

REPORT OF COMMITTEE OF MANAGEMENT OF THE McDONALD PHYSICS BUILDING.

The past year's work has been chiefly notable because, for the first time, the teaching of the regular courses was conducted with fair completeness of staff and equipment. Most of the experiments in the ordinary routine of Practical Work had already been set up and used in the previous year. The experience thus gained by the Demonstrators, Messrs. Tory and Pitcher, enabled them to render such valuable assistance in the repetition of courses already once tested that much more time could be devoted to fitting up the Laboratory for special research work.

Considerable progress has been made in this direction, and several original investigations are now being carried on.

Mr. H. T. Barnes, B.A.Sc. McGill, has been engaged during the past year in an investigation of the causes of variation of electrical standard cells, which, it is hoped, will prove of interest to other Physical Laboratories, where such standards are of primary importance.

Mr. H. M. Tory, B.A. McGill, has been investigating the laws of thermo-electricity, with special reference to the thermo-electric properties of iron. This research has also an important bearing on some experiments on cylinder condensation which were carried out during the summer vacation by Professors Nicolson and Callendar at the Thermodynamic Laboratory of the McDonald Engineering Building.

Mr. F. H. Pitcher, B.A.Sc. McGill, is investigating the temperature-variation of magnetic susceptibility by a new method which promises good results.

Mr. R. O. King, B.A.Sc. McGill, 1851 Exhibition Scholar, has partly completed a determination, by a new method, of the thermal conductivity of metals, with the special object of determining whether the conductivity increases or diminishes with rise of temperature. In addition to the above investigations, now in progress, arrangements have been made and special apparatus designed for several other branches of research work.

The setting up and testing of the main electrical and magnetic instruments was fully reported upon last year. It may suffice to mention a few of the new instruments dealt with in 1895.

The large Rowland Grating Spectroscope has been fitted up on a novel plan in the room designed for it: an automatic mercury pump for spectroscopic work on gases has been fitted up in the annex.

The Standard Rieffler Clock has been set up in the constant temperature room in the basement. It has been connected by wires to the