

OBITUARY

SIR J. J. THOMSON (1856-1940)

IN the demise of Sir Joseph John Thomson, on the morning of 30th August, the world has lost a great and distinguished leader of science, whose pioneering work blazed itself across the scientific firmament of the last quarter of the 19th and the first decade of the present century. Born on December 18, 1856, his earlier education was at Owen's College, Manchester, and Trinity College, Cambridge. He was elected to the Fellowship of the Royal Society in 1884, and during the same year called to the chair of Cavendish Professorship. For thirty-five years he filled this chair with great distinction, and organised the Research laboratories which soon became the Mecca of physicists all the world over. He was elected to the presidency of the Royal Society during 1916 to 1920, and was the recipient of almost all the distinctions which the scientific world could bestow on one of its greatest devotees.

Sir J. J. Thomson's remarkable achievement lay in the realm of the electronic constitution of matter. His classical and ingeniously devised experiments on the discharge of electricity through gases were crowned with the brilliant discovery of the corpuscular nature of the cathode rays, the particles constituting these rays having a mass two

thousandth of that of the hydrogen atom. It was this discovery, supported by other significant and almost simultaneous investigations of Zeeman and Lorentz in Holland and Lenard in Germany, that helped to firmly establish the electronic theory of matter.

Besides his numerous papers in *The Proceedings of the Royal Society* and the *Philosophical Magazine*, Sir J. J., as he came to be called affectionately in later years, was the author of a number of well-known books, the most famous of which are on the conduction of electricity through gases, and a series of general text-books on Physics, written in collaboration with Prof. Poynting.

Sir J. J. was the leader of a very active school of Physics. More than twenty-five of his students have been elected to the Fellowship of the Royal Society, and six of them for the award of the Nobel Prize. He retired from the Cavendish chair soon after the last World War, and was succeeded by Lord Rutherford. It was an appropriate tribute that was paid to the abounding energy of Sir J. J., when the late Lord Rutherford referred to him at a dinner party given to celebrate his eightieth birthday, as "A star of the first magnitude, a central sun that does not shrink with age, but draws on some unknown source of energy".

INTELLIGENCE SERVICE FOR INDUSTRIAL RESEARCH

AT a conference of chemists, called by the Indian Munitions Board at Lahore on the 8th January 1918, it was agreed that (1) a monthly list of researches in progress should be circulated to all chemists who are assisting the Board with Research work, (2) at the foot of the list, a list of problems awaiting investigation should be published and (3) chemists undertaking research work for the Board should be requested to inform the Board of any problems that may occur to them.

To-day, the Government of India has inaugurated the Board of Scientific and Industrial Research which has already taken the initiative in launching a number of research schemes of immediate practical interest.

A periodical (monthly) publication of the list of researches together with any import-

ant achievements made in each of the lines, would be helpful in many different ways. The research worker will be enabled to keep himself informed of the various lines of industrial work pursued in the country and wasteful duplication could be avoided. The publication will further be helpful for the research worker to get into touch with his colleagues who may be working in a closely allied line. The several provincial and State governments, the industrial magnates and the interested public will have an opportunity of keeping themselves informed of the progress of industrial research in the country.

We earnestly hope that the Board of Scientific and Industrial Research will consider the advisability of publishing the list of researches and reporting upon their progress from time to time.