CHAPTER X

Bismarck’s Germany. II, Economic and Social (1871-88)

The great single fact about Germany in the period under consideration is her phenomenal economic development. This and its implications, both social and political, dwarf the other aspects of German life. The Germany of the early years of the twentieth century bore little resemblance to the Germany of the year of unification. From a parochial land, well behind her western neighbors, she had become an industrial giant exceeded only by the United States. Probably there is no similarly rapid development recorded in history. The only parallels are Japan at about the same period and the Soviet Union after 1927. This amazing development brought, however, a whole train of problems to Germany as the industrial revolution did to all other countries, problems by no means yet resolved either in Germany or elsewhere.

The velocity and date of Germany’s economic strides made her story somewhat different from that of the other major industrial powers. Some economists suggest that one of the keys to Germany’s success is to be found in the fact that she was almost a century behind Great Britain in her industrialization. She could thus profit from the mistakes and growing pains of the British economy. Furthermore, she was able to start her modernization with more highly perfected machinery and thus avoid some of the problems of obsolescence. Another peculiarity of the German development was that almost from the start she united science with technology and industry. It is commonplace today for great companies to have large laboratories where pure research is carried out and for there to be close liaison between universities and industry. That was far from usual in the late nineteenth century, and Germany must be given much of the credit for it.

A measure of the industrial growth is the growth of the population. Between 1871 and 1910 the population of Germany increased by more
than half, from just over forty million to almost sixty-five million. Contrast this with France, which between 1876 and 1911 moved from about thirty-seven million to thirty-nine and a half million. Most of the growth was in the towns and cities. In 1871 about 36 per cent of Germans lived in towns; by 1910 fully 60 per cent did. During the mid-nineteenth century there was a steady drain on the German population, caused by emigration mostly to the United States and to South America. By the end of the century this stream was reduced to a trickle because German industry was able to absorb the increasing population. In fact, by the turn of the century Germany actually experienced a labor shortage and came to depend upon transient foreign labor at harvest time.

Much of the German industrial prowess is not completely the achievement of the Germans. Germany was endowed richly with natural resources, perhaps more richly than some Germans have wanted to admit. In the enormous coal deposits of the Rhineland-Westphalia district, centering in the Ruhr Basin, and in the large coal areas of Silesia she had almost the coal wealth of England. In addition, there are rich lignite deposits in central Germany. In iron ore she has not been so favored, but the iron deposits of Silesia and of the Saar area are important. After the annexation of Lorraine in 1871 her position was much improved, and conditions became even more favorable as science developed techniques for the extraction of low-grade ores. In other minerals, notably potash, Germany was relatively fortunate as well.

A major impetus for the development of heavy industry in Germany as elsewhere was the building of a railway network. This not only made the demand for steel soar, but also, by binding the country together, made easy the distribution of finished products. The first German railway resulted from the enthusiasm of King Louis I of Bavaria, who built in 1835 the earliest line between Nuremberg and neighboring Fürth. Yet the economist Friedrich List deserves the title of father of German railroads. He conceived of a great system of lines which would radiate principally from Berlin. The Prussian government, however, was at first not much interested in railway building, and it was in Saxony that the second important line was opened, between Dresden and Leipzig. However, during the decade of the forties Prussian governmental reluctance was overcome, and many concessions were granted for the laying of new track. By 1850 Germany had about half again as much trackage as France, and most of the main German cities were connected by steel. In the sixties the importance of railways as military adjuncts was realized, and Moltke in his strategic plans made full use of the well-developed system. Thus in both 1866 and 1870 the superiority of German railways was a factor in the rapid Prussian and German victories.
Almost as important for Germany as her railroad system is her canal system. The main German rivers run from southeast to northwest. The problem thus was to connect the basins by a number of east-to-west canals. This was not very difficult because of the flatness of the north German plain and the low elevation of watersheds. Canals were not new to Germany; but after the railway network was laid out, great sums were spent both on building new ones and widening and deepening existing ones. Among the best known which date from the imperial period are the Kaiser Wilhelm (or Kieler) Canal across the Jutland Peninsula and the Dortmund-Ems Canal connecting the Rhine with the Ems Basin, thus enabling Rhine shipping to get through to the North Sea without leaving German waters. This canal-building activity did not end with the imperial period but was pushed both by the Weimar Republic and by Nazi Germany. Some of the achievements of these later years were the Mittelland Canal across north Germany and the great ship elevator on the canal leading from Berlin to its port of Stettin. Along with the development of the canal system went the improvement of inland cities as deep water ports. The most impressive of them is the enormous harbor of Duisburg-Ruhrort; perhaps more unusual is the fact that Mannheim-Ludwigshafen, about three hundred miles from open water, is a deep water port with heavy traffic.

The building of great ships and the development of a large merchant marine came a little later. By the end of the century both Hamburg and Bremen had increased the capacity of their harbors, and the two greatest German steamship companies, the Hamburg-America and the North German Lloyd, were actively competing for both passenger and freight transportation with ships of other nations. In fact, in the nineties a German ship, the “Kaiser Wilhelm der Grosse,” held for some years the blue ribbon for transatlantic service.

In the field of heavy industry, coal mining and steel hold pride of place in the period. Both boomed incalculably in the years between unification and war. Coal production jumped from twenty-nine million to one hundred ninety-one million metric tons. This compares with a British production of one hundred eighteen and two hundred ninety-two, and a French production of thirteen and forty respectively. In addition, by 1913 Germany was producing eighty-seven million metric tons of lignite as opposed to eight million in 1871. In Europe only Britain was ahead of Germany.

In the case of iron and steel the story is even more spectacular. Germany managed to overtake Great Britain in steel production between 1890 and 1900 and in pig iron output in the following decade, while France and Belgium were left trailing pitifully behind. The German
steel industry was dominated by a few big names, or more properly dynasties, of which Krupp is the best known. The first Krupp, at the beginning of the nineteenth century, had a small forge in the village of Essen, where, as a result of experimentation, he discovered a process for making cast steel. His son Alfred developed the great industry associated with the name. As a supplier of locomotives and steel rails, he was supported by the railway boom. The munitions industry was also centered largely around Krupp, who became known as the Cannon King. By 1914 Krupp was employing almost seventy thousand workers. In 1820 Essen had a population of four thousand; by 1910 it had increased to four hundred ten thousand. The dynasty still continues under Alfred Krupp von Bohlen und Halbach. (Bertha Krupp, heiress to the fortune, married Gustav von Bohlen und Halbach, who added the word Krupp to his name. The present head of the family is their son.)

One could run the gamut of the various types of industry and see a similar frenzied activity. The textile factories increased greatly; the cutlery business was so advanced that it was possible to buy German cutlery in Sheffield, England, long the world's center for this industry. In two industries Germany approached pre-eminence. They are the chemical and electrical industries. Germany is well endowed with chemical resources. In the late nineteenth century she began to exploit them very extensively, though as yet not significantly for export. They were mainly consumed at home. Yet the foundation was laid for the creation of the famous I. G. Farben combine in the Weimar Republic period. In electricity the advances are connected mainly with two names: Werner von Siemens, inventor of the dynamo; and Emil Rathenau. These two men were the founders of the two great combines which in due course divided Germany's (and much of the world's) electrical business between them. Siemens and Halske Co. and the German General Electric Co. (Allgemeine Elektrizitäts-Gesellschaft, generally known as the A.E.G.) were the respective creations of these men and remain today a basic part of the world's electrical industry.

This industrial and commercial growth necessitated a growth in banking facilities. In finance Germany developed a modern and highly integrated system composed partly of banks that had been in existence before 1871 and partly of others founded shortly after unification. They revolved around the Reichsbank, the central bank of issue, chartered in 1875. As in the case of industry, the tendency of banking in Germany was to integrate into several very large units rather than to spread among small corporations. Thus four large institutions had the most powerful, though not the exclusive, hand in German financing. There were the Deutsche, the Darmstädter, the Dresdener banks and the Discontogesell-
schaf). From the start the relationship between finance and industry was very close, and a complicated system of interlocking directorates evolved. Much of the banks' energies were connected with the financing of new enterprises, and in the course of time the leading banks developed extensive relationships abroad with attendant political implications.

An important development in German economic history was the tendency to form cartels, or monopolies, which became noticeable in the seventies but gathered much more momentum in the eighties. There were many sorts of cartels, but their basic component was an agreement among the large entrepreneurs in any given industry to regulate or limit output and to fix prices. The protective tariff legislation of 1879 gave this movement a distinct push by tending to eliminate, or at least reduce, the flow of foreign goods into the German market. Thus in the eighties cartels proliferated. Before 1877 there were fourteen cartels; between 1879 and 1885 seventy-six were formed; in the following five years one hundred twenty more appeared. At the end of the century there were about two hundred seventy-five in active operation.

By the turn of the twentieth century Germany was transformed economically. Not only had she evolved an imposing economic system, but this system was largely in the hands of a relatively small number of extremely influential men. The story of the leading German industrial dynasties is an absorbing one for the social, as well as the economic, historian. It was not all clear sailing for these people. Germany endured the vagaries of the business cycle along with the rest of the world. The two or three years immediately after the Franco-Prussian War were unprecedentedly prosperous in Germany. It is said that more factories were established between 1870 and 1873 than in the preceding seventy years of the century. Part of this is traceable to the French indemnity, much of which was thrown upon the market as the government redeemed many of its obligations. The effect of the panic of 1873 in the United States was felt very quickly in Europe, and the years following were years of severe depression in Germany and central Europe in general. They led to the clamor for protection that had such important political results in Germany. However, in the long run nothing could stop the astounding German industrial boom.

The story is not quite so rosy on the agricultural side of the German economy, although there was progress in this area too. By unification, most of the settlement of the serf question was complete and the pattern of landholding pretty well crystallized. A free peasantry and a landed gentry controlled the land. The pattern varied sharply from west to east. West of the Elbe the characteristic (though not exclusive) holding was that of the small free farmer who farmed intensively a small plot of land.
The land east of the Elbe was dominated by the large landholder who employed many peasants and engaged in extensive agriculture. His farming efficiency was often called into question, and the problem of various types of subsidy for the marginal eastern farmer remained an important political question right into the days of the Nazis.

Efforts were made to improve and develop scientific agriculture throughout the century. The most important name in this connection is Justus Liebig, who was a pioneer in the application of chemistry to agriculture. His ideas were taken up and developed by new departments in the universities and by schools devoted exclusively to agricultural study, which were favored by the government and tried successfully to increase the product of the soil. This was necessary because during the period 1870–90 Germany ceased to be able to feed herself and became increasingly dependent on foreign importation. These were the years too of the migration from country to city. A result of this shift was a labor shortage on the farms, and an invitation to greater per capita productivity.

The landowners, reacting to these various changes in their position, solidified themselves into an important political lobby of the Conservative party. It has been seen how this development led in great part to the passage of the protective tariff and the change of Bismarck’s party orientation in the eighties. In the reign of William II the landowners were to play an even more strategic role in government.

These economic shifts and the general transformation of German life led to basic changes in the social pattern. Perhaps the most obvious was the rapid urbanization, the changeover from a rural to an urban economy. Here again the statistics are astonishing. The most spectacular are those of Berlin, which around 1820 had been a comfortable little city of nearly two hundred thousand but which became by 1914 a megalopolis of over two million, one of the largest in the world. There was a big gap between Berlin and the second largest German city, Hamburg, which contained just under a million; but no less than four other cities, Munich, Leipzig, Cologne, and Breslau, had passed the half million mark. The Westphalian industrial area, hard to estimate because of the number of separate municipalities, must have been one of the largest concentrations in the world, containing within a radius of less than fifty miles from its center Cologne, Essen, Dortmund, Duisburg, Düsseldorf, Barmen, Elberfeld, Bochum, and many other smaller communities.

This enormously rapid growth of big cities led in Germany as elsewhere to the introduction of new and serious problems. Perhaps the most urgent was housing for the new arrivals. The industrial slum, with its human tragedy, came into being; in spite of efforts to control the problem, and great building enterprises, the lot of the worker was ab-
ject. Berlin, in particular, developed a tragic situation which any reader of Jakob Wassermann's moving novel *Christian Wahnschaffe* (translated into English as *The World's Illusion*) is familiar with. There were also problems of education, health and sanitation, recreation, parks, and transportation, which had to be faced very suddenly.

New social classes arose with the new society, blurring the old familiar trinity of nobility, bourgeoisie, and peasantry. Industry brought two new classes to Germany: a small upper middle class, and a much larger class of industrial workers. The new upper middle class was composed of the industrial magnates, bankers, and businessmen. It formed a plutocracy which overshadowed the older commercial patriciate immortalized by Thomas Mann in *Buddenbrooks*. Socially it looked upward toward the aristocracy rather than downward toward the humbler bourgeois townsfolk. Increasingly intermarriage between the two upper classes occurred, thus further blurring the class picture. A unique early example of the growing union between land and industry was the wealthy and aristocratic Silesian landowner, Henckel von Donnersmarck, who bought up much profitable coal-mining property in his area and also involved himself with French financial interests, thus combining the three important strands of the new society: the land, heavy industry, and international business.

The growth of the industrial proletariat has been a typical feature of Western civilization and has caused obvious and decisive repercussions in the modern world. This was certainly the case in Germany, where the political importance of the proletariat is witnessed by the booming membership of the Social Democratic party. Bismarck was probably right in 1866 when he believed that universal suffrage was a conservative instrument; by 1890 he had realized that times had changed and that universal suffrage had placed an important part of the control of the vote in the hands of the new radical class of workers.

Together with the increase in industrial workers went the development of the trade union movement for their protection. The enactment by the North German Confederation in 1869 of a law permitting the establishment of workers' associations ended old prohibitions and paved the way for the development of the union movement. This development did not occur immediately, however. The union movement lagged behind industrialization and even behind the Social Democratic party. Although there were some foundations in the early years of the *Reich*, it was not until the decade of the nineties that German unionism became a major force, and even then it did not develop along unified lines. There were three main union organizations, though one far overshadowed the others both in numbers and in influence. This was the so-called Free
Trade Union movement, Marxist in coloration and closely affiliated with the Social Democratic party. By the turn of the century the membership of this group approached seven hundred thousand, but by 1912 it had passed two and a half million. Though the leadership of this movement (Carl Legien being the most prominent leader) worked closely with the Social Democrats and at times ruled in party decisions, by no means all of the union members were also members of the party. There was, however, a strong tendency for them to vote the Social Democratic ticket. It is also noteworthy, given the future importance of the party, that the trade union leadership was consistently on the conservative wing of the party. Trade unionism is not a revolutionary movement. It is a vested interest and has no desire to overthrow a social order in which it has a place of respectability and even prestige. The influence of the union leaders in the party councils was to contribute important pages to the history of the revolution of 1918 and the Weimar Republic.

The second of the union movements was known as the Christian Trade Unions. Christian social thought derived from Emanuel von Ketteler, bishop of Mainz, who back in the fifties and sixties had become conscious of the new shifts in society and of the need for the church to provide ways to keep the industrial worker close to his religion. This sort of thinking was found all over Europe but very particularly in Germany, where Catholics were conscious of their minority status. It received impetus during the pontificate of Pope Leo XIII, who was the first pope to concern himself greatly with the new social problems. The growth of the Marxist parties, specifically based on a philosophy of materialism, alarmed Christians, who saw a frightening leakage from all the churches. The early history of the Christian Union movement is a complicated one because there were some very divergent theories on its organization and ideology. By 1899, however, most of these had been ironed out, and at Mainz a united platform was adopted and a central organization formed. At that time there were about fifty thousand members of Christian unions; by 1913 there were over three hundred thousand. They remained about one-seventh the size of the Free Unions but at times had an influence disproportionate to their size. Although they were founded mainly under Catholic auspices, they welcomed Protestant membership and were technically interdenominational. Their major political allegiance was to the Center party, although this relationship was far more tenuous than that of the Free Unions and the Social Democrats. They stood on the left wing of the Center party, and the best-known Christian Union leader, Adam Stegerwald, was viewed askance by some of the conservative Center leadership.

The third group was known as the Hirsch-Duncker Unions after the
two men who had been influential in their foundation. They were liberal in character, neither Marxist nor Christian. They believed in a policy of self-help in the old liberal tradition. This group was the smallest of the three, numbering by 1913 slightly over one hundred thousand members.

Bismarck was not blind to the transformation of Germany which took such rapid strides during his tenure of office. He was forced to turn from his favorite sport of the higher diplomacy and to interest himself in economic and social problems. Perhaps it is putting it too strongly to say that Bismarck did this against his will, for he had a sort of inarticulate concept of the patriarchal state which forced him to be concerned with social welfare. His heritage gave him a concept of paternalism as far as the management of an estate was concerned; from this to paternalism in the management of the state is not a very long step. There was a sense of noblesse oblige, not unlike that of the British Conservatives of the Disraeli type, which made it imperative for those high on the social ladder to keep a fatherly eye on those lower down. It is not too much to suggest that Bismarck's abortive friendship with Lassalle was based on this mutual acceptance of the state's responsibility to its population. Add to this Bismarck's severe distrust of the Social Democratic party and a consequent urge to take some of the wind from its sails, and you have sufficient motivation for the series of "social security" laws which he pushed through the Reichstag in the last decade of his rule.

In 1881 Bismarck introduced his new program of social legislation, perhaps the most constructive series of acts of his whole career. Both in addresses of his own and in the speech from the throne, he emphasized the right and the duty of the state to protect the welfare of the workers. He introduced a bill calling for a system of health insurance providing for both medical attention and half pay in case of illness. Insurance funds were provided, to be paid for by employer, employee, and the state. The Reichstag received these proposals very unfavorably. Particularly angry were the National Liberals who saw here the abandonment of laissez faire. They managed to eliminate the state as a contributor to the fund; its function became simply that of managing the fund and paying for administration. After much political juggling the bill finally became law. The following year a similar bill was introduced to cover accident insurance and was forced through the legislature. Finally in 1889 an even more grandiose project was passed, namely an old age and invalidity pension act. In this act the state did contribute one-third of the fund. During the reign of William II the system was enlarged and perfected, with the result that Germany was the first power to have an extensive social security system.

The Germany of 1871 was almost legendary to the German of 1890.
His whole life had been changed in those two decades. Germany was no longer the backward stepchild of the preceding two centuries. She was now fully competent to compete and keep up with the other great nations of the world. Indeed she was actively doing it. This fact is important to an understanding of the international tensions leading to World War I. Great Britain no longer dominated the world economically. She had grave competition from both Germany and the United States. There were some in the late eighties who wondered if the aging chancellor had not perhaps outlived his time, if his basically conservative and defensive policy were still the right one for the new Germany. There were many who were in sympathy with the new young emperor who was restive under the rule of the older generation, who looked forward to a fuller entrance of Germany into the affairs of the whole world, and who with his love for the sea typically summarized his longings with the phrase, “Full speed ahead.”