13 E.—5.

B. TECHNICAL INSTRUCTION.

Details of the work of the various technical schools and classes for the year 1910 will be found in the reports of the controlling authorities or of the managers, as the case may be, in the appendix Various particulars relating to technical instruction are given in Tables 7 to 17, inclusive, on pages 21 to 33.

The year 1910 marks the close of a decade of technical instruction in the Dominion. It may not be uninstructive, therefore, to review the work of the year, not so much in the light of that of the year immediately preceding, but in the light of what has been accomplished in the period during which the present system has been in operation. Some idea of the progress made may be gained by a brief comparison of present-day aims and ideals with those of the year 1901. In the year 1869 an English railway engineer standing high in his profession, who had made a close first-hand study of technical education in Germany, France, and Switzerland, was so impressed with the proportions it had assumed in these countries and the visible results it had produced that, recognizing how little had been done in the direction of organizing a system which would effectively train the English people for their life-work generally, and particularly enable the workers to acquire a high degree of skill and intelligence, wrote a stirring plea for technical instruction, in which its aims and ideals were set out with great clearness and force. He said, "By technical education I mean that special training which will render the talents of the educated man useful in that sphere in which he is destined to pass his life, and which will make the new generation in the result is the same of the said, "By technical education I make the new generation in that sphere in which he is destined to pass his life, and which will make the new generation." or Englishmen excel the new generation of foreigners in this coming rivalry of race and nation."

An English workman also wrote, "The present prosperity of this country is so unmistakably interwoven with its manufactures, and the pre-eminence of these depends so much on new adaptations, discoveries, and improvements, as to demand for the workers the readiest—that is, the most usable and best—educational training this nation can give. It is not only idle but suicidal to dream of remaining where we are. We must strike out in new paths. We must advance with other nations or lose caste and trade together. How many men know anything of the material with which they work? Yet such knowledge would sweeten toil, would open the treasure house of thought and imagination, would enable a man to convert to new uses elements of force by which he is surrounded, and enrich the nation by adaptations and modes of economizing means now in use. Every man ought to have the means within his reach to enable him to become master of his art or of his craft." These utterances by men moving in very different spheres of life indicate that certain great ideas about technical training were, as we say, in the air, as early as 1869. But fresh ideas gain acceptance slowly. They were violently opposed and neglected by many who believed that education, whether special or general, was of little use in real life and practical work. The ideas, however, grew, they slowly clarified in the thought of the time, and eventually, after twenty years of effort, produced the system of technical education common to England and America, which at its inception had all the defects of a new organization, but nevertheless was vital with that force in life which is generated by a conscious need.

In 1901 the aims and ideals of technical instruction had not changed very much. It was, however, beginning to be apparent that if it were ever to become a real instrument of education another and more vital aim than that of the victory of English products over those of foreign and formidable rivals must be added thereto. While recognizing the value of healthy commercial competition, it was recognized that, if England was to excel in her manufactured products, attention must be directed to the making of better citizens as well as to the training of more skilful mechanics—that the training must be vital, not merely intellectual. Although in some quarters it is still considered that the aims of technical instruction should be limited to the equipment of present and future generations of young mechanics with those industrial weapons that will enable them to secure victory over all rivals, yet the growth of the broader outlook and the higher ideal—the equipment of all for complete living, the provision of the opportunity for all to acquire the ability to realize intelligently the meaning of the varied relationships in which they stand to the community, and the skill to perform accurately and readily all the varied duties these relationships

demand, is both visible and real.

In literature and in life we are constantly reminded of the tendency among men to substitute a part for the whole, to study a thing apart from its relationships, whereas nothing can be fully known unless it is known in all its relations to that larger order of which it forms a part. It is therefore gratifying to note the growth of a tendency in dealing with the problems of technical education to cease to regard the latter as an isolated branch of education.

A rapid survey may now be taken of the provision made throughout the Dominion for carrying on technical instruction during the period under review both as regards buildings and equipment and the supply of trained teachers. The progress made in the provision of suitable buildings and equipment is very marked. The funds placed at the disposal of controlling authorities for these purposes have, on the whole, been wisely expended. While the sum available has not allowed of much in the way of ornamentation, either outside or inside, it may be said that the buildings that have been erected are for the most part quite suitable for technical-school require-

ments, and are adequately equipped with necessary furniture, fittings, and apparatus.

In 1901 isolated classes having a more or less close relationship to industrial requirements were conducted in Auckland. They were held in a building previously used as a cabinetmaking factory. At the close of 1910 a substantial building in ferro-concrete, costing nearly £30,000, of which the trustees of the Auckland Savings-bank contributed one-third, was nearly ready for occupation. This building is a part only of a larger scheme, and when the whole structure as projected is completed the northern city should be well provided with facilities for technical in-Since 1901 technical classes in Auckland have been carried on in various more or less unsuitable buildings, the number now in use being no less than six. Fairly complete courses of instruction, including a well-attended day technical school, have, nevertheless, been organized.