decided by the law courts that the school boards were unable to apply the rates to the support of such schools. They were accordingly withdrawn from the sphere of elementary educa­tion, and have since been treated as schools of a secondary type. The judgment on appeal was conclusive, that the school board rates could be employed only for the provision of ele­mentary education for children, whether in the day or evening, and this decision paved the way for the dissolution of school boards, and to the transfer of their duties and functions to the county and borough councils under the Act of 1902.

As regards secondary schools proper, in their relation to technical education, it is important that the curriculum of such schools should be sufficiently varied to afford a sound liberal and preparatory training for the different branches of professional work. It is generally admitted that at least three types or de­partments of schools are needed—(*a*) the classical, (*b*) the mathematical, and (*c*) the modern language type; and that each of these divisions should contain sub-departments. The first of these varieties would be available for the general training of students wishing to enter the legal, theological or literary professions; the second for those preparing for engineering, manufacturing or agricultural pursuits; and the third would be found best fitted as a preparation for a commercial calling. These schools would correspond to some extent to the three kinds of secondary schools found in Germany, and would be available for students preparing to enter one or other of the faculties of a modern university. The organization of different types of secondary schools, and the curriculum appropriate to each, are matters which continue to occupy the attention of educational experts. In accordance with the regulations for secondary schools issued by the Board of Education in 1907, substantial grants were made to secondary schools which con­formed to certain conditions as regards local control and un­denominational religious instruction, or the directive influence of the board as regards curriculum and management over all such schools was strengthened. At the same time, manual training and domestic science were made essential parts of the curriculum in boys’ and girls’ schools respectively.

The demand for technical education, which originally led to the formation of the City and Guilds of London Institute, directed attention to the methods of teaching science, drawing and other subjects, and to the necessity of including science in the curriculum of all grades of schools. The methods of science teaching have been greatly improved. Experimental work has become essential, and methods of investigation and research have been applied to the teaching of a number of subjects to which formerly they would have seemed inapplic­able. A close connexion has thus been established between the workshop and the classroom, and practical instruction is now regarded as a necessary part of general education both ele­mentary and secondary, and as no less disciplinary than the merely literary and oral teaching it has partly superseded. This change in the school curriculum and in the methods of instruction has narrowed the true significance of the term “ technical ” as applied to education. By the term “ technical ” as commonly used is now understood “ technological ” or “ professional,” and whilst technological instruction may supplement either primary or secondary education, it is necessarily distinct from either.

The conviction has been steadily gaining ground that success in manufacturing industry, in the higher walks of commerce, and in every pursuit requiring technical knowledge, depends very largely upon the thorough and complete training of those who are charged with the control of the different kinds of work in which the army of operatives are engaged. Intelligent and highly skilled workers are indispensable; but unless they are properly directed by efficient and expert officers they can effect but little. It is undoubtedly due to the careful training of the masters and leaders of industry that the Ger­mans have achieved so large a measure of success in different technical pursuits. The recognition of this fact is slowly but surely influencing educational thought and action in Great Britain; but Germany is still ahead in the facilities afforded for higher education, and in the ad­vantage taken of the facilities that exist. The number of students in her universities and technical high schools is still in excess of those receiving a similar training in Great Britain. The establishment, however, of local universities and the schemes for the award of scholarships adopted by local educa­tion authorities, will tend year by year to lessen this disparity. Meanwhile, Germany has relaxed none of her former efforts, but is steadily occupied in the enlargement and improvement of her educational institutions. New schools have been erected, wherever and for whatever purpose they are needed, equipped with every modern appliance for scientific investigation and research. Each professional career has its corresponding high school or university department. The economy of a wise and liberal expenditure on higher education is a recognized fact in German statecraft.

For those who are intended to occupy the highest posts in industrial life, a sound secondary education, supplemented by appropriate university training, is the best preparation. It is only in the university or tertiary grade of education that specialized or technological training for the higher industrial posts should commence. At this stage of education, general and professional teaching are more closely associated, and the names of the faculties of the new universities in the United Kingdom will in future indicate the several branches of pro­fessional work to which the different courses of university study are intended to lead. Of late there has been a marked develop­ment of distinctly technical instruction in connexion with the colleges of university rank. The error of restricting university studies to a certain limited range of subjects, which led in Germany to the establishment of technical high schools as institutions distinct from the universities, has been avoided. Engineering, in the broadest sense of the term, has been recog­nized as a branch of university education of the same order as medicine or law. Laboratories and workshops have for many years formed part of the equipment of the principal university colleges. In the statutes of the university of London a separate faculty is assigned to engineering, and part of the work of the polytechnic institutes is correlated with that of the reconstituted university. A survey of the field of education shows that whilst the difference between technical and general education is well marked in the primary and secondary stages, it is the function of the university to liberalize professional teaching, and to afford opportunities for specialized study and research in the higher branches of knowledge applicable to the practical work of industrial life.

Authorities.—See Sir Philip Magnus, *Industrial Education,* 1888, and presidential address to education section of British Association, 1907; Schönhof, *Industrial Education in France,* 1888; Holzapfel, *Die technischen Schulen, &c.* (1897); Report of British Royal Commission on Technical Instruction, 1884, and later special reports issued by the Board of Education; annual Reports of the United States Commissioner of Education and of the United States Commissioner of Labour; Report of English Departmental Com­mittee on the Royal College of Science and School of Mines.

**(P. M.\*)**

**TECK,** a ducal castle in the kingdom of Württemberg, immediately to the N. of the Swabian Jura and S. of the town of Kirchheim, crowning a ridge (2544 ft.) of the same name. It was destroyed in the Peasants’ War (1525).

The duchy of Teck was acquired early in the 11th century by Berthold, count of Zähringen, whose great-grandson Albert, or Adalbert, styled himself duke of Teck. In 1381 it passed both by conquest and purchase to Württemberg. The title, which had lapsed with the extinction of the Zähringen line in 1439, was revived in 1495 by the German King Maximilian I., who bestowed it upon the dukes of Württemberg. The dignity was renounced by Duke Frederick William Charles upon his elevation to the rank of king in 1806. In 1863 the title “ prince of Teck ” was conferred by King William I. of Würt­temberg upon the children of Duke Alexander of Württemberg