

practice for the manufacturer and contractor to pay a bonus to their employees it should be an equally wise policy for the Government to bonus their surveyors.

Stimulus in Government work would be good for both the mental and physical development of the men. Perhaps there is no department of the service in which this is less necessary than the engineering and surveying branches of the Government service; yet we fancy that even in this department the men would welcome the suggestion.

THE DANGER OF UNSKILL.

Walter G. Beach in the current number of the Popular Science Monthly, has a very interesting article, entitled the "Danger of the Unskill." In view of the sitting of the Royal Commission on Technical Education, which will be held throughout Canada during the coming months, the article is of peculiar interest.

The unskilled laborer of Canada is made up of two classes. One, the immigrant from the crowded out and unskilled workmen of Great Britain, largely supplemented by the peasant immigrant of southern Europe. With this class is to be found mingled the sons and daughters of Canadian citizens, who, because of environment or necessity, have been drafted into the army of the unskilled. These two classes make up the labor reserve upon which the manufacturer and the contractor draw.

The demand for unskilled labor is great, but the fight of the unskilled man for an existence is greater. Specialization and the perfecting of machinery have placed a greater handicap than ever upon the unskilled.

The day was when the natural resources of this country were so prolific as would encourage us to believe that they would be an ever ready source of supply. Cooperation and combination was not needed to produce sufficient for existence. This is changed. The increase in population and in the number of fancied necessities have made complex our social life, and so increased the demands around the purchaser that endurance, courage and assertedness must be supported by skill before the men and women can attain the position or keep pace with the progress that the new industrial life of our country demands.

Skilled citizens are necessary, first, that they may work out an existence and have in reserve leisure for reflection and recuperation; and second, that waste may be lessened in our industrial life.

There are two ways in which they may acquire this skill. It may come either through their connection with the trades and industry or through technical schools and colleges. The demands of our industrial life seems to be too great to allow for the training of the new men by the apprenticeship system alone. There can be no doubt that the apprentice system in the past led to great skill and gave, at least, some of that which is associated with our idea of a school. The apprenticeship system is a thing of the past. The modern workshop is too great a specialist to train the skilled workers. There is too much invested to allow of it being used as a training-ground.

Our modern conditions require that the training be received outside the workshop.

Nova Scotia and Ontario have scattered throughout the Provinces small training and technical schools. These are but the beginning of what the future will require throughout the Dominion in the way of trade schools. The night school where vocational training may be ob-

tained is Canada-wide. They are doing a good and necessary work, but naturally, they are not specialistic enough.

The report of the Royal Commission on Industrial Education will doubtless contain information and suggestions whereby our councils and schools boards may devise means of training the young people in their other things more important than the "three R's."

GROWTH OF STEEL OUTPUT IN CANADA.

The growth of the pig iron production in Canada, as well as that of the Dominion corporation, since 1901, is clearly shown in the following table:

	Total for Canada. Tons.
1909..	609,400
1908..	686,800
1907..	416,600
1906..	585,400
1905..	390,200
1904..	277,700
1903..	323,700
1902..	348,600
1901..	165,900

The output of steel ingots has been as follows:

	Total for Canada. Tons.
1909..	570,600
1908..	662,000
1907..	606,500
1906..	569,200
1905..	300,400
1904..	128,900
1903..	260,600
1902..	136,400
1901..	33,300

The Government bounties on pig iron and steel ingots expire on December 31st this year, and those on wire rods, which were given in lieu of tariff, on June 30, 1911. It is thought that when the different bounties are terminated they will be replaced by a protective tariff, although the cessation of the bonuses indicates that the steel industry in Canada is thought to have established itself upon a firm and lasting foundation.

TECHNICAL EDUCATION COMMISSION.

The Royal Commission on Technical Education commenced their sittings at the Nova Scotia Technical College July 18, 1910.

Personnel of Commission.

The Commission is composed of seven members, namely: James W. Robertson, C.M.B., D.Sc., LL.D.; Hon. John N. Armstrong, Rev. George Bryce, M.A., D.D., LL.D., F.R.S.R.; Gaspard De Serres, Gilbert M. Murray, B.A.; David Forsyth, B.A.; and James Simpson.

Dr. Robertson, the chairman, gave a brief outline of the work of the commission. He said that the Government had expressed a recognition in a new form of the heritage of Canadians. This recognition is in the form of the conservation of the resources of the country. These cannot be utilized until the people have been educated in this regard and in their proper development. The best way is that whereby labor can be applied with the least waste, cost, etc. Indus-