

News and Views

Sir Richard Glazebrook, K.C.B., F.R.S.,

SIR RICHARD GLAZEBROOK reaches his eightieth birthday on September 18, and there must be few men in this or any other generation whose names are associated with such a long career devoted unremittingly to the services of science and the State. "Ease, from this noble miser of his time, no moment seeks" and first as fellow, tutor and bursar of Trinity College, Cambridge, then as principal of University College, Liverpool, and afterwards as first director of the National Physical Laboratory, Sir Richard has never wearied in well doing, and has ever brought a single-minded resolution to bear in turn on each of the many problems which came to hand. Of the breadth and diversity of his activities there is no room to speak here—the Universities Commission, the Museums Commission, the 1851 Commission, the Aeronautical Research Committee, the "Dictionary of Applied Physics", the Gas Referees, the presidencies of many institutions and societies—he has always revelled in work and thrived on it. As chairman of countless committees, he is not likely to be surpassed for his ability to crystallise discussion into decision and decision into action. But the biggest debt of all which the Nation owes him, and for which he will always be remembered, is for the skill, resource, pertinacity and judgment he brought to bear in creating and moulding the laboratories at Teddington into a great national institution with a standing unquestioned, both at home and abroad. It is a privilege to be able to extend our congratulations to Sir Richard on a great occasion, and to wish him many more years of untiring service.

Prof. W. W. Watts, F.R.S.: President-Elect of the British Association

No man of his generation has exercised greater or more knowledgeable influence on geologists and the progress of British geology than Prof. William Whitehead Watts, president-elect of the British Association for 1935. Born at Broseley in Shropshire in 1860, he was educated first at local schools and then at Denstone College, Staffordshire, and Sidney Sussex College, Cambridge. His teaching career was started when he undertook university extension lecturing and for a time took charge of the Department of Geology at Leeds. It was continued when, after some years of service as petrologist on H.M. Geological Survey, he became deputy professor of geology at Oxford. It was as professor of geography and assistant professor with Charles Lapworth at Birmingham that he made his mark, and by that time he had produced his "Geology for Beginners", a small book which for forty years has provided the first introduction of the science to young geologists in all the English-speaking world. In 1906, Watts succeeded Judd as professor of geology at the Royal College of Science and the Royal School of Mines, London, where he has built up a school, the students from which have filled academic professorships,

directorships of geological surveys and many and diverse posts of influence in industry in many lands. Since the Imperial College was instituted in 1908, the Department of Geology has been extended by Watts's organisation of the Sub-Departments of Oil Technology and Mining.

PROF. WATTS'S talent for administration has led him to respond to insistent demands for his services outside the Imperial College, and he has held office as dean of the Faculty of Science and member of the Senate of the University of London, secretary and president of the Geological Society of London, president of the London Geologists' Association, president of the Mineralogical Society and secretary of the Conjoint Board of Scientific Societies and Technological Institutions. Notwithstanding the time taken up by teaching and administration, Prof. Watts's own researches—more especially those concerned with Charnwood Forest and in Shropshire—have proved an inspiration to all British workers concerned with Lower Palaeozoic rocks. His interest in the applications of science led him to choose for his presidential address to the Geological Society in 1911 the problem of the hidden coal resources of Great Britain, a conspectus remarkable for its breadth of view. Prof. Watts's connexion with the British Association dates back to 1883, and since that time he has been associated as secretary and chairman with the still active Committee on Geological Photographs, the oldest of the Association's research committees extant and the only one which has been self-supporting since its inception. He has been in turn secretary, recorder and, at Southport and again at Toronto, president of Section C (Geology). Among the honours which have been conferred upon him are the Wollaston and Murchison Medals of the Geological Society, honorary doctorates of the Universities of St. Andrews and Edinburgh and the honorary fellowship of Sidney Sussex College, Cambridge.

British Association at Aberdeen

IMMEDIATELY before the delivery of his presidential address at the inaugural meeting of the British Association, Sir James Jeans announced that the following message had been sent to H.M. the King: "Your Majesty,—We, the Members of the British Association for the Advancement of Science assembled in the City of Aberdeen in annual session, desire humbly to recall to Your Majesty that it was in this City that His Royal Highness The Prince Consort assumed the Presidency of the Association in the year 1859. From the Presidential Chair, he conveyed to the assembled members of the Association a gracious message from Her Majesty Queen Victoria, and delivered an Address which disclosed his own profound interest in the advancement of Science. The many marks of Royal favour which have been extended to our Association on subsequent occasions have provided further signal encouragement to us in

our pursuit of the aims defined by His Royal Highness, and on all these counts we now desire to express to Your Majesty our humble gratitude. J. H. Jeans, President." The following reply was received from Sir Clive Wigram: "I am commanded by the King to thank the members of the British Association for the Advancement of Science for the loyal message which they have addressed to His Majesty, their Patron, from the Inaugural General Meeting in the Ancient City of Aberdeen. His Majesty appreciates their kind remembrance of the occasion when the Prince Consort, as President of the Association, delivered a message from Queen Victoria to the members assembled in this City three quarters of a century ago. The King desires me to assure the members of his unabated interest in their Meetings and his confidence that their investigations into the manifold problems confronting present day Scientists will continue to be productive of results which will benefit mankind. Clive Wigram."

THE report of the Council of the British Association, adopted by the General Committee at Aberdeen on September 5, records that the Local Committee for the Leicester meeting has presented the sum of £1,000 to the Association, being the unexpended balance of the fund raised locally for the purposes of the meeting. This gift has been gratefully accepted, and the sum will be invested to form a Leicester and Leicestershire Fund, the interest of which will be used "to assist by scholarship or otherwise a student or students working for the advancement of science". Five new members of Council were elected by the General Committee, namely, Sir T. Hudson Beare, Prof. A. V. Hill, Dr. W. W. Vaughan, Dr. W. T. Calman and Prof. H. M. Hallsworth. Future meetings of the Association will be at Norwich, 1935 (September 4-11); Blackpool, 1936; Nottingham, 1937; Cambridge, 1938; Dundee, 1939 or 1940. Sir Josiah Stamp announced at the conclusion of the inaugural meeting at Aberdeen that the membership for the meeting had reached a total of 2,784.

Causation of Cancer

IN a paper published in *Medizinische Welt* of August 25, Dr. W. von Brehmer claims to have obtained in pure culture an organism, present in the blood of cancerous patients and of animals bearing tumours. The organism could also be obtained from human and animal tumours. It is a pleomorphic aerobe which in pure culture appears in the form of tubules 0.5 μ -2.8 μ long and 0.2 μ -0.8 μ broad, and can be stained by a Giemsa stain. The tubules are filled with spores, which when liberated, are stated to be able to enter damaged cells and thus cause cancer. An essential condition for obtaining cultures of this organism, to which the name *Syphonospora polymorpha* has been given, is an alkaline condition of the medium, with a pH of 7.5-7.6, and von Brehmer maintains that cancer is always associated with a shift of the hydrogen ion concentration of the blood toward the alkaline side. The organism is stated to exist in the blood of apparently normal healthy people in the form of small spores which are

non-pathogenic, but become pathogenic with the shift of the hydrogen ion concentration. Dr. von Brehmer also claims to have produced tumours in animals by the injection of pure cultures of his organism, but no detailed evidence is given.

DR. VON BREHMER'S paper is followed by a paper by V. Schilling, who has repeated these experiments, partly with von Brehmer's assistance. He has succeeded in obtaining pure cultures of this organism from malignant tissues and from the blood of cancer patients and of animals bearing tumours. His experiments on the production of cancer in animals by inoculation of these tumours have, however, given negative results. He is, therefore, inclined to regard the presence of this organism as being due to a mixed infection or to its being a non-pathogenic symbiont, and he dissociates himself from the therapeutic and diagnostic conclusions drawn by von Brehmer from his work. The existence of a relatively large, visible and stainable organism as the cause of cancer is difficult to reconcile with many of the well-established facts concerning cancer. Moreover, the existence of an alkalosis in cancer, which von Brehmer considers to be an essential feature of cancer, is questionable and several competent observers using exact methods have failed to demonstrate it. It has been reported (*Times*, September 10) that von Brehmer's claims will be submitted to an official investigation, initiated by the authorities in Germany. Until the results are known, it is necessary to reserve judgement.

Food Storage and Transport

ON September 7, Sir Frank Smith, Secretary of the Department of Scientific and Industrial Research, delivered the Hardy Memorial Lecture before the British Association at Aberdeen, in which he paid tribute to the work of the late Sir William Hardy, who during the last seventeen years of his life, devoted much of his time to research on the transport and storage of foodstuffs. Sir Frank described the work being done on the kippered herring at the Torry Research Station, Aberdeen, which was founded by Sir William Hardy. A new kippering kiln has been evolved there, in which all variables such as temperature, humidity, etc., can be controlled. Thus, any desired cure can be produced with certainty. At the same station, a new kind of mild salted herring has been produced by the combined processes of salting and chilling. About 1,600 steam trawlers fish from the ports of Great Britain, landing nearly 700,000 tons of white fish valued at about 12½ million sterling each year. Storage in crushed ice, under conditions prevailing when Hardy took up the problem in 1929, could only hold such fish fresh for 6-7 days. To-day, work at the Torry Station has extended that period to 12 days, by reducing bacterial contamination. Further work has shown that freezing in brine at -20°C. and storing at the same temperature will keep the fish for three months. The 10,000-ton vessel *Arctic Queen*, fitted as a floating factory for halibut, was also described. The importance of refrigeration cannot be over-