

1882.
NEW ZEALAND.

EDUCATION: THE CANTERBURY COLLEGE

(PAPERS RELATING TO).

[In Continuation of E.-4, 1881.]

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

STATEMENT of CHAIRMAN of the BOARD of GOVERNORS.

At the annual meeting of the Board of Governors of the Canterbury College, held on the 10th July, 1882, the Chairman's statement of the progress made and the work done in the several departments during the year was read as follows:—

At this the ninth annual meeting of the Board, I propose to make the usual statement, showing the progress made during the past twelve months of the various institutions under the management of the Board. I shall commence with the College.

Canterbury College.—The number of matriculated students attending the classes during the past year was forty-six, being an increase of four over those attending the previous year. The total number of students matriculated and non-matriculated attending lectures during the year was 108, being an increase of seven on those attending the previous year. The number of students attending each lecture during the last term was as follows:—

Pass Latin (translation), 19; pass Latin (composition), 25; Greek (translation), 6; Greek (composition), 5; honours Latin (translation), 4; honours Latin (composition), 5; English composition lecture, 43; Hamlet, and Romeo and Juliet, 48; Chaucer's Era, 29; Burton's Anatomy of Melancholy, 28; philological lecture, 15; criticism lecture, 16; English history, 24; lower mathematics, 25; upper mathematics, 4; mechanics and hydrostatics, 14; advanced mathematics, 1; junior chemistry, 9; senior chemistry, 5; junior physics, 9; senior physics, 6; laboratory practice, 10; junior geology, 2; senior geology, 4; teachers' geology, 8; junior botany, 10; senior botany, 4; junior zoology, 6; senior zoology, 1; pass biology, 14; honours biology, 3; teachers' biology, 2; senior French, 6; junior French, 2; German, 3.

Six students (C. Chilton, B. M. Connal, Miss M. Edger, T. S. Foster, J. Innes, and J. B. Wilkinson) entered at the last examination of the University of New Zealand for honours and for the degree of M.A., and one (Miss K. M. Edger) for the degree of M.A. All were successful. Messrs. Connal and Foster took first class in languages and literature (Latin and Greek); Miss Edger and Mr. Innes first class in languages and literature (Latin and English); Mr. Chilton first class in natural science (biology); and Mr. Wilkinson first class in chemistry and experimental physics (electricity and magnetism). Mr. James Hay, M.A., passed the examination for the degree of Bachelor of Laws. Two students (W. B. Douglas and G. Watson) passed the final examination for the degree of B.A., and eight students (L. Cohen, J. Grossmann, Miss Grossmann, S. Hamilton, R. F. Irvine, J. J. Paterson, H. T. Purchas, and H. B. M. Watson) passed the first section of their examination for the B.A. degree; in both cases these were the whole of the candidates that went up for examination. Of five senior scholarships given by the University of New Zealand on the results of the last examination, the first four were gained by students of this College, viz., Joseph Grossmann, R. F. Irvine, Miss Janette Grossmann, and L. Cohen. The College exhibitions given for excellence in honours work at the College annual examinations were awarded to J. P. Grossmann, for Latin; R. F. Irvine, for English; W. P. Evans, for mathematics; S. Hamilton, for physics; R. M. Laing, for biology; and Miss E. Searle, for history, political economy, and French. During the past year 117 volumes have been added to the College Library.

In my statement last year I reported that contracts had been entered into for the erection of a hall in which examinations could be conducted, degrees conferred, and lectures and addresses given. Satisfactory progress has been made with the building, and there is reason to believe that it will be completed within two months from this date. The inside measurement is 80 feet by 35 feet. This will afford ample space for the purposes for which the hall has been erected. I wish to draw the attention of the

Board to the necessity of proceeding as soon as possible with the additions required—i.e., additional lecture and professors' rooms, as shown on the design furnished by the architect. I trust the Board will make arrangements for completing these buildings as soon as the funds of the College will allow.

Museum.—Since the last meeting many valuable additions have been made to the Natural History Department by contributions from various institutions and from private individuals. The instrument for registering the daily number of visitors to the Museum has been in position since the 18th June. The number registered since then is 5,200, being at the rate of 124,800 for the year. The Technological Department was opened on the 15th February, the models received from Europe and America having been placed in position. The department contains models of steam-, water-, and gas-engines, bridges, ships, apparatus used in mining, drainage and irrigation, models of roofs of buildings, models illustrating mechanical motions, metallurgical processes, manufactures of indiarubber, &c. I append a valuable statement in detail, furnished by Professor Julius Von Haast, Director of the Museum, showing the additions to the Museum during the past year.

School of Art.—Since the last annual meeting all the cases containing models, books, casts, &c., selected by Mr. Kennaway and Sir Phillip Cunliffe Owen in England have arrived, and are now in the School of Art, which was opened on the 1st March, under the master, Mr. D. Blair, formerly Examiner in Art at the South Kensington Museum. The school is held in the building formerly used for the Girls' High School. The requisite alterations were made and the rooms fitted up under the superintendence of the master. The necessity for the establishment of this school was shown immediately after it was opened by the very considerable number of students who attended the classes. The number attending the morning classes during the first term was 28, and the evening classes 63, and the attendance during the present or second term shows a considerable increase, being—morning 45, and evening 80. Of these, 28 students make buildings a speciality, 23 machinery, and 5 lithography, the remainder attending for general instruction. Instruction is also given to 42 pupils of the Boys' and 21 pupils of the Girls' High Schools. The master, finding the work of the school increasing, applied for assistance, and the Board, desirous of making the school thoroughly efficient, appointed Mr. G. H. Elliott, who holds a certificate from the National Art Training School, South Kensington. The Board of Education, wishing to have drawing taught to the pupils of the normal and district schools, made application to this Board requesting the services of the master of the School of Art in organizing a staff, and supervising the instruction to be given in these schools. Correspondence between the Boards has taken place, and there is every probability of a satisfactory arrangement being made, as it is the desire of this Board that the benefit to be derived from the School of Art should be as widely extended as possible.

Boys' High School.—The school opened on the 18th May last with an attendance of 78 boys, which number increased at the second term to 90, and an assistant-master being required Mr. C. Chilton, B.A., was appointed. At the next term the attendance at the school increased to 114, and Mr. G. Watson, B.A., was engaged to teach in the afternoons. At the commencement of the present term the third master received the appointment of headmaster to the West Christchurch District School, and tendered his resignation to the Board, which resignation the Board accepted with regret at losing the services of a teacher so efficient. In consequence of this resignation, Mr. Watson was appointed assistant-master, and Mr. Carrington, B.A., was engaged to teach in the forenoon. The number of boys attending the school having increased to 121, another master was required, and Mr. Irvine was temporarily appointed. Instruction in drawing is given in the School of Art to the pupils of the Boys' High School whose parents wish them to attend; the number at present in attendance being 42. In the early part of this year a library was opened at the Boys' High School for the use of the pupils; founded partly by grant from the Board of Governors and partly by private subscriptions, the number of volumes being 450.

Girls' High School.—The new building in Cranmer Square was opened at the commencement of the third term of 1881. During the past year 107 pupils attended the school; the number at present on the books being 74. The school was examined by Professors Brown and Cook at the end of 1881, and their report was very satisfactory. It was also inspected by the Inspector-General, the Rev. W. J. Habens, and his report thereon is as follows:—

“Education Department, Wellington, 29th November, 1881.

“I inspected this school on the 31st October. With the exception of the removal from the old building to a new one equally suitable and on a preferable site, there seems to have been no change of any consequence made during the year. I need, therefore, only refer to the very favourable opinion expressed in my former reports as to the organization of the school and the character of the work done in it.

“WM. JAS. HABENS.”

As the land received for the endowment of this school is not of superior quality, there was considerable difficulty in leasing it on terms which would provide sufficient revenue in aid of the school fees; the Board therefore was reluctantly obliged to make some alterations in the staff, and in some cases to reduce the salaries so as to bring the expenditure within the probable income. I have to state that the Board recognizes the zeal and efficiency of the teaching staff, and that this reduction of salary was in consequence of the limited means at the disposal of the Board.

Public Library.—The number of books in the Library has been increased by 387 since the last annual meeting, namely, 115 for the reference and 272 for the circulating department; the number of volumes at present in the Library being 9,193 in the circulating and 6,486 in the reference department, or a total of 15,661. Number of subscribers, 644.

School of Agriculture.—This school, which opened on the 9th July, 1880, with eight students, has increased so much that during the past year fifty-one students have received instruction, and no better proof of its being appreciated not only as a local but also as a colonial institution can be brought forward than by stating the districts from whence the students came: Auckland, 3; Gisborne, 1; Invercargill, 2; Napier, 3; Nelson, 2; Otago, 2; Poverty Bay, 2; Wanganui, 1; Wellington, 2; Westland, 1; Canterbury, 32. At the examination held in June, 1881, H. L. Ellis and

L. Cuff gained the two vacant scholarships. The number of students attending last term was 38. Additional applications have been made from students desirous of entering the school next term. The buildings are now completed, and accommodate fifty-five students, with lecture and class-rooms and apartments for the staff. Since the last meeting the following appointment has been made, viz., Mr. F. Barkas, A.Sc., Durham, as Lecturer on Chemistry. It has been the earnest desire of the Board that this institution should be considered of colonial importance, and, in order to give facility to young men from every part of the colony to enter as students, the Board granted travelling allowance to students to and from their homes once in each year. As the school has only been two years in existence the results cannot be expected to be very apparent. Good work, however, has been done. I beg to direct the attention of the Governors to a valuable report lately furnished by Mr. Ivey, director of this school, which report I suggest should be published for general information.

Accounts.—The accounts of the Board for the financial year ending the 31st December, 1881, have been audited and certified as being correct by Mr. Ollivier, who was appointed by the Government for that purpose.

ABSTRACT of ACCOUNTS of the BOARD of GOVERNORS of CANTERBURY COLLEGE, for the Year ending 31st December, 1881.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
To Grants for Girls' High School ...	700	0 0	By Balance brought forward ...	654	9 3
Girls' High School fees ...	1,204	0 9	College—		
Professors' fees ...	634	14 6	Maintenance ...	5,625	9 10
College maintenance... ..	105	5 0	Buildings ...	2,904	3 10
Boys' High School ...	715	16 8	Fees ...	634	14 6
Sale of text-books ...	76	13 8	Text-books ...	7	17 7
Public library maintenance ...	594	13 11	Library ...	50	10 8
Laboratory... ..	44	5 10	Public Library—		
School of Agriculture—			Maintenance ...	1,571	8 10
Fees ...	1,401	14 6	Reference ...	186	12 6
Sale of stock produce ...	1,364	8 0	Museum—		
Implements, &c. ...	21	16 5	Maintenance ...	2,499	8 6
Interest on loans ...	3,973	7 7	Buildings ...	1,636	4 9
Rents ...	974	6 8	Laboratory... ..	151	17 9
Land sales ...	925	9 9	" chemicals ...	46	0 0
Rents—			Girls' High School—		
Classical School ...	2,197	19 4	Maintenance ...	2,014	17 8
Superior education ...	1,863	19 7	Buildings ...	2,325	13 3
Boys' High School ...	1,102	11 8	Boys' High School—		
School of Technical Science... ..	1,456	13 3	Maintenance ...	2,960	4 10
Land sales ...	808	0 9	Buildings ...	2,026	16 3
Refund ...	15	0 0	School of Agriculture—		
Repayment of loans ...	30,700	0 0	Labour and maintenance ...	5,086	0 0
Loan ...	25,800	0 0	Buildings and permanent improvements	9,392	15 1
Interest ...	1,903	4 5	Plantations ...	97	14 3
Deposit account ...	3,746	12 0	Live stock ...	359	0 0
School of Agriculture, imprest account...	24	19 4	Implements ...	265	15 11
Balance overdraft ...	462	9 5	Library ...	25	2 0
			Capital account ...	4,966	10 9
			School of Mines ...	97	13 11
			" and Models ...	77	14 4
			School of Art ...	678	9 8
			Loans and refunds ...	35,822	12 0
			Interest ...	21	9 4
			Deposits ...	25	0 0
			Classical School ...	2	2 0
			Girls' High School, capital account ...	103	13 9
	£82,318	3 0		£82,318	3 0

I have audited this account, and have compared the items with the vouchers, and find it correct.

26th April, 1882.

J. OLLIVIER,
Provincial District Auditor.

REPORT on the PROGRESS and CONDITION of the CANTERBURY MUSEUM, CHRISTCHURCH,
30th June, 1882.

I HAVE the honor to submit to you my annual report on the progress of and improvements made in the Canterbury Museum. It is my pleasant duty to state that also during the past financial year the Canterbury Museum has made considerable progress in every respect. The number of donors to the Museum during the past twelve months reached a total of 135, many of the presentations being of peculiar value and interest. The most important specimens for the natural history and ethnographical divisions were received from the following gentlemen and institutions: Mr. R. W. Fereday; Mr. J. D. Enys, F.G.S.; Mr. T. W. Hacket, in Nelson; Mr. G. M. Thompson, F.L.S., in Dunedin; Dr. J. Hector, F.R.S., in Wellington; Dr. George Bennett, F.L.S., in Sydney; the Royal Museum, Bruxelles; Captain Greenstreet, of the "Mataura;" Mr. Charles Chilton, M.A.; Mr. J. E. Brown, M.H.R.; Mr. Edward Meirick, B.A.; and His Excellency Sir Arthur Gordon, G.C.M.G. For the technological branch the most important contributions were from Mr. T. F. Cheesman, F.L.S., Auckland; Mr. James Barnard, Launceston; Messrs. Emerson, Smith, and Co., Beaver Falls, Pennsylvania; Mr. D. Sladden, Oxford; Public Works Department, Christchurch; Science and Art Department, South Kensington, London; Mr. C. B. Knorpp, Public Works Department, Wellington; Mr. T. H. Potts, F.L.S.; Mr. G.

Thornton, M.I.C.E.; and Mr. A. Fletcher, Melbourne. For the statuary room and picture gallery a few contributions were also received. From the Duke of Manchester his bust; from Mr. James Black an oil painting by T. Collins; and from Mr. Laning Coates, in Philadelphia, an oil painting portrait of General Washington by Samuel Mun. In Appendix A the list of exchanges received, and in Appendix B those sent to other museums, are given. A series of monkeys (stuffed) and of skins of rare eagles and pheasants, by purchase from England, and a series of New Zealand Coleoptera (types), were also bought.

Scientific Work done at the Museum.—Being badly in want of assistance, I engaged temporarily Dr. W. Haacke, formerly assistant of Professor E. Haeckel in Jena, in the beginning of August, to prepare specimens for the Technological Museum, and to catalogue in the zoological and botanical departments, a task to which his former studies well qualified him. During the seven months he stayed at the Museum,—after which he received the appointment as Curator of the Adelaide Museum, South Australia,—the ticket catalogues of the mammals and birds, both foreign and New Zealand, New Zealand Crustacea, Bryozoa, Hydrozoa, and Echinodermata, were prepared by him. The rest of the botanical collections was received from Mr. T. Kirk, and the whole has now been arranged in six large cabinets, so that the students or any person wanting information can consult them. Being anxious to complete our collections from the moa-hunter encampments, Mr. W. Sparks went last August to Shag Point, Otago, making systematic excavations, with the assistance of a labourer, and brought a very large and valuable series back with him. The type collection of Coleoptera, obtained from Captain T. Broun, was augmented by a second set, and has already proved very valuable for reference also. Mr. R. W. Fereday has during the past year continued his arduous task of preparing for the Museum a type collection of New Zealand Lepidoptera, and has made considerable advance therewith. Our best thanks are due to him for this labour of love. The number of birds set up during the year, and now exhibited in the show-cases, is seventy-two: amongst these are eight New Zealand birds, and the rest consist of foreign ones. Some fine eagles, two beautiful and rare pheasants from Central China, and the red bird of paradise are included in the latter. Two large fishes were set up, and about a dozen vertebrate skeletons. A great deal of the taxidermist's time has been taken up with other work, owing to the opening of the Technological Museum, and, in consequence, the rearrangement of some of the other rooms.

Library.—Fifty-seven works and parts of works have been added to the Library, and it is to be regretted that no funds can be devoted to the purchase of works of reference, of which so many are urgently required.

Technological Department.—Owing to various circumstances (the delay in the delivery of show-cases, the leaking of the glass roof) the new room, intended for the Technological Museum, could only be opened on the 15th February to the public, but ever since it has been a great source of attraction to visitors, who find there both instruction and enjoyment in the examination of the various exhibits. In the high wall-cases the following arrangement has been pursued: In the first case—Mechanical powers, geometrical models and models illustrating mechanical motion. In the second case—Continuation of the mechanical motion, details of machinery, drainage, and irrigation. In the third case—Steam-, water-, and gas-power engines and metallurgical models, mining models, timbering of mines, laboratory vessels, models of bridges, and ship-building. In the fifth case—Models of timber construction and joinery. In the sixth case—Timber and stone construction, both in brick and freestone. The seventh and last wall-case has been devoted to art metal-work. The three large central cases, and a smaller one in the same room, contain specimens of ceramic art of all kinds, glass, enamels, *repoussé*, and other work in metal. Textile fabrics and specimens, illustrating the manufactures of indiarubber, gutta-percha, and celluloid are in the same cases. In the desk-cases on both sides of the central rows the fine and extensive collections in illustration of metallurgy, both foreign and New Zealand, are exhibited, together with kauri gum, timber, and fibres. In other places the products of our gold fields, specimens of New Zealand timber, building stones, and many other objects of interest have been placed.

School of Mines.—Also during this year valuable collections have been received for the teaching of mining and metallurgy, including several models and large series of specimens of minerals and ores. Further collections, made on our behalf by Professor von Hochstetter, the Director-General of the Imperial Museum, Vienna, are on the way out. Another series of rare metals and precious stones is daily expected to arrive in Lyttleton, amongst the former a fine specimen of platinum, of osmium, iridium, and of iridosmium: of the former, a diamond in the matrix, from the South African mines. The models illustrating the mining and metallurgical processes, and of which some more are expected, are, as before observed, placed in the high wall-cases in the technological room.

Attendance.—The attendance of the public has during the last year been larger than ever before; but, having no automatic process to get authentic information, on various occasions—on week-days, public holidays, and on Sunday afternoons—I had the visitors counted. As, for instance, on last Queen's Birthday over 1,600 visitors entered the building; on various Sunday afternoons the attendance ranged between 600 and 1,200; on week-days from 100 to 400. However, since the 18th June the instrument for the registration of visitors has been at work, giving the following numbers: Sunday, 18th June, 1,119; Monday, 19th, 135; Tuesday, 20th, 161; Wednesday, 21st, 385; Thursday, 22nd, 261; Friday, 23rd, 306; Saturday, 24th, 241: thus giving for one week a total of 2,608 visitors, which multiplied by 48 would give an annual total of 125,184 visitors. Considering that we are in mid-winter, I do not think that the estimate is too high, but I believe it is below the actual number, which I have no doubt the next year's total will prove.

Technological Museum and Picture Gallery Fund.—Owing to the fact that the fund available for current expenses, purchases, &c., during the year 1882 is far less than for several years past, and that the International Exhibition now held in Christchurch would give ample opportunity to obtain valuable specimens for the Technological Museum, instead of addressing myself to one gentleman only (Mr. George Gould), or to the Philosophical Institute, as done on several occasions in previous years, I ventured to address a circular to a number of gentlemen whom I thought might take an interest in the advancement of the public collections. You will observe that in my appeal I also included a picture

gallery, as I thought the time had come when a beginning might be made for such a very useful addition to the public collections. Up to the present time the general public have liberally subscribed, the sum total of £502 10s. having been obtained, but I hope that a still larger amount will be forthcoming. It is my intention to devote about £300 of this amount to the completion of the Technological Museum by obtaining specimens of industrial art, models, and some more show-cases, and the rest towards purchasing two or three good pictures; and I have no doubt that when once a beginning is made several of our wealthy citizens (as this has repeatedly been done in Melbourne and Sydney) will come forward and present valuable pictures to the art gallery.

International Exhibition.—I wish finally to state that already several of the exhibitors have made valuable donations to the Museum, to be handed over at the close of the Exhibition, and that several of the agents of eminent English manufacturers have most cordially and strongly advocated the applications sent Home by me to present their exhibits to the Museum. These gentlemen have no doubt that in many cases my applications will be successful. The value of this Exhibition to further the technological education of our mechanics, to advance the taste of the public, and to offer valuable suggestions how best to utilize our raw products in the colony cannot be over-estimated.

I have, &c.,

JULIUS VON HAAST,
Director.

The Chairman of the Board of Governors, Canterbury College.

APPENDIX A.

COLLECTIONS RECEIVED IN EXCHANGE.

Professor H. Burmeister, Director, Museo Publico, Buenos Ayres.—Two skins of *Rhea americana* (American ostrich).

F. Kayser, Director, Mount Bischoff Tin Mines, Tasmania.—Collection of rocks, tin ores, and metallurgical products from these mines.

Professor H. Ward, Rochester, New York.—Ethnological specimens from North America, Mexico, and Peru; relief maps of Mounts Blanc, Etna, and Vesuvius; models of Swiss lake-dwellings, and of two cave-towns in North America; casts of meteorites, and prehistoric bone-carvings of Central France; six human skulls—North American Indians and Nubians; skin of *Camelus dromedarius* (common camel).

Auckland Museum.—Portions of skeletons of *Dinornis curtus* and *Geranoides*; collection of kauri gum.

T. A. de Roepstoff, Andaman Islands.—Collection of ethnological specimens from the Andaman and Nicobar Islands.

United States National Museum, Washington.—Collection of North American fishes from the Pacific Coast, 96 species in 99 specimens, in spirits of wine; collection of North American fishes in spirits of wine, 86 species in 90 specimens; collection of invertebrates from the New England coast, in spirits of wine, 165 specimens; collection of North American reptiles, in spirits of wine, 57 species in 96 specimens.

APPENDIX B.

COLLECTIONS SENT IN EXCHANGE.

Royal Museum, Dresden, Germany.—Specimens of stone implements and broken moa bones from the kitchen middens (moa-hunter encampment), Shag Point, Otago.

Imperial Museum, Vienna, Austria.—Two moa skeletons and portions of same, collection moa-hunter remains, Shag Point.

Professor Ward, Rochester, New York.—Three moa skeletons and portions of same.

Royal Museum, Florence.—Skeleton of *Megaptera lalandii* and portions of skeleton of *Berardius arnouxii*.

W. A. Baker, Auburn, New York.—Specimens of stone implements and broken moa bones from the moa-hunter kitchen middens, Shag Point, Otago.

Auckland Museum.—101 foreign bird-skins, 22 skeletons of mammals and birds (foreign).

