

Obituary.

DR. C. P. GOERZ.

DR. CARL PAUL GOERZ, the founder of the well-known optical and instrument-making firm of C. P. Goerz, died at his home in the Grünewald, Berlin, on January 14, at the age of sixty-nine years. The record of his life is a remarkable one of industry and perseverance successfully exercised in the creation of a great establishment for the production of scientific apparatus of precision.

Although Dr. Goerz, to whom the honour of Doctor Ing. *honoris causa* was accorded by the Technical High School of Charlottenburg, had received no special academic scientific training, he realised the vital need for the exercise of scientific knowledge and research in such work as that to which he was devoted. His success is attributable to his commercial capacity, to his power of appreciating the value of the leaven of science in industry, and to his ability to utilise and encourage the efforts of those with whom he associated himself.

Towards the end of 1886 Dr. Goerz commenced business in Berlin as a small retailer of mathematical instruments, and later of photographic apparatus. In 1887 he engaged his first employee, the number of whom increased to many thousands during the recent war. The present firm dates nominally from 1888, when a small and simply equipped workshop was established in Berlin for the manufacture principally of photographic cameras. For the optical computation of the objectives he was fortunate in engaging the services of Carl Moser, who died in 1892.

Further progress resulted from the association of Paul Goerz with Ottomar Anschütz, whose pioneer work in the instantaneous photography of animal action had attracted much public attention. But the greatest advance in the fortunes of the firm is attributable to the introduction of the Goerz double anastigmat, designed by a casual applicant for scientific employment, Emil von Höegh.

Thereafter the progress was rapid. The present headquarters and well-equipped workshops were commenced in 1894. Numerous branches were established in foreign countries, and during the war a large mass-production factory was erected in the suburb of Zehlendorf. A separate works was devoted to the production of photographic film and kindred chemical work.

Realising the need for unrestricted supplies of optical glass, Dr. Goerz established on ground adjacent to his mass-production works at Zehlendorf the Sendlinger optical glass works, the origin of which can be traced through the laboratories of Steinheil at Sendlinger near Munich to the original glass works of Fraunhofer.

Dr. Goerz is survived by his second wife and by a daughter and two sons, the children of his first wife who died in 1897.

Through his death the German optical industry has lost a vigorous leader of striking personality, respected by all who were associated with him, and particularly by his many employees, in whose welfare he always exercised an active interest.

J. W. F.

THE HON. R. C. PARSONS.

READERS of NATURE will have learned with regret of the death of the Hon. Richard Clere Parsons in London on January 26, in his seventy-second year. After a brilliant career at Trinity College, Dublin, where Mr. Parsons graduated in honours at twenty-two years of age, he was apprenticed to Messrs. Easton and Anderson, and it was during this period that his love of hydraulics developed and became the dominant factor in his life's work. In January 1875 he was asked by Mr. Anderson to make experiments upon centrifugal pumps, and the work culminated in the reading of a paper, entitled "The Theory of Centrifugal Pumps as supported by Experiments," before the Institution of Civil Engineers—a paper which gained him the Miller Prize. This was his first-fruits, and in his later work, both scientific and practical, he continued to be principally concerned with water-flow. Mr. Parsons read many other papers before the Institution, from which he received the Telford gold medal, the Manby premium, and the George Stephenson medal. His first important post was that of resident engineer of the South Hants Water Works; in 1880 he became a partner in the firm of Messrs. Kitson and Co., Leeds; seven years later he entered into partnership with the late J. F. La Trobe Bateman, F.R.S., and so commenced the consulting practice which he continued until his death.

Much of Mr. Parsons's work was carried out abroad; for example, the water supply and drainage of the city of Buenos Ayres, and the scheme which he prepared for the drainage of Petrograd. He held many important consultative appointments, and it was while acting in the capacity of engineer for the Water Works Company of Rosario that his inventive faculty exerted itself in producing an apparatus for automatically adding a coagulant to a water supply before filtration. To this he gave the name Tiltometer. It was followed by another invention called the Senfrot, for adding salt to water when under pressure.

Perhaps Mr. Parsons's most important invention was the Stereophagus pump introduced by him in 1911, and used for the pumping of sewage or water containing solid matter. In this, use is made of revolving blades, which cut up any solids, and thus prevent the possibility of choking. The description of this pump, and also of another, known as the Flexala, which was designed for dealing with fluids containing erosive substances, was given in a paper read before the Institution of Civil Engineers in 1919 entitled "Centrifugal Pumps for dealing with Liquids containing Solid, Fibrous or Erosive Matters."

Mention should be made of the interest which Mr. Parsons took in educational work. During his stay in Leeds he was connected with the development of the Yorkshire College, now the University of Leeds, and he was for thirty-three years connected with King's College, London, of which he was treasurer and vice-chairman. He was also, on the nomination of the University of London, a governor of the Imperial College of Science and Technology, and was a vice-president and manager of the Royal Institution.