are University College, Bristol; Armstrong College, Newcastle-on- Tyne; and the university colleges at Nottingham, Reading and Southampton.

The University of Cambridge has a school of engineering with well-equipped laboratories for the teaching of pure and applied sciences. The universities of Edinburgh and Glasgow recognized at an early date, as part of a university course, the teaching of science in its application to engineering: and at University College, Dundee, there is a good school for the teaching of the technology of spinning and weaving, more particularly with reference to the manu­facture of jute and linen.

In London, University College and King’s College fulfilled for many years the function of a university and technical high school. Soon after the reorganization of the University of London in 1901, by which that institution was changed from an examining body into a teaching university, University College and King's College, which were named in the charter as schools of the university, transferred their funds, buildings, &c., to the university and became incorporated therein. The East London College, originally founded as a technical school in connexion with the People’s Palace at Mile End, was admitted in 1907 as a school of the university, and under the statutes of the university certain teachers in the Polytechnic institutes became recognized teachers, and their students were admitted to graduation as internal students. Most of the students so admitted graduate in the faculty of engineering. For several years it was apparent that the work of the City Guilds Central College and that of the Royal College of Science and School of Mines overlapped to some extent, and that the teaching in each separate institution was incomplete and needed to be supplemented by that provided in the others. A departmental committee was accordingly appointed by the president of the Board of Education in the year 1904 to consider the working of the govern­ment College of Science and the School of Mines and their relation to other similar schools, and as a result of the report of that committee, published in 1906, a charter of incorporation was granted in 1907 to a new institution under the name of the Imperial College of Science and Technology, in which the teaching given in the three schools would be co-ordinated under a new governing body, consisting of members appointed by the Crown, the Board of Education, the City and Guilds of London Institute, the University of London and the principal engineering societies, with power to negotiate with the university for the transfer to the new institution of the engineering departments of University College and of King’s College. The Exhibition Commissioners of 1851 agreed to grant unoccupied sites of land at South Kensington for the extension of, and the addition of new departments to, the existing colleges, and large annual endowments were promised by the government and. the London County Council in addition to sums of money from private sources. The new Imperial College of Science and Technology is constituted by charter a school of the university, and is intended to provide the highest instruction in engineering and applied science, with facilities for advanced research work. The scheme was intended, when complete, to supply the metropolis with a technical school of the highest grade, similar to some extent to the well-known institutions in Berlin (Charlottenburg) and Massachusetts, but adapted to the special industrial needs of the British empire.

*Legislative Enactments.*—The state organization of technical education in the United Kingdom is mainly the result of enact­ments passed in and after the year 1890. Before that date, however, as early as 1877, the Livery Companies of London, with a view to fulfilling the purposes for which by charter they were originally incorporated, began to consider how best they could initiate a national scheme of technical education, for which, owing to the depression of trade and the changed conditions under which British industries were con­ducted, a strong demand had arisen. They consulted leading manufacturers and some of the best-known scientific autho­rities, and in 1880 an association was formed of the City corpora­tion and some of the wealthier City companies under the name of the City and Guilds of London Institute for the advancement of technical education. The scheme of the institute was to establish a central institution at South Kensington, somewhat on the lines of the high schools of Germany, and one or more technical schools of intermediate grade in London, and to encourage by means of grants of money and by examinations for certificates technical classes and trade schools in different parts of the United Kingdom. In March 1880, an organizing director and secretary was appointed to develop and give effect to the scheme. As indicating the importance of the movement King Edward VII., then prince of Wales, accepted the office of president of the institute, which thus led the way to the establishment, under the direction of the government and under the control of local authorities, of a national system of technical education. The successive steps by which the system was evolved, and how it was gradually incorporated into the general scheme of education, are matters of interest in the history of education. A definition of “ technical instruction ” applicable to the varied teaching of the United Kingdom was, in the first in­stance, fixed by act of parliament. The term included instruction in science, art, and technology, and also in manual training; and by “ technology ” was understood the practical application of different kinds of knowledge to a particular trade, or industry, or employment.

The progress of technical education was very much helped by the formation of the "National Association for the Promo­tion of Technical Education,” which was inaugurated at a meeting held on the 1st of July 1887 and dissolved when its objects had been fulfilled, in June 1907, after twenty years of useful work. The general objects of the association were to promote and watch legis­lation, to spread information, and to discuss and assist in giving effect to the recommendations of royal commissions appointed to inquire into educational methods and organization. To its activity the development of technical education in England had been largely due. The first legislative effort to give effect to the recommendations of the Royal Commission on Technical Instruction, whose report was published in 1884, was a bill introduced into parliament in July 1887. The purpose of this bill was to enable school boards and local authorities to provide out of the rates technical schools, or to contribute to their support. A special provision of the bill was that a poll might be demanded by fifty ratepayers before any action could be taken under the powers it conferred. Technical instruction was so defined as to include subjects aided or sanctioned by the Science and Art Department. The bill was read a second time on 9th of August 1887, but never reached the committee stage. In the following March a new bill was introduced on behalf of the “ National Association.” It empowered school boards to provide technical instruction in schools under their management, and to contribute to the maintenance of higher technical institutes. The definition of technical instruction was widened so as to include the use of tools, commercial subjects, modern languages, and any subjects sanctioned jointly by the Education Department at Whitehall and the Science and Art Department at South Kensington, which at that time were practically separate government departments. The bill gave very extensive powers to school boards. It was with­drawn without a second reading, in view of the avowed inten­tion of the government to deal with the subject. On the 17th of May 1888 the government bill was introduced. It contained several new features which pointed in the direction of subsequent legislation. Whilst school boards were again empowered to provide technical instruction in their own schools, they were also required, under certain conditions, to aid in the supply of technical and manual training in voluntary schools. At the same time the local control of secondary technical instruction was placed in the hands of a separate authority, viz., the “ authority empowered to carry out the Public Libraries Acts.” Additional rates, limited in each case to 1d. in the £, might be levied. The bill bristled with difficulties. It aimed at placing the voluntary schools, as regards technical instruction, under the control of school boards, but set up a new authority for the control of technical instruction higher than elementary. There was a growing belief, however, that school boards were not the most suitable bodies for the direction or control of technical education. This belief arose from the difficulty of devising means for securing equal advantages to both classes of elementary schools, and from the general unwillingness to extend school board authority beyond the limits of elementary instruction.

No reference was made to technical education in the Queen's Speech in opening the parliamentary session of 1889, but the