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FUNDS FOR HIGHER TECHNICAL EDUCATION.

The Royal Commission, appointed in 1910 to enquire into the needs and present equipment of the Dominion of Canada with respect to industrial training and technical education, has recently submitted a voluminous report in which many findings are presented and recommendations made. Its investigations into the systems of education in this and other countries have disclosed many shortcomings as well as some commendable features.

In the matter, for instance, of technical education of university or college grade, although a complete study of the organization of institutions and causes of instruction was not entered into, a study of the effects of the higher forms of technical education upon progress in industry and trade brought out one outstanding fact.

In France, Germany, Switzerland and the United States, the power and influence of technical education of the highest types appeared to be greater than in the United Kingdom or in Canada. In England, moreover, the opinion most frequently heard-and it was earnestly urged-was to the effect that hereafter the industries must somehow secure the services of more men of the highest scientific attainments with thorough technical training, or her manufacturers and merchants will not be able to hold their own against foreign competition.

The faculties of applied science of colleges and universities in Canada have the reputation of preparing engineers for professional work in a thorough and satisfactory manner. From what was learned abroad by the commission, the opinion appears to prevail that students in technical colleges, at some time before they graduate, should have obtained experience with materials, tools, machines and products for the purpose of giving them a clear understanding of principles and a correct knowledge of the conditions of production and construction which prevail in shops and factories. It is not important that they should have enough practice to develop either skill or speed as workmen in manipulative labor.

Technical education for the preparation of technical engineers, and other persons being trained for professional work of a grade and rank similar to theirs, would be improved, states the commission, by further extensions in the direction indicated by the practice in Germany, where industry and trade require, precisely like the German army, a number of intellectually highly trained officers, who are recruited almost exclusively from the technical colleges. These colleges educate the leaders of industry and also the state and municipal officials who are entrusted with the execution of technical problems.

The universities and colleges in Canada are providing technical courses to meet the demands from an increasing number of students. The rapid growth and development of the country, and the further application of science and scientific methods to all forms of production, construction, conservation and administration, will call for still larger numbers of graduates. In consequences the universities and colleges are sure to require increased financial support. The commission expresses itself to be of the opinion that this should be provided from some source without causing the fees required from students to be so high as to exclude suitable young persons who may seek the highest grade of technical instruction.

The report, as a whole, is well seasoned with admonitions that the higher educational centres of Canada are not yet at such a stage of excellence and proficiency that the country can sit back and entertain thoughts of retrenchment of financial support. The advice which the commission imparts in this respect is most timely, as the