

and "Longmans' Gazetteer of the World", of which he was editor, which first appeared in 1895 and has been often reissued. Both works show that rigorous accuracy in detail, based upon profound and wide research into original sources, and that sober and balanced judgment which were his outstanding characteristics.

Dr. Chisholm may, indeed, be said to have been one of the founders of scientific geography, particularly from the economic side, within Great Britain. Not only did he show that it demanded as exact scholarship, as wide knowledge as the subjects which had been recognised earlier as worthy of academic rank, but also at a time when, with the apparently sudden recognition of its interest and wide ramifications there was grave risk of hasty generalisation, he insisted upon the need for precise and, if possible, statistical proof of fundamentals. Rigidly conscientious himself, and with a passion for accuracy and completeness of statement, he was peculiarly impatient of slovenliness, whether in speech or thought, and if modern geography in Great Britain may seem to have developed relatively slowly, it is to Dr. Chisholm largely that we owe the fact that its foundations have been well and truly laid.

Dr. Chisholm's influence also extended far beyond the limits of his own country. His "Handbook of Commercial Geography" had the rare distinc-

tion of being translated into Arabic, and he carried on an extensive correspondence with geographers, economists, and others throughout large parts of the world. It was characteristic that his handwriting was clear and precise to the end and that he would give to letters, even on trifling matters, the same care and attention as to his own special work. His help and advice were, in consequence, constantly asked for, and so freely given as to bring him into contact with a wide circle. Though never in much sympathy with the narrowly nationalist Scottish point of view, he was a Scot of the best type, upright, honourable to the last degree, fair-minded, indifferent to worldly advancement, but profoundly concerned with the deeper problems of man's destiny, and too clear-sighted to be content with easy solutions. Even apart from his influence on economic geography and history, which was both wide and deep, the example he set of a life devoted to the search after knowledge was an inspiration to all who knew him.

WE regret to announce the following deaths:

The Hon. Edward Gerald Strutt, C.H., past president of the Surveyors' Institution and agricultural adviser to the Board of Agriculture during the War, on Mar. 8, aged seventy-five years.

Prof. Eugenio Rignano, professor of theoretical philosophy at the University of Milan and editor of *Scientia*, on Feb. 9.

### News and Views.

SINCERE regret will be felt throughout the world of science at the destruction by fire of a large part of Lord Rayleigh's laboratory at Terling Place, Chelmsford, Essex, on Mar. 7. After taking his degree at Cambridge in 1865, the late Lord Rayleigh found great difficulties in getting opportunities for experimental research or instruction in laboratory work. Three years later he started experiments on his own account at Terling Place, and from there produced a number of papers which at once secured for him a position as a leader in physical science. When he resigned from the chair of experimental physics at Cambridge in 1884, he continued his researches in his private laboratory, and it was there that he carried out the precise determinations of the density of nitrogen which led to the discovery of argon. The simplicity of the apparatus used by the late Lord Rayleigh is well known, and most visitors to the laboratory were astonished that results of prime significance could be obtained with such modest equipments. We are glad to know that most of this historic apparatus has been saved as well as all books and papers belonging to the late Lord Rayleigh.

THE upper storey of the laboratory at Terling Place—originally a stall loft—has been burnt out; it was here that the main work on argon was done. Among the pieces of historic apparatus which have been destroyed are the original Rayleigh refractometer and the manometer used for adjusting the pressures of gases to an accurate standard in the weighings of nitrogen, hydrogen, and oxygen. Most

of the present Lord Rayleigh's chief working instruments have also been destroyed and much preparatory work for experiments in progress is gone. The apparatus thus lost includes several valuable spectrographs, quartz apparatus and lenses for investigating the optical properties of mercury vapour, air pumps, equipment for measuring the light of the night sky by photo-electric cells, and other instruments used in recent or current researches. It is distressing to have to record a disaster of this kind, and we ask Lord Rayleigh to accept the sincere sympathy of scientific workers everywhere at the losses he has suffered and the consequent interference with his research work.

THE Department of Scientific and Industrial Research has, since the inception of research associations, always emphasised that the associations, to be eligible for grant from the Department, must secure adequate financial contributions from industry itself. While the securing of this support from the great industries has not been an easy matter, it is gratifying to find that in several of the most important industries of Great Britain a general levy is made in order to provide funds for particular research associations. The report of the council of the British Research Association for the Woollen and Worsted Industries for 1929-1930 indicates that this Association is about to complete an arrangement under which the wool textile industry will submit to a voluntary levy on imported wool, mohair, and so on, as well as to a levy on those processing sections of the industry which do not pay the levy on the raw material. The income which will