

I need not waste time in recounting the marvellous growth of German commerce, which has challenged the admiration of all students of economic science, but I will proceed to notice the system of education that has admittedly been the cause of such marvellous results. An excellent system of public education is one of the best forms of National investment. The truth of this has been amply proven in the case of Germany. Thirty years ago the idea of taking from her any practical lessons in the manufacture and distribution of products would have been scouted; to-day her achievements in applied science, and the wonderful growth of her export trade has set all countries studying her methods. Her system of education is practical, and is constantly being improved along the lines of any recent developments or discoveries that have a bearing on the future usefulness of the scholar.

The Elementary Schools, called *Volkeschulen*, are the training places for all children between the ages of six and fourteen years. Attendance is made compulsory. These schools are the root of the educational system. Next in order are the *Gymnasium*, which are really the classical schools, and lead up through a strictly classical course to the University in one direction if a learned profession be the goal of the student's ambition, or another development of the system leads from the *Volkeschulen* to the *Realschulen*, in which the exact sciences rather than Greek and Latin are taught, and these lead into the Technical High Schools, or Polytechnic Schools, of which there are nine of the highest class in Germany. These enjoy the direct patronage of the state in which they are situated, and are assisted in their maintenance by the ruler of said state. The one at Berlin is under the King of Prussia; at Dresden, the King of Saxony; at Stuttgart, the King of Wurtemberg; at Karlsruhe, the Grand Duke of Baden. These are great institutions for the teaching of applied science, always with some practical end in view. Architects, engineers, chemists, metallurgists and technical experts of the highest grade are prepared in these schools. There are in Germany schools working toward special technical ends, which have a similar rank with the Polytechnic, notably the schools of Mining, one at Freiberg in the Saxon mining district, another at Clausthal, in the Harz mountains, among the lead, copper and silver mines. These mines, though now very deep, are worked at a profit owing to the application of strictly scientific principles. The Government works the mines largely to furnish an object lesson to the students. Mills and smelting furnaces are in active operation at the mouth of the shafts. Some of the professors rank among the greatest mining technologists of the world, and to the influence of these schools is traceable the reputation as metal-workers the Germans have already won.

There are manual training schools and technical schools of different grades for almost every industry—for brewing, tanning,