## E. W. von Siemens Honorary Member 1892

DR. Ernst Werner von Siemens, inventor, promoter of the telegraph and other early electrical apparatus, and a founder of the German firm of Siemens and Halske, was elected to honorary membership in the Institute July 17, 1892. Doctor Siemens was born in Germany in 1816, the eldest of 7 brothers, all of whom achieved distinction in the pursuit of science. His early life was spent in acquiring an education at the Gymnasium of Lubeck, and afterward in the study of military practice and theory. At the age of 28, he was

appointed superintendent of artillery workshops and devoted his attention to the application of mechanical, electrical, and chemical science to the defences of his country. About 1848, Doctor Siemens proposed the use of subterranean instead of overhead telegraph lines, and invented a machine for applying seamless gutta-percha to the conductor. Shortly after this he retired from the army, and commenced to devote his whole energy to investigations of theoretical and applied science. His numerous achievements in practical electricity include dial and printing telegraphs, development of the duplex telegraph circuit, apparatus for localizing faults in electric cables, the polarized relay, an electrical range-finder, and the development of the self-excited dynamo, and methods of armature winding. In 1879, he exhibited an electric railway in Berlin. One of the earliest forms of self-regulating arc lamps also is attributed to this prolific inventor. He received from the University of Berlin, in 1860, the honorary degree of Ph.D. Among other honors, a patent of nobility was conferred upon him by the Emperor Frederick III, and he had received the highest scientific order of his country, the Prussian order, "for merit." Doctor Siemens died December 6, 1892.



E. W. VON SIEME

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