

The inquiry, therefore, has been extended to include those parts of technical instruction which, as it were, lie adjacent to the realm of "professional" education. Again, in some aspects the training for trades and for manufacturing industry (*aux métiers et à l'industrie*) demands artistic knowledge, and this has led the writer to go beyond his commission, and to study minutely the English schools of the fine arts on the side of their relation to "industrial" and applied art.

Finally, careful inquiry into facts as well as theory leads to the conviction that "professional" education finds its corollary, or, rather, its indispensable point of departure, in the manual instruction which belongs to the programmes of primary and secondary education, and what has been done in England in this direction is therefore noted in this report.

Utility of this Branch of Education.—Two facts have had a very strong influence on the economic condition of the working-classes. (1.) The old system of apprenticeship is on the wane, and destined to extinction. The master now employs so many hands that he cannot give individual instruction to any of them, or take a paternal interest in them; and it would be impossible now to prevent a youth from leaving as soon as he had begun to be really useful, and to make some return for the trouble of training him. (2.) The division of labour is carried to such a point that a workman no longer makes a garment, a boot, or a shoe; it takes ten, or perhaps twenty, to make a single part of one of these articles. A slackened demand, or a change in the fashion or make of these things, throws a crowd of operatives out of work. Excessive specialisation has rendered them incapable of touching any other part of the work of their own trade than that which they have hitherto performed almost automatically. Had they learned their trade as a whole they could find useful and remunerative occupation in some closely related branch of it.

The "professional" schools, then, have a twofold part to play; they have, first, to make up for the decline of workshop apprenticeship; and, secondly, to furnish the workman with such general and complete ideas of his trade as will enable him to do his work with more intelligence and speed, and at the same time to set him to perform all the operations of his own calling and those of the related and similar branches of industry. The workman who has had general principles and useful processes clearly explained to him in the school, and adequately demonstrated there, will pass more quickly on that account through his apprenticeship and obtain earlier the wages of a journeyman, and his wages will soon rise above the normal rate.

But the school cannot take the place of apprenticeship, or turn out fully-trained workmen. One year, three years, five years of school-teaching will not make a real workman. The "professional" school helps the young apprentice, and facilitates and completes his training. The school workshop enables him to learn the best processes, and to get a better grasp of the principles of his trade. But, according to the English view, he cannot really learn his trade and acquire manual dexterity anywhere but in the real workshop or factory.

It would be a waste of public money to keep boys at school till they became accomplished tradesmen. And how could the products of their work be disposed of? They would not fetch what they cost. To sell them at current prices, or at reduced prices, would be to compete with private industry. Besides this, families could not afford to maintain the boys so long without wages. It would never do to pay wages to the pupils. There is no "professional" school in England that does not require some contribution from the pupils. True, there are scholarships, but they are given rather as prizes than as inducements to attendance. The schools are intended rather for those who are already working at a trade than for those who merely intend to be tradesmen.

PART I.—LEGISLATION AND LOCAL AUTHORITIES.

1.—LEGISLATION.

Before the year 1889 the power of provincial districts and municipalities, and of such bodies as County Councils, to establish technical schools and devote their resources to technical instruction was in doubt. The laws of 1889 and 1891 removed this doubt, and the law of 1890 provided the authorities with pecuniary resources for these purposes. Important as these laws are, they have met with remarkably little opposition; they were cordially received in Parliament, and were strongly supported by public opinion. The only criticism of any weight takes the form of the question, Ought not this Department of Public Instruction to be in the hands of the School Boards? The aim of the Government was to stimulate the institution of evening schools for the trades, and this object has been fully attained.

Before this time about three hundred schools of arts, of science, and of technology, had been established by some of the guilds, but they failed for want of means. At the time of the Queen's Jubilee, schools were instituted at Blackburn and other cities, but most of these also failed for want of means. The Government wished to render aid to these enterprises.

The principal laws are: "Technical Instruction Act, 1889;" "Local Taxation (Customs and Excise) Act, 1890;" "Technical Instruction Act, 1891." Of less importance are: "Technical and Industrial Institutions Act, 1892," "School for Science and Art Act, 1891," "Public Libraries Act, 1892." For the present purposes, legislation relating to Scotland, Ireland, and Wales is not included.

2.—AUTHORITIES ENTRUSTED WITH THE WORK.

These are the local authorities, such as County Councils, Borough Councils, and urban sanitary authorities. Every borough of 40,000 inhabitants constitutes a county by itself. Towns of a certain size are thus raised to the rank of provinces. Town and country have different interests in everything that relates to technical education, and both preserve their independence, not only in the organization of the instruction, but also in the providing of the money needed for this purpose.