

PRESENT STATUS OF TECHNICAL EDUCATION IN NOVA SCOTIA.

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Technical education in Nova Scotia is at present only seven months old and has as yet created no history for itself. The alacrity with which many men have taken advantage of the simpler foundation courses offered this year in the Technical Schools established at Halifax, New Glasgow and Sydney augurs well for the future of this department of education. It was on April 25th, 1907, that the Provincial Legislature of Nova Scotia passed an "Act Relating to Technical Education." This made the people of this province the first in Canada to accept the conclusive lessons taught by Germany and other nations in the efficacy and necessity of this form of education to the material extent that they were willing to establish a system of technical instruction on a comprehensive basis which could be enlarged to meet future demands.

This Act provided for a technical college to be built in the capital city, which would be the capping stone of the system. In the words of the Act: "There shall be established at Halifax, an institution for the purpose of affording facilities for scientific research and instruction and professional training in civil mining, mechanical, chemical, metallurgical and electrical engineering, or any other departments which may from time to time be added.

In order to articulate the work of this institution most closely with the other colleges already existing in the province, a member from each of these colleges and one from Mount Allison University, New Brunswick, which draws its students to a great extent from Nova Scotia, are nominated to the Governing Board.

The plans for the main building of the Technical College have been completed and a cut of the front elevation is given on the cover of THE JOURNAL.

The building is designed in a free Renaissance style of architecture. It is to be constructed of Nova Scotia pressed brick and freestone. The central part of the structure is to be composed entirely of stone and by projecting from the main part of the building will serve to relieve the impression of flatness to which it might otherwise be prone. The building will consist of two stories and will be 170 feet by 48 feet, with two projecting wings in the rear, each 40 x 55. The Provincial Science Library, which now represents a handsome nucleus of valuable accessions and the Provincial Museum are to be given a home in this College. This arrangement will prove an advantage to all the departments, because it will give the Library and Museum a chance to expand into their full spheres of utility, and will place the scientific volumes of the former and the large number of mineralogical and geological specimens of the latter at close hand for purposes of instruction.

The plans for the building are finished and are shortly to be put out for tenders, so that construction may begin with the disappearance of frost in the spring.

Besides the full engineering courses in the Technical College, it is the present intention to hold a number of shorter courses in the different branches, which will be suitable for men in practical life, who wish to obtain a higher theoretical knowledge of the scientific basis of the profession in which they are employed, but who lack all the necessary preliminary knowledge to be regular

matriculants in the College, or who are prevented by one reason or another from giving up the full number of years required to obtain an engineering degree.

There are to be two laboratory buildings in the rear of the main building, one devoted to Mining and Metallurgy and the other to mechanical engineering, electrical engineering, hydraulics and strength of materials. The buildings are to be of the factory type of reinforced concrete and steel, so that they can be readily enlarged at any time.

Since the coal industry is the greatest one of which the province boasts, the mining laboratory is to be equipped for research and instruction in this branch of mining industry as well as metal mining. Almost all the mining engineering laboratories in America with a few notable exceptions have equipped themselves to carry out the operations connected with metal mining and ore dressing and have neglected the other branch of the industry. Research problems of such nature as are vital to the industrial progress of the province will be carried out in the various laboratories, and it is hoped that the closest relationship may exist between the industries and the Technical College.

The fees for tuition at this Government Institution will be nominal and everything will be done to encourage the poor boy who desires a higher scientific training, but who is prevented from going abroad to obtain it, on account of the attendant expense.

Under the Technical Education Act there is also provision for secondary education by continuing under the new Department of Technical Education the coal mining and engineering schools which have heretofore existed under the Department of Mines and also by establishing in industrial centres "Local Technical Schools."

The coal mining schools are conducted for coal miners and coal mining officials, who wish to acquire a greater knowledge of the science and art of coal mining and for those who wish to procure the Government certificates of competency for managers, under-ground managers and over-men. For educational purposes, the portions of the province which contain the collieries have been divided into five districts and an instructor is appointed who devotes his whole time to teaching coal mining and surveying in that district. Classes are held at almost every colliery centre and all instruction is absolutely free to the students. In the districts that are so large that the regular instructor cannot overtake the work, local assistants are appointed to aid him. At the present writing there are 18 coal mining schools in operation.

As the coal mines grow larger and deeper and call for more and more economical working in the face of increased engineering and commercial complexities, the educated miner will be more and more necessary to carry on the work successfully and to make the requisite provisions for guarding human life. These coal mining schools, which are being brought to a higher standard each year, will be a great boon to ambitious men by providing a practical education at their doors and will also serve in supplying educated mine officials to superintend the collieries.