FROM REPORT OF FACULTY OF APPLIED SCIENCE.

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Amongst the more important donations received by the Faculty during the present session may be mentioned an experimental boiler (value \$1000) and a centrifugal pump from Mr. W. C. McDonald, and a turbine of the combined type from Messrs. W. Kennedy & Sons of Owen Sound; also donations of timber from the Canadian Pacific Railway Company, the British Columbia Mills Timber & Trading Company of Vancouver, Messrs. McLaughlin Bros., lumbermen of Ontario, and various others. The experimental pump, also presented by Mr. W. C. McDonald, is now approaching completion, and it is expected that it will be installed in the near future.

Very important additions have been made to the Engineering Buildings by the construction of an accumulator room, an extension to the basement of the Testing Laboratories, and a much needed coal-hole with a capacity for 475 tons. The Accumulator Room has been completely equipped, and is now working in a most efficient manner. The whole expense connected with these improvements has been defrayed by Mr. W. C. McDonald.

At this time it may perhaps be appropriate to give a brief statement of the character of the work being done in the several laboratories connected with this Faculty.

The Mathematical Laboratory is used chiefly in connection with the course in Dynamics in the First Year. Lectures are given on the fundamental and derived units of the Science, as well as on the Laws of Motion, and deductions from the same. When the students have in this way been made acquainted with some of the ideas of the subject, they are admitted to the laboratory, where experiments of a progressive character are assigned to them. These experiments are in all cases quantitative, and embrace the measurement of mass by means of accurate physical balances, of intervals of time by clock and chronograph, and of distance by means of scales, screw micrometers, etc. They then proceed to the measurements of areas, volumes, velocities, accelerations, forces, specific gravities, friction, and also to pendulum experiments, etc. The equipment of the laboratory for this work is very complete, embracing as it does the ordinary instruments for the purpose to be found in most physical laboratories, together with a variety of apparatus specially constructed for this laboratory. Particular attention is given in the lectures to the principles of observing in general, the sources of error, etc.; the whole Course having reference to the subsequent work of the student in the Physical and Engineering Laboratories.

In the Chemical Laboratory much of the work has necessarily been of the ordinary routine character, but special investigations have been made

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