

Laboratory.

During the past year 71 samples of ore and mineral substances were assayed for the public by Mr. Waters at schedule rates, and in the same period 47 samples of rock, mineral, &c., were examined and reported on by Professor Park, 58 by Professor Marshall, and 50 by Mr. Waters—all free of charge.

Original Research by the Staff.

By Professor Park : (1) "Text-book of Theodolite Surveying and Levelling"; English edition—Charles Griffin and Co. (Limited), London; American edition—J. B. Lippincott Company, Philadelphia. (2) "Geology of Queenstown District of Lake Wakatipu Division"; Bulletin No. 7. New Zealand Geological Survey; illustrated with 38 plates, 33 figures, and 14 coloured maps and plans; Government Printer, Wellington. (3) "An Outline of New Zealand Geology"; now in press. (4) "Notes on the Geology of Hauraki Goldfields"; jubilee number of *Australian Mining Standard*, 18th November, 1908; also *New Zealand Mines Record*. (5) "On the Distribution of Ores in Horizontal Lines in Vertical Depth"; *Trans. N.Z. Inst.*, vol. xxxix, p. 90. (6) "Notes on the Formation of Zones of Secondary Enrichment in Certain Metalliferous Lodes"; *Trans. N.Z. Inst.*, vol. xxxix, p. 93. (7) "Notes on the Origin of Metal-bearing Solutions concerned in the Formation of Ore-deposits"; *Trans. N.Z. Inst.*, vol. xxxix, p. 98.—Professor Marshall : (1.) "Report of Research Committee on Glacial Action in Australasia"; *T.A.A.A.S.*, vol. xi, p. 283. (2.) "Distribution of the Igneous Rocks of New Zealand"; *T.A.A.A.S.*, vol. xi, p. 366. (3.) "Geology of Centre and North of North Island, New Zealand"; *Trans. N.Z. Inst.*, vol. xl, p. 79. (4.) "The Gabbro of the Dun Mountain, Nelson"; *Trans. N.Z. Inst.*, vol. xl, p. 320. (5.) "The Vicinity of Lake Te Anau and Milford Sound"; "*Geographical Journal*," London, vol. xxxii, p. 363.—Mr. Waters, A.O.S.M. : "The Present Status of Coal-power"; pp. 59; illustrated; *New Zealand Mines Record*, 1908, and pamphlet; Government Printer, Wellington.

Acknowledgments.

In conclusion, the Director of the School of Mines wishes to place on record his appreciation of the zeal and ability with which Professor P. Marshall, Mr. W. B. Waters, and the assistants have carried out the work of their several departments during the year covered by this report.

The report was referred to the Mines Committee.

UNIVERSITY MUSEUM: REPORT OF THE CURATOR (DR. W. BENHAM, D.Sc., LOND., M.A., F.Z.S.).

The Hocken Wing.

This important addition to the Museum and to the City of Dunedin is now completed. It is a distinctly handsome building, and the lighting is surprisingly good. I instructed the architect to use prismatic glass for the windows, which I had noticed highly recommended by museum experts in Europe and America; the result surpasses our expectation. The Exhibition Hall, on the ground floor, which measures 75 ft. by 40 ft., and is 15 ft. high, is illuminated by windows at each end and along one side. There is no dark corner in the hall; every part is equally and excellently lighted, and no shadows are cast, which will be of great advantage when the cases are placed in position. The picture gallery above is similarly lighted, but the library has clear glass windows on two sides, and being a smaller room is equally well lit. A gas-stove has been placed in this room for the convenience of readers in the winter. The fittings for the upper floor, assigned for the reception and exhibition of Dr. Hocken's books and pictures, maps, &c., are now being made. The Hocken Library Trustees have resolved that when the gift is installed a public opening will take place, at which the collection and building will be formally transferred to the University Council. The basement, which I propose to have fitted partly as a laboratory, partly as a museum for teaching purposes, so that the specimens may be more accessible to us than at present, is also illuminated on one side by prismatic glass, while the windows on the east side, below which the work benches will be placed, have clear glass.

Museum Work.

In order to allow communication between the existing halls and the new wing, it was necessary to remove the long cases from the north wall on each floor. The long mammal-case, on the ground floor, was cut into two portions, which were then moved apart and re-erected on each side of the 10 ft. doorway. The work of making this alteration was very carefully and well done by Messrs. Hayward Bros. The two cases containing the native fishes, on the gallery above, had to be removed to the old Art Gallery, as they are too long to remain in the gallery after the entrance had been cut through. This work necessitated, of course, the emptying and rearranging of the cases, which occupied myself and the taxidermist for some weeks.

Additions to the Exhibits.

During the summer session I held a class of the natural history of New Zealand for teachers, and in order to illustrate the lectures and demonstrations I had a considerable number of new insects, spiders, and crustaceans mounted and placed on the shelves. Of insects there were added twenty species, some of which are represented by preparations illustrating their life history, some fifteen crus-