

### Science and Progress

THE address, "Science in Everyday Life", given at Long Eaton on September 7 in connexion with the Nottingham meeting of the British Association by Dr. J. E. R. Constable, dealt with the more popular side of the activities of the Department of Scientific and Industrial Research and the laboratories engaged in research under its auspices. The National Physical Laboratory has, for example, fostered the use of X-rays for the detection of internal defects in steamship and aeroplane propellers, in almost all types of industrial products and in human teeth, and of foreign bodies in packed foods. It has also undertaken the measurement of noise and suggested methods of diminishing noises in buildings by the use of sound-absorbing devices. The Fuel Research Station has been investigating the best methods of getting the most heat and the least smoke from coal, while the Food Investigation Board has been finding out the best methods of keeping foods of all kinds in cold storage for long periods without its deteriorating.

ANOTHER branch of the activities of the Department to which Dr. Constable referred was that of the Road Research Laboratory, which is determining the best methods and materials for the construction of roads with good wearing qualities and non-skid surfaces. Machines for measuring the durability and non-skid property of sample roads and for determining when a road surface must be condemned as bad have been constructed and are giving valuable information. Closely associated with this laboratory is that for building research, which has succeeded in solving some of the difficulties in the production on a large scale of uniformity in structural materials such as concrete, and in the preservation of the stonework of buildings, and has investigated the best methods of dealing with many of the newer quick-setting plasters and cements. As a result of the work of the laboratory the smoking chimney need no longer be tolerated.

### Dr. R. d'E. Atkinson

DR. R. D'E. ATKINSON has been appointed chief assistant in the Royal Observatory, Greenwich. Dr. Atkinson obtained a first class in the Physics Final Honour School in Oxford in 1922 and was elected to a research fellowship at Hertford College. In 1926 he obtained a Rockefeller travelling fellowship and studied in Göttingen for two years under Prof. Franck, taking the D.Phil. degree. After a short period as demonstrator in the physics laboratory of the Technische Hochschule in Berlin-Charlottenburg, he was appointed assistant professor and, in 1933, associate professor of physics in the Rutgers University, New Brunswick. Dr. Atkinson has published many papers. Of particular interest is his work on atomic synthesis and the source of stellar energy, in the course of which he deduced, before the discovery of the neutron, from general considerations of atomic abundance in the sun and stars, that there must be some type of particle that could penetrate a highly charged nucleus more easily than a proton.

### Charles Bouchard (1837-1915)

CHARLES JACQUES BOUCHARD, a distinguished French physician, was born on September 6, 1837. He studied medicine first at Lyons and then in Paris, where he became house physician to Charcot, with whom he afterwards collaborated in the study of certain nervous diseases. He is best known for his works on the pathology of cerebral hæmorrhage (1866) and auto-intoxication (1887), both of which were translated into English, and the diseases caused by diminished nutrition (1870-80). He was also co-editor of a system of medicine with Charcot and Brissaud (1891-94) and of a treatise on general pathology in collaboration with H. Roger (1895-1903). In 1887 he founded the *Revue de la Tuberculose* with Verneuil, and in 1899 the *Journal de Physiologie et de Pathologie Générale* with Chauveau as his co-editor. Bouchard was one of the first physicians in Paris to take an interest in radiology, and installed a radioscopic apparatus at his own expense for the examination of his patients at the Charité hospital, where he was physician. In addition to occupying the chair of general pathology and therapeutics in the Paris faculty of medicine (1877) his distinctions included the presidency of the second French Congress of Medicine (1895), Société de Biologie (1896) and Academy of Sciences (1908). His death took place on October 28, 1915. The work entitled "Un Médecin Philosophe: Charles Bouchard, son œuvre et son temps", by Paul Legendre (1924), forms one of the outstanding medical biographies.

### Trades Union Congress and Science

THE announcement made by Mr. Ernest Bevin in his presidential address to the Trades Union Congress meeting at Norwich of the formation of a scientific advisory council will be widely welcomed. Mr. Bevin paid tribute to the progress that science has made, but pointed out that society has not kept pace with it in making the fundamental readjustments and assimilating the results of research, discovery and invention. The General Council of the Congress believes that men of science can make a further contribution to progress by assisting such a movement as the Trades Union Congress with counsel and knowledge. It has accordingly decided to establish a Scientific Advisory Council, the purpose of which will be to enable the Congress and its constituent unions to secure the help and advice of leading scientific workers in some systematic and regular way. "The General Council are convinced that their prevision and foreknowledge of the significance of scientific discovery in all fields of research would be of incalculable value not only to the trade union movement, but to the community." Mr. Bevin gave a warning that this does not mean that scientific workers are to be invited to frame the policy of the Congress; the General Council wishes to be in touch with representative men of science by means of such an advisory council and panels of scientific workers, from which it will be able to obtain information and advice in dealing with its own problems. It would