The classification of the elements, and the principles of the leading chemical theories. (3.) The description of the more important elements and organic and inorganic compounds. (4.) The chemistry of metals. (5.) The general chemistry of animal and vegetable organisms. (6.) Chemical physics, including the chemical relations of light, heat, and electricity. Text-book: Fownes's Manual.

Qualitative Analysis (Professor Black).—Fee, £4 4s. This course is conducted in the Chemical Laboratory. Practical instruction is given to the students in classes. It is devoted to the qualitative analysis of simple, compound, and complex salts; soils, water, metallic ores, and other minerals. Text-books: Fresenius's Qualitative Analysis, Thorpe's Qualitative Analysis.

Quantitative Analysis (Professor Black).—Fee, £4 4s. This course is conducted in the Chemical Laboratory. Practical instruction is given to the students in the methods of determining the percentage composition of soils, rocks, fuel, clays, water, the ash of plants; also of metallic ores, limestones, coal, and other minerals. Text-books: Fresenius's Quantitative Analysis, Thorpe's Quantitative Analysis.

Metallurgy (David Wilkinson).—Fee, £3 3s. The lectures treat of: *(a.)* Fuel, furnaces, crucibles, retorts, fluxes; coal—the different varieties; charcoal—its manufacture in kilns, heaps, ovens; coke—its manufacture in mounds, ovens, &c. The description of the different kinds of furnaces: the blast furnace—hot blast, cold blast; reverberatory furnace, oxidising and reducing furnaces, puddling furnace, refinery, calcining furnace, liquation furnace, assay furnace, Siemens's gas furnace; materials for furnaces and crucibles—*e.g.*, fire-stone, fire-clay, fire-bricks; the different kinds of crucibles and retorts; determination of the heating-power of different kinds of fuel. *(b.)* Extraction of metals from their ores. *(c.)* Physical and chemical properties of the metals. *(d.)* Industrial applications of the metals.

Assaying (David Wilkinson).—Fee, £3 3s. Instruction is given to students in the Assay Laboratory or furnace-room. It is devoted to the most approved and useful methods of assay—both by the dry and wet processes—metallic ores, such as gold, silver, platinum, bismuth, the compounds of copper, lead, tin, antimony, zinc, iron, nickel, cobalt, mercury, &c.; also the dry and wet assay of bullion.

Mining Geology (Professor Ulrich).—Three hours per week. Fee, £3 3s. (1.) Modes of occurrence of useful minerals, description of the various kinds of deposits of useful minerals, lodes or mineral veins, bedded deposits—seams or layers, irregular massive deposits—stocks and stock

works, impregnations, &c.; theory of faults or heaves, and rules for searching for the faulted or lost portion of a deposit; review of certain theories and hypotheses regarding the mode of formation of mineral veins and other kinds of mineral deposits. (2.) Prospecting for useful mineral deposits; shoading, trenching, costeaning; boring, as practised with rods or rope; various apparatus with various kinds of cutting and clearing instruments; the diamond drill.

Mining (Professor Ulrich).—First Course: Four hours per week. Fee, £3 3s. (1.) The breaking-down of rocks and useful minerals; tools employed in hard and soft ground, in metal and coal-mines; various methods of blasting, tools and explosives employed; boring- and cutting-machines; fire-setting. (2.) Opening of mineral deposits—shafts and adits. (3.) Exploitation, or the working away of mineral deposits. (4.) Modes of securing excavations by timbering, masonry, and tubbing; construction of underground dams. (5.) Transportation of minerals and rocks along the underground roads, and hoisting or winding them up the shafts; machinery, appliances, safety-cages or parachutes, &c.

Second Course: Four hours per week. Fee, £3 3s. (6.) Modes of gaining access to underground workings. (7.) Ventilation of mines, its principles and modes of achievement; natural ventilation, artificial ventilation, various approved ventilators, distribution of air through the workings. (8.) Lighting of underground workings; description of the most approved safety-lamps; extinguishing of fires in mines. (9.) Drainage of mines of water; adits, pumps, pumping-engines, water-pressure engines. (10.) Mechanical extraction of gold from drifts and lode-stone, common and hydraulic sluicing, dredging, puddling, milling, and amalgamation, machines and appliances. Text-books: Gordon's Miners' Guide, Eissler's Metallurgy of Gold, Eissler's Metallurgy of Silver, Smyth's Coal Mining.

Mineralogy (Professor Ulrich).—General Course: Three hours per week. Fee, £3 3s. (1.) Crystallography; systems of crystallization; laws determining the modification of crystals; compound crystals; pseudomorphous crystals; description and use of goniometers. (2.) Physical properties of minerals discussed as far as essential to recognition and practical distinction of the various mineral species. (3.) Chemical composition of minerals. (4.) Classification and description of the more important species and varieties of minerals; their modes of occurrence, association, and geographical distribution, with special consideration of those that are of economic value, or that are of interest from a geological or physical point of view. These lectures will be illustrated by specimens intended for close inspection.

Advanced Course: One hour per week. Fee, £1 1s. Extended course in crystallography and the physical (especially optical) properties of minerals. Text-books: E. S. Dana's Text-book of Mineralogy, James E. Dana's System of Mineralogy.

Scientific Use of the Blowpipe and Determinative Mineralogy (David Wilkinson).—Fee, £1 11s. 6d. Instruction in the use of the blowpipe; reactions of elements, oxides, and acids; determination of artificial inorganic compounds, to be succeeded by that of important metallic and earthy minerals, by the aid of their crystalline form and physical properties. Experienced students, on providing themselves with the necessary apparatus, will also receive instruction in executing assays for gold, silver, lead, copper, nickel, cobalt, &c., by means of the blowpipe. Text-books: Fuch's Guide to the Determination of Minerals by means of the Blowpipe (trans. T. W. Danby), Brush's Manual of Determinative Mineralogy, Platner's Manual of Qualitative and Quantitative Analysis with the Blowpipe (trans. H. B. Cornwall).

Petrography (Professor Ulrich).—General Course: Three hours per week. Fee, £3 3s. Description of the character of the rock composing the earth's crust. Discussion of the different systems of classification proposed for the igneous, aqueous, and metamorphic rocks. Various methods for the determination of the chemical and mineralogical constitution and minute structure of rocks, with special consideration and illustration of the use of the microscope in the examination of thin sections. Preparation and mounting of thin sections. These lectures are illustrated by specimens intended for close inspection. Text-book: The Study of Rocks, by F. Rutley.

Advanced Course: Two hours per week. Fee, £1 11s. 6d. Special description of the "rock-forming minerals," particularly as to their optical properties; their determination in thin sections by the microscope and polariscope. Text-book: Rock-forming Minerals, by F. Rutley.

General Geology (vacant).—Introductory: History and development of geology as a science. Structure of the earth and evidences of internal heat. Degradation of the rocks, chemical and mechanical, including the action of glaciers, rivers, and seas. Distribution of material and formation of strata. Elevations and depressions of land. Volcanoes and earthquakes. General principles of stratigraphy, with metamorphism, contortion and slaty cleavage. Preservation of fossils, and succession of life in time. Stratigraphical geology: (*a*) palæozoic, (*b*) mesozoic, (*c*) kainozoic. Economic geology. Field geology. Summary of course. The lectures will be illustrated, according to circumstances and opportunities, by field excursions. Text-books: Geikie's Class-book of Geology, Elementary Lessons in Physical Geography, Outlines of Field Geology.

Applied Mechanics.—Fee, £1 11s. 6d. Steam-engine and boilers; pumping and winding machinery; air-compressors; rock and diamond drills; tramways.

Land and Mine Surveying.—Three hours per week. Fee, £3 3s.

Drawing (David C. Hutton, S. and A.M.).—The following is a condensed summary of the instruction given in drawing: Freehand drawing—Sketching simple designs and objects from the "flat;" sketching from models and from objects from the "round." Practical geometry—Use of drawing instruments, and the construction of scales; practical plane geometry; practical solid geometry, including isometric and perspective projection and the theory of shadows. Mechanical drawing—Machine drawing to scale, and working drawing in accordance with the best modern practice. Tinting drawings, correct figuring and lettering. Exemption from attendance may be granted to any student who has passed the science and art examinations in the above subjects.

Schedule B.—Faculty of Medicine.

1. *Constitution.*—The Professors and Lecturers of the Medical School of the University of Otago, and the Honorary Medical Staff of the Dunedin Hospital, shall constitute the Medical Faculty of the University of Otago.

2. *Officers.*—There shall be a Dean of the Faculty of Medicine, and a Vice-Dean of the Faculty of Medicine.

3. *Appointment of Officers.*—The Dean shall be appointed for a term of three years by the Council of the University of Otago. The Vice-Dean shall be the Chairman of the Hospital Medical Staff for the time being.

4. *Functions of the Faculty.*—Generally, to regulate and arrange all matters concerning the teaching in the Medical School, subject to the approval of the University Council, and, in the case of the teaching in the Hospital, subject also to the concurrence of the Hospital Trustees.

5. *Duties of the Officers.*—It shall be the duties of the Deans to forward to the Council of the University reports on the work of the Medical School when necessary, covering the monthly reports to be made by every Professor and Lecturer.

6. At the end of every month during the session every Professor and Lecturer shall fill in, on a printed form, the number of students attending his class, and the number of lectures delivered by him, and in the case of practical work, the character of the work done, and shall forward the form duly filled in and signed to the Dean.

Statement of the Receipts and Expenditure of the University of Otago for the Year ending 31st March, 1891.

General Account.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
Balance in Colonial Bank, 31st March, 1890	2,575	13	10	Salaries—			
Endowments—				Professors	5,100	0	0
Rent of Burwood and Mararoa	1,300	0	0	Lecturers	1,266	13	4
„ Barewood	1,750	0	0	Registrar	270	16	8
„ Benmore	3,600	0	0	Attendants and Assistants to Professors	339	17	10
„ Forest Hill	32	13	8	Professors' and lecturers' fees	1,484	19	3
„ House in Castle Street	52	0	0	Apparatus and chemicals	348	19	1
„ House, Leith Street	3	15	0	Furnishing and fittings	48	5	3
Church Board of Property contributions—				Repairs and alterations	248	8	2
For salaries	1,650	0	0	Law costs	99	0	0
Towards expenses of Physical Laboratory	60	7	4	Library	51	13	9
Fees—				Prizes	26	16	0
College and examination	146	1	6	Insurance	40	18	0
Class	1,571	7	9	Printing, advertising, and stationery	111	12	9
Analysis	20	0	0	Water, fuel, and light	213	4	5
Interest—				Municipal rates	109	7	6
On fixed deposits	67	2	0	Incidental expenditure	54	4	6
On deferred payment, Macdonald	26	1	2	McLellan's mortgage expenses	4	10	1
Government subsidy, School of Mines	500	0	0	Transfer to Loan Interest Account	900	0	0
Government contribution for chemicals and expenses of lectures on metallurgy	200	0	0	For report on scholarships	15	0	0
				Refund of fee (Maskell)	1	1	0
Prospecting licenses and goldfields revenue	17	1	0	School of Mines, New Building Account	889	11	3
Refund of payment from High School Governors	16	2	3	Additions to Museum, Building Account	378	13	0
				Sale of lease of Burwood, expenses	52	11	6
Transferred from Museum Account	25	8	6	Balance, 31st March, 1891	1,557	10	8
	£13,613	14	0		£13,613	14	0

Richardson Scholarship Fund.

	£	s.	d.		£	s.	d.
Balance, 31st March, 1890	722	15	9	Payment to holder of scholarship	40	0	0
Receipts—Interest from mortgage	42	0	0	Balance, 31st March, 1891—			
Interest from fixed deposit	5	14	0	Investment on mortgage	600	0	0
				Investment on fixed deposit	120	13	0
				Bank, current account	9	16	9
	£770	9	9		£770	9	9

Sir Walter Scott Scholarship Fund.

	£	s.	d.		£	s.	d.
Balance, 31st March, 1890	291	6	11	Payment to holder of scholarship	15	0	0
Balance overdraft, 31st March, 1891	8	16	1	Interest on overdraft	0	3	0
				Balance, 31st March, 1891—			
				Investment on debentures	285	0	0
	£300	3	0		£300	3	0

Taieri Scholarship Fund.

	£	s.	d.		£	s.	d.
Balance, 31st March, 1890	134	10	2	Expenditure—Nil	..		
Receipts—				Balance, 31st March, 1891—On fixed deposit	141	4	2
Donation from the founder, Hon. James Fulton	50	0	0	Fixed deposit	50	0	0
Interest on fixed deposit	6	14	0				
	£191	4	2		£191	4	2

Women's Scholarship Fund.

	£ s. d.		£ s. d.
Balance, 31st March, 1890	472 12 6	Expenditure—Nil	..
Receipt—Interest on fixed deposit ..	9 0 0	Balance, 31st March, 1891—	
		Debentures	288 15 0
		Fixed deposit	189 0 0
		Bank, current account	3 17 6
	£481 12 6		£481 12 6

Macandrew Scholarship Fund.

	£ s. d.		£ s. d.
Balance, 31st March, 1890	548 12 6	Expenditure—Nil	..
Receipts—Interest	27 11 11	Balance, 31st March, 1891—	
		Investment on fixed deposit	576 4 5
	£576 4 5		£576 4 5

Macgregor Prize Fund.

	£ s. d.		£ s. d.
Balance, 31st March, 1890	79 7 4	Expenditure—Nil	..
Receipts—Interest on fixed deposit ..	3 19 0	Balance, 31st March, 1891	83 6 4
	£83 6 4		£83 6 4

Professor Brown's Bequest for Books.

	£ s. d.		£ s. d.
Receipts—Balance, 31st March, 1890 ..	105 0 0	Expended on books	105 0 0

Museum Trust Account.

	£ s. d.		£ s. d.
Receipts—Rent of reserve	766 13 4	Expenditure—	
		Athenæum, to share of receipts ..	76 13 4
		Maintenance of museum	664 11 6
		Refund to General Account	25 8 6
	£766 13 4		£766 13 4

Interest Account, Loan No. 2 Account (Building Purposes), 1882, £15,000 at 6 per cent.

	£ s. d.		£ s. d.
From General Account..	900 0 0	Interest paid	900 0 0

Balances.

Cr.	£ s. d.	*Cr.*	£ s. d.	£ s. d.
General Account	1,557 10 8	General Account	582 15 9	
Richardson Scholarship	730 9 9	Richardson Scholarship ..	9 16 9	
Taieri Schalarship	191 4 2	Women's Scholarship	3 17 6	
Women's Scholarship	481 12 6	*Dr.*		596 10 0
Macandrew Scholarship..	576 4 5	Sir Walter Scott Scholarship ..	8 16 1	
Macgregor Prize Fund	83 6 4	Outstanding cheques, 31st Mar.	368 10 7	
Sir Walter Scott Scholarship	285 0 0			377 6 8
	3,905 7 10			219 3 4
Dr.				
Sir Walter Scott Scholarship	8 16 1	Debentures		285 0 0
		Debentures		288 15 0
		Mortgage		600 0 0
		Fixed deposit		2,503 13 5
	£3,896 11 9			£3,896 11 9

A. HAMILTON, Registrar.

Examined and found correct.—JAMES EDWARD FITZGERALD, Controller and Auditor-General.

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