SIEMENS

Sir William Siemens (1823–1883)

Wilhelm Siemens (1823–1883), who changed his first name to William after moving to England, was born on April 4, 1823, in Lenthe near Hanover, Germany. He accompanied his older brother Werner von Siemens, who was then serving in the Prussian army, to Magdeburg, where he attended trade school. After dropping out of a practical engineering program in Magdeburg and abandoning the study of natural sciences at the University of Göttingen, William spent the spring and summer of 1843 in England. Here he succeeded in patenting the silver and gold-plating technique developed by Werner and selling the rights to the English company of Elkington for £1,600 or roughly 30,000 marks. This success not only helped the brothers out of major financial difficulties; it also encouraged William to consider moving to England. Werner supported the idea, and William traveled to England again in January 1844. However, the quick success of the previous year could not be immediately repeated. Only gradually did the situation improve. From 1849, William held a permanent position as an engineer in Birmingham. At the same time, he also worked on his own inventions, among them a water meter that later proved very successful.

In 1850, William took over the management of the newly established agency of Siemens & Halske in London, although its beginnings were somewhat inauspicious. The manufacture and laying of submarine telegraph cables opened up new business opportunities. William's good contacts with engineering circles and government authorities facilitated the otherwise difficult entry into the highly developed English telegraph market, where private operating companies were in competition with one another. The participation of William and Werner von Siemens as technical consultants in the laying of the first deep-sea cable in the Mediterranean between Sardinia and Algeria in 1857 was a great success, and the British government pledged to engage the two brothers as scientific advisers for all future deep-sea cable projects.

In 1858, the London agency was reorganized as a separate enterprise under the name Siemens, Halske & Co. Among the orders that consolidated the prestige of the German supplier were the laying of lines from Constantinople via Chios to Candia, from Syra to Chios and from Candia to Alexandria as well as of a section of the telegraph line to India through the Red Sea and the Indian Ocean. Access to the English market was

thus finally secured, so that at the beginning of 1863 Siemens, Halske & Co. was able to open its own cable factory in Woolwich near London in order to ensure independence from the quality and prices of existing suppliers. In 1865, the London business was restructured under the name Siemens Brothers after the departure of Halske, who considered the sea cable business too risky. Due to William's and Werner's differing views as to the relationship between the companies in London and Berlin, the restructuring was not without problems. While William wanted to be independent of Berlin and have a free hand in his business policies, Werner pursued the idea of an international, closely linked family company under his own leadership. The older man ultimately prevailed, due not least to his larger capital investment.

The next major project undertaken by Siemens Brothers, the Indo-European telegraph line, involved all parts of the company: Berlin and St. Petersburg were responsible for the construction work, while Siemens Brothers in London took over the laying of the submarine cable in the Black Sea and supplied the materials. Because construction took place on three sections of the line simultaneously and the communications link ran through four different sovereign territories, there were considerable logistical, political and financial problems in addition to the technical ones. Nonetheless, the construction project was finally brought to a successful conclusion at the beginning of 1870. On April 12, 1870, William Siemens in London created a sensation: in the presence of a group of invited guests, he sent and, within one hour, received a reply to a telegram transmitted along the 11,000-kilometer line between London and Calcutta. With only a single interruption due to World War I, this line remained in operation until 1931.

Even more daring than the construction and operation of the Indo-European telegraph line were the submarine cable ventures to which William Siemens and the London company devoted themselves almost exclusively in the 1870s – above all, the planning and laying of a telegraph cable between Europe and the U.S. in 1874 and 1875. Work on the more than 3,000-kilometer-long transatlantic cable turned out to be a dramatic adventure. After many obstacles and setbacks, the project was successfully completed in September 1875. However, the brothers' strong personal commitment to the cable business came to an end in 1880 when Siemens Brothers was transformed into a joint stock corporation.

Despite his many activities as a businessman and entrepreneur, William continued to devote himself intensively to scientific research. Together with his brother Friedrich, who spent several years in England, he worked on the development of a new steel manufacturing process, the so-called Siemens-Martin process. In 1866, William built the Siemens Sample Steelworks for experimental purposes in Birmingham. He registered his first patent for steel manufacturing in 1867. More patents followed in the next few years. In order to put his steel manufacturing process into practice, he founded the Landore Siemens Steel Company, which acquired a steelworks in Landore near Swansea in Wales. In Canada, William was for a time Chairman of the Steel Company of Canada, which had acquired patent rights from him. In 1878, the town of Londonderry, where the steelworks were located, was temporarily renamed Siemens Town in his honor.

William was an established figure in English scientific circles and was involved – frequently in a leading position – in numerous associations and societies. He became a member of the Royal Society in 1862. In 1872, he founded the Society of Telegraph Engineers and Electricians, of which he was the first president. He was awarded honorary doctorates by a number of universities.

England was William’s second home. On the day he became engaged to the Scotswoman Anne Gordon, whom he married in 1859, he took English nationality and changed his first name to William. A few months before his death on November 19, 1883, he was knighted Sir William Siemens by Queen Victoria.