Among the more important appointments obtained by graduates of the mining school during 1910 are the following: G. L. Hercus, A.O.S.M., Director, Westport School of Mines; O. Gore Adams, A.O.S.M., consulting engineer, Bolivia Mining Company (Limited); S. Napier-Bell, A.O.S.M., consulting engineer, African Tin-mining Company, Nigeria; Geoffrey W. E. Turner, A.O.S.M., manager, Progress Mines (Limited), Reefton; A. Spencer, A.O.S.M., assistant general manager, New Zealand Consolidated Goldfields (Limited); J. Allan Thomson, M.Sc., A.O.S.M., geologist to British Antarctic Expedition (1910), retired owing to ill health; P. Fitzgerald, A.O.S.M., general manager, Oroga Links Gold-mining Company (Limited), Kalgoorlie; D. M. Timlinson, A.O.S.M., B.Sc., assistant general manager, Korea Copper Company (Limited), Korea; Oluf Moen, A.O.S.M., manager, Scandinavia Gold-mining Company (Limited), St. Bathan's; Philip McDouall, assistant mine-surveyor, Progress Mines, Reefton.

Surveyors' Examinations.—R. Thompson, R. M. Mouat, and W. Black succeeded in passing the examinations of the Surveyors' Board of Examiners as licensed surveyors.

Mine-managers' Examination.—G. W. Eaton-Turner passed the examination of the Board of Examiners under the Mining Act, gaining a first-class mine-manager's certificate.

Post-graduate Course.—The two years' course of Mr. Norman Shand, A.O.S.M., the present holder of the Berwick Moreing post-graduate place, expired on the 31st December, 1910. At the request of the general manager of the Talisman Mine the time has been extended for another year.

New Zealand Research Scholarship for Otago.—The Scholarship for 1910 was awarded to Mr. H. M. Budd, M.Sc., a graduate of the Otago Mining School.

Equipment.

The laboratory of the department of applied mechanics is now well equipped with an Avery's testing-machine for testing materials in tension and compression, Avery's shot cement-tester with accessories, wire-torsion tester, and a transverse cement-tester. All the machines are constructed after the latest models. The new apparatus also includes many working models illustrative of steam-engine construction and practice; various roof-trusses; numerous models of iron joints and methods of riveting, apparatus for showing bending-moments, reaction at points of support, and stresses in girders; reaction of jet of water, and hydraulic tank for showing flow from different kinds of apertures under a varying head.

During the past year there have been added to the equipment of the department of metallurgy two electrical motors, each developing about 2 B.H.P., a dynamo of 3·5 B.H.P., and a small electrically-driven rock-crusher for the reduction of samples of ore forwarded to the school for valuation. The gas-engine, rock-breaker, and berdan-pan have been removed from the old experimental plant, and re-erected in the basement of the new mining-school building, where they are conveniently situated for use and for class demonstration. The rock-breaker and berdan have been erected in such a way that they can be driven either by the gas-engine or by an electric motor. To the department of geology there have been added a powerful projection lantern and a Newton projection polariscope for the illustration of lectures.

Metallurgical Laboratory.

During the year 1910 the number of samples sent in for assay showed a considerable increase, being as follow: Number of lots forwarded, 141; total number of samples, 267; number of separate estimations, 277. Besides these, about twenty samples were reported on for "Notes and Queries" in the *Otago Witness*. Of the foregoing samples, the largest number were determinations for gold, but many scheelite samples were forwarded for the estimation of tungstic acid. Other samples consisted of fireclays, phosphate rock, limestones, coals, iron-ores, bullion, &c.

The majority of the samples were forwarded from Otago and Southland, but many were sent from the West Coast districts, whilst others came from the North Island, and from such distant places as the Philippine Islands and Fiji.

The work of the assay laboratory has gradually increased during late years, and there is no doubt that this department of the school of mines is of growing value to the mining community. The necessity for assaying is becoming more and more obvious to miners and mining companies as time goes on. The scheelite industry finds the mining-school laboratory especially useful, since it affords mine-owners a means of quickly finding the value of their ores and concentrates. A small working-model cyanide plant has just been completed for treating tailings experimentally, and it is hoped that it will prove of use to the mining community for the testing of small parcels of gold-bearing ore. The metallurgical department is under the supervision of Professor Waters.

During the year Professor Marshall examined and reported on, free of charge, some fifty samples of rock and ore, and the Director on forty-three samples. The examinations were in most cases made for miners, prospectors, and others interested in the discovery of minerals of economic importance.

I have, &c.,

James Park, Director.

Mr. A. H. V. Morgan, M.A., Director of the Waihi School of Mines, to the Under-Secretary, Mines Department, Wellington.

Sir,— Waihi, 13th March, 1911.

I have the honour to present the following report on the work of the school during the year ended the 31st December, 1910:—

Attendance.—The average number of students during 1910 was eighty, and the average class attendance 159, or just about two classes per student. The number of individual students enrolled