

SCHOOL OF ENGINEERING, ELECTRICITY, AND TECHNICAL SCIENCE.

Report of the Professor in charge (Mr. Robert J. Scott, M.I.M.E., M.I.C.E.) :—

I have the honour to report that during the year 1905, 172 students attended lectures in the School of Engineering, Electricity, and Technical Science, the hour attendances per week amounting to 1,353.

Forty-five students were taking the full courses for the University degree, or the associateship of the school; 6 College students attended lectures in electricity and magnetism.

Results of Examinations.—At the University examinations in 1904, 10 students passed part of the first examination and 5 completed the first examination; 5 students passed part of the second examination; and 5 completed their final examination for the degree of Bachelor of Science in Engineering.

Associateship of the School of Engineering.—Three students passed the final examination for the Associateship in Mechanical Engineering of the School of Engineering and Electricity, and 1 student that for the Associateship in Electrical Engineering. The passes in these courses in the subjects taught in the School of Engineering were: In freehand mechanical drawing, 5; advanced descriptive geometry, 7; mechanical drawing (advanced, second year), 4; steam-engine (elementary), 8; steam-engine (intermediate), 11; steam-engine (advanced), 4; elementary applied mechanics, 1; applied mechanics, 9; mechanics of machinery, 6; hydraulics and pneumatics, 9; strength of materials (elementary), 6; strength of materials (intermediate), 4; strength of materials (advanced), 3; theory of workshop practice, 3; surveying (elementary), 1; electricity and magnetism, 4; advanced electricity, 2; electrical engineering (intermediate), 1; electrical engineering (advanced), 1; mechanical drawing and designing, 2; mechanical drawing and designing (electrical), 1.

Evening Students.—119 certificates were obtained by students attending evening lectures, who passed in the following subjects at the annual examinations:—First Class: Freehand mechanical drawing, 6; descriptive geometry and setting-out work, 7; mechanical drawing, Section I, 6; mechanical drawing, Section II, 6; mechanical drawing, Section III, 1; the steam-engine (elementary), 7; elementary applied mechanics, 2; strength of materials (elementary), 2; elementary electricity, 4; elementary electrical engineering, 2. Second Class: Freehand mechanical drawing, 14; descriptive geometry and setting-out work, 9; mechanical drawing, Section I, 12; mechanical drawing, Section II, 8; mechanical drawing, Section III, 1; elementary steam-engine, 8; elementary applied mechanics, 6; strength of materials (elementary), 6; elementary electricity, 7; elementary electrical engineering, 5.

Annual Grant.—The annual grant of £1,500 made by the Government, for the first time, this year has enabled considerable additions to be made to buildings and apparatus, and also the work of the school to be subdivided and specialised, with satisfactory results.

Courses in Engineering.—At present nine distinct courses in engineering are open to students. Six of these are day courses, providing the instruction necessary for taking the University degrees of Bachelor of Mechanical, Electrical, or Civil Engineering, and for obtaining the associateship of the School of Engineering in these branches. Three are evening courses: (a) A four-years course for apprentices in mechanical engineering; (b) a three-years course which, with concurrent shop-work, qualifies, by arrangement with the Marine Department, for a third-class marine engineer's certificate; (c) a four-years course for apprentices in electrical engineering.

Additions to Buildings.—During the year the erection of a large hydraulics laboratory was approved of by the Board of Governors and its construction begun; a small workshop was built; and an excellent photometric room and two instrument-rooms constructed in the previously waste space of the roof of the existing building. A small lecturer's room was formed in the old stair-well, and a transformer gallery erected in the electrical engineering laboratory.

The Professor in charge having been authorised to expend £900 on plant during his visit to Europe, a large quantity arrived during the year and was set up in the various laboratories.

MUSEUM.

Report of the Acting-Curator (Dr. Charles Chilton, M.A., D.Sc.) :—

I have the honour to report on the work of the Museum for the year 1905. This duty falls to me owing to the lamented death of the Curator, Captain F. W. Hutton, and I cannot perform it without in the first place recording the great loss caused to the Museum by his death; his width of knowledge of the various branches of science and his acquaintance with the natural history of New Zealand were unequalled, and his name will remain inseparably connected with the foundation of New Zealand geology and zoology.

The late Captain Hutton left for England in March, 1905, and I then took charge of the Museum, and the ordinary work has been carried on as usual since. He took with him a considerable number of duplicates for exchange, so that, beyond this, fewer exchanges have been made than usual. Exchanges have, however, been sent to the Victoria Museum at Launceston, Tasmania, a duplicate specimen of Queensland crocodile was sold, and numerous specimens, most of which are specified below, have been received as exchanges or presentations.

While in England Captain Hutton arranged for the construction of an egg-cabinet for the foreign birds' eggs, and this was received before the end of the year. He also ordered from Messrs. Janson and Son some insect-cabinets and collections of foreign insects; these are being prepared, and will be sent out later on; by arrangement with Messrs. Janson and Son, they have been paid for partly in cash and partly in duplicate specimens of natural history. Captain Hutton also purchased in England a considerable number of ethnological specimens—viz., implements, weapons, &c., from Thibet, and various specimens of British pottery; copies of Queen Victoria's seals, &c.