

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

Results of Examinations.

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

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

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

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

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

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

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

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

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

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

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

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

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