to carry out development, so that the government could afford to step in and expend such sums as would insure creation of **new industries or enlargement** of old ones; the creation of such conditions as would contribute to the success of an undertaking by permitting the highest development.

Artificial Storage.

It must be conceded our streams have a deficiency of storage capacity, and to permit of the highest development artificial storage must be created on the watershed by placing dams across the stream, where possible and create reservoirs to hold back part of the flood flow. In many cases it will be possible to divert small streams from one watershed to another. Both these operations entail considerable outlay of capital. In such circumstances there would seem to be a legitimate field for government assistance, and one which should bring indirect returns sufficient to reimburse for any outlay made.

"Whether or not we are all of one mind as to how our water power problems should be solved, as Nova Scotians we should be a unit as regards anything that makes for the betterment of our native province. Already our progressive spirit has shown itself in much of our recent legislation, and in at least one or two regards we lead our sister provinces of the Dominion of Canada. To bring the country to its highest development it is absolutely necessary that all Nova Scotians should become imbued with an abiding faith in their native province and its resources. Not a passive faith such as has, perhaps, marked us in the past, but a faith in our future prospects so intense as to dim the most enticing allurements from abroad. When we have all realized that in our native province we possess as goodly a heritage as could be allotted to mankind, and when we shall all have the courage of our convictions and put our energies and cash into industries and development at home instead of looking for investments abroad, there will come our full measure of prosperity, and who shall know the limit of it?"

Recent Development in Engineering Education.

F. H. Sexton, Director of Technical Education, Nova Scotia, was the second speaker at this morning's session.

The principal theme of Mr. Sexton's paper was to show the recent development in engineering education on the lines of the extension of the university work, to people who were not reached by the college before, also of the closer correlation between active industry and the college in some special case to-day. In part, Mr. Sexton said:

The colleges are ministering to the people outside the colleges by short courses, evening courses, and correspondence courses.

Cooper Union, in New York, has turned out hundreds of men who compare favorably with those graduating from full engineering courses. Cooper Union offers its work in the evening for the most part in electrical, mechanical, structural and chemical engineering. Men attend Cooper Union for five nights a week and obtain a degree after about four or five years of study.

The Polytechnic Institute, of Brooklyn, has recently offered nearly all of its day courses in engineering to students in the evening, and a degree may be obtained after following the same course as is prescribed for the day students.

The University of Chicago and the University of Wisconsin have established correspondence courses. The University of Chicago offers more than 300. It is possible in these colleges to pass the whole of the first two years' courses by correspondence alone.

The University of Cincinnati has instituted a very notable advance in engineering courses. Under this plan the student

spends one week at the university, and the next week in one of the great shops in Cincinnati. He has a mate who works in the shop while the first boy is in college, and who is in college while the first boy is in the shop. Thus the shop is not disorganized nor is the college. The boys earn wages from 10c. to 21c. an hour during the six years of the course. They earn an amount averaging \$300 per year for this period while the actual college expenses for the same time average \$75 a year only.

This scheme has everything to commend it, because the boy is learning his practice with his theory and is a much better equipped engineer at the end of the course than his brother who has acquired only the theory in the four years' course.

The Technical College in Halifax is striving as much as possible to serve the interests of applied science training in the province. It would be hard to establish co-operative courses in connection with it at present, because there are no great electrical or machine manufacturing shops in Halifax at present. These may confidently be expected in a few years' time with the industrial development of the city which is bound to come.

Correspondence Courses.

The Technical College is planning to follow the worthy example of the University of Chicago and the University of Wisconsin in the establishment of correspondence courses. These courses will be established as time, money and opportunity permit, and will give students in remote districts a chance to apply the knowledge that they would not otherwise have. The correspondence course will reach the students who cannot be reached by evening classes or in any other way.

The Technical College is offering short courses this year in land surveying and highway construction. These courses will be given in the winter months, when there is not much actual work being done in either line. The land surveying course will be especially adapted for those who wish to qualify for land surveyors under the new Act for Surveyors, which has recently been passed. The course in highway construction is planned for those who are interested in the construction of rural highways, and leaves theory in the background as much as possible and considers the practical side of road building. The topics to be treated are the location of roads, road building, road maintenance, road machinery, culverts and small bridges. The cost of all the operations is to be kept in the foreground as much as possible.

Other short courses for coal mining officials and power house superintendents are to be amended later.

The Technical College enjoys one distinction that Nova Scotians should be proud of. It is the only college that is trying to carry the necessary education to the mechanic by a system of evening schools. The evening school method of instruction is superior wherever it can be applied. Last year there were nearly 1,500 students in the coal mining school, engineering schools, and schools for mechanics that were scattered over Nova Scotia.

The Technical College has been running only one year and as yet has not accomplished much in the way of industrial research. In connection with the newly discovered tungstenscheelite, the college has discovered a method of extracting commercially the mineral from the rock and partially refining it for the market. The college is installing apparatus for testing building materials, cement, etc., and intends to undertake research which will be of value to Nova Scotian industrial activities.

The Technical College is now trying to build up such a name for itself that it will attract the students outside the limits of the province to itself, but its chief aim is simply to be of service to the young men of Nova Scotia and to the best industrial interests of Nova Scotia.