

authoritative study of St. Gregory the Great, which was followed by "Augustine the Missionary." He also wrote "The Golden Days of the Early English Church," published in 1916, and edited a "History of the Vicars of Rochdale" for the Chetham Society.

It is surprising that, amid all this literary and scientific activity, Sir Henry should have been able to devote so much time to politics and public affairs, on which he was a frequent and voluminous writer in the correspondence columns of the Press. He was elected member of Parliament for South Salford in 1886, 1892, and 1895. In 1902 he did not seek re-election. Although he sat as a Unionist, he adopted an independent attitude, giving a free rein to powers of criticism and controversy which lost nothing by his command of language.

In addition to the honours already mentioned, Sir Henry Howorth was an honorary D.C.L. of Durham University, a trustee and honorary librarian of Chetham College, and, from 1899, a trustee of the British Museum. He had been president of the Royal Archæological Institute and the Viking Society, and was a vice-president of the Royal Asiatic and of the Royal Numismatic Societies.

DR. LOUIS BELL.

DR. LOUIS BELL died at his home at West Newton, Mass., on June 14. He was born in Chester, New Hampshire, in 1864, and twenty years afterwards graduated at Dartmouth College. He then specialised in physics and applied engineering, receiving the Ph.D. degree from Johns Hopkins University in 1888. In the same year he was elected professor of physics at Purdue University, Lafayette, Ind. He edited the *Electrical World* from 1890 to 1892, and was then appointed Chief Engineer of the power transmission department of the General Electric Company. In this capacity he installed at Redlands, California, the first three phase transmission plant which was used for general service. From 1895 to 1905 he lectured on power transmission to the Massachusetts Institute of Technology, while for twenty-seven years he was a consulting engineer in Boston.

Dr. Bell did excellent pioneering work on illuminating engineering and on power transmission. His "Electric Power Transmission," published in 1897, was for several years the standard textbook on the subject. For many years also his "Art of Illumination," published in 1902, was the standard work on illuminating engineering. He contributed articles on "Electrical Power Transmission" and on "Electric Motors" to the 10th and 11th editions of the "Encyclopædia Britannica," and published many technical articles chiefly on alternating currents, electric traction, illumination, physiological optics and radio-telephony. He was a manager of the American Institute of Electrical Engineers from 1891 to 1894 and was a past president of the American Illuminating Engineering Society. His work on photometry for the International Electrical Commission was much appreciated by engineers all over the world.

THE former Director-General of the German Continental Gas Co., Dr. W. v. Oechelhaeuser, died on May 31, at Dessau (Anhalt). He was born on January 5, 1850, at Frankfort-on-Main. He studied engineering science at the Technical High School in Berlin, made rather extensive journeys in foreign countries and entered in 1887 into the services of the German

Continental Gas Co. at Dessau, of which firm he was Director-General during the years 1890-1912. His technical achievements, based upon sound scientific knowledge, have been acknowledged by the bestowal of the honorary degrees of Dr. Ing. and Dr. Phil. Dr. von Oechelhaeuser contributed largely to the development of the gas industry; for example, he substituted for the old type of horizontal gas retorts, with their great amount of hand work, the vertical retorts, in which the coal glides down by its own weight and at the same time is gasified. On the other hand, he constructed the first engine on the Oechelhaeuser system, by which it became possible to use the gas from a blast furnace directly for power production. In addition to this, he was successful in raising the social standing of the engineer in Germany, in his capacity of president, during many years, of the Society of Gas and Water Engineers and of the Society of German Engineers.

PROF. HERMANN SCHOLL, professor of technical physics of the University of Leipzig, died on June 27, aged fifty-one. His premature death will be much regretted. He was born on January 14, 1872, in Eupen, Rhenish Prussia, and studied at the Technical High School, Aix-la-Chapelle, and at the University of Giessen, where he became assistant to Prof. Otto Wiener, with whom he moved to Leipzig in the year 1899. In 1910 he was made professor of technical physics, and he organised the practical courses of this study at the university. His investigations were concerned mainly with the relation between light and electricity; for example, he was of opinion that electric action of the light plays an important part in the first-known photographic process, the daguerreotype process. Much important work was done by Scholl in his capacity as an expert of the Reichsgericht in patent cases. In numerous decisions concerning the validity of patents connected with electricity and mechanics, the senate of the supreme German court of justice followed Scholl's opinion. In consequence of his far-reaching scientific knowledge and thorough understanding of technical questions, Scholl exerted great influence upon the development of industry. Industrial circles, as well as his colleagues and pupils, will be much afflicted by the loss of this distinguished man.

WE regret to announce the following deaths:

Dr. E. Beckmann, on July 12, aged seventy. An appreciative note on his life and work appeared in our issue of July 21, p. 109, when the occasion of his seventieth birthday celebrated on July 4 was recorded.

Prof. L. Hiltner, president of the Bavarian Botanical Institute, on June 6.

Prof. E. W. D. Holway, of the University of Minnesota, known for his work on the rust-fungi, on March 31, aged seventy.

Prof. F. Krafft, professor of chemistry at Heidelberg, aged seventy-one.

Dr. Josef Nevinny, professor of pharmacology and pharmacognosy at the University of Innsbruck, aged seventy.

Prof. J. P. Langlois, of the Conservatoire national des Arts et Metiers, and editor since 1910 of the *Revue générale des Sciences*, on June 17.

Dr. J. G. Rutherford, chairman of the International Commission on Control of Bovine Tuberculosis and Canadian delegate at the International Institute of Agriculture at Rome in 1908, on July 24, aged sixty-five.