

PROF. B. D. STEELE, F.R.S.

THE death occurred at Brisbane on April 12 at the early age of sixty-three years of Bertram Dillon Steele, emeritus professor of chemistry in the University of Queensland. Prof. Steele was forced by ill-health to relinquish active teaching in 1928 and was given the title of emeritus professor in 1930.

Prof. Steele was brought up in England, but went to Australia with his family in early youth. First qualifying as a pharmacist, he later took his science degree in the University of Melbourne. He returned to Europe in 1899 with an 1851 Exhibition Scholarship. Following this, he held posts in McGill University, Montreal, and Heriot-Watt College, Edinburgh. He returned to the University of Melbourne as lecturer in chemistry in 1905. In 1910 he was appointed as first holder of the chair of chemistry in the University of Queensland. His scientific work in connexion with the determination of transport numbers of electrolytes and the electro-chemistry of non-aqueous solutions was carried out before his return to Australia. After his return to Melbourne, he designed in conjunction with Kerr Grant the very sensitive micro-balance later used by Ramsay and Gray for determining the density of radon.

The duties associated with a chair in a new university, however, left Prof. Steele little time for scientific work in his later life. He acted as first president of the Board of Faculties of the University, which was largely responsible for the organisation of the institution. Perhaps his most valuable contribution to public welfare in Queensland was his association as chairman with Government Commissions for the control of the prickly

pear. As a result of the activities of a Royal Commission, the pear, which was formerly encroaching on hundreds of thousands of acres of good land annually, is now actually being driven backwards.

During the War, Prof. Steele proceeded to England on leave from his University and entered the service of the Ministry of Munitions. He was responsible, among other activities, for the design and successful running of a synthetic phenol factory at Ellesmere Port, Cheshire.

PROF. GEORGE CARY COMSTOCK, emeritus director of the Washburn Observatory and professor of astronomy in the University of Wisconsin, formerly dean of the Graduate School, died on May 11, aged seventy-nine years. He was known for his determination of the constant of aberration, for studies of atmospheric refraction, for long-continued work on double stars, and especially for one of the first determinations of the proper motions of faint stars.

WE regret to announce the following deaths:

Prof. J. M. Aldrich, associate curator of insects in the U.S. National Museum, an authority on the Diptera, on May 27, aged sixty-eight years.

Prof. Harriet W. Bigelow, professor of astronomy at Smith College, Northampton, U.S.A., known for her work on comets and the positions of stars, on June 29, aged sixty-four years.

Prof. M. S. Pembrey, F.R.S., formerly professor of physiology in the University of London, known for his work on respiration, on July 23, aged sixty-eight years.

News and Views

Lessons of the Drought

THE *Times* Trade and Engineering Supplement of July 28 contains a special section devoted to a consideration of "Water Economy and Supply". In view of the continued predominance of the topic of the drought, the appearance of a symposium of the opinions of various competent authorities, including engineers and men of science, on the subject is undoubtedly opportune and appropriate, though it appears that the publishers, when the idea was first mooted, entertained misgivings lest a change of weather might destroy the basis of the number before its publication. The first article on "Lessons of the Drought", by Sir E. Hilton Young, the Minister of Health, is generally of the nature of a reassuring statement calculated to allay public anxiety. "There is," he says, "great need for care and attention to the situation, but none for alarm." He counsels economy in the use of water "where reserves are not abundant", and recommends water undertakers to look ahead and "assume that the drought will continue in large measure until the rains of November and December

and that even then there may not be more rain than last year, when it was much below the normal". The Water Shortage Act, passed in May last, has proved of signal service in enabling water authorities to augment their supplies.

SIR HILTON YOUNG discusses the question of future water policy, and, while conceding that measures could be taken to obviate economies during even severe drought, feels that the cost would be inordinately great and too heavy for the rate-payer to bear. It is, he says, a matter for careful thought how far to go in increasing permanently the cost of water in order to ensure against very exceptional scarcity. On the subject of lessons from the drought, survey and distribution indicate, in his opinion, the most fruitful field for improvement, but the survey he has in mind is not the survey now being pressingly urged on the Government by the British Association and the Institution of Civil Engineers. It is merely "that water undertakers should form as accurate an estimate as they can of their future needs, bearing in

mind the trend towards increase of consumption as well as the trend of the population". It is shown in the leading article of this issue of NATURE that this view of the situation is quite inadequate, and that something much more fundamental and drastic is required to meet the ever-increasing demands on the water resources of the country. Sir Hilton closes his contribution with a note on rural supplies in which he says that schemes costing a million sterling are "already in sight" and many more schemes are on the way.

Water Resources and their Administration

IN a succeeding article on "National Water Resources and the Need for a Comprehensive Survey", Mr. R. B. Dunwoody takes a much sounder and more practical view of the matter, recalling the investigation of the Royal Commission (1906-1911) on Canals and Waterways, which showed "a striking absence of statistical information as to the flows of rivers and streams, and consequently of the water available in different parts of the country". On the completion of the investigation, as secretary of the Commission, he submitted in 1911 to the President of the Local Government Board a scheme for a comprehensive survey of the water supplies of England and Wales. Considerable extracts are quoted from the memorandum, all indicating that it has much in common with the proposals for a survey now being urged on the Government. Mr. Clemesha Smith, in his article on "Regional Water Supplies", presses the need for co-ordination. Amplifying the policy of the appointment in several parts of the country of regional advisory committees, he considers that committees in respect of suitable areas should be set up covering the whole of England and Wales. He outlines the functions of the two sets of bodies he proposes, as follows: (a) regional committees, consisting of representatives of authorities, charged with the duty of supplying water for domestic purposes, empowered to demand the necessary information and able to raise funds to enable them to check statistics and examine and put forward proposals relating to water supply; and (b) water commissions, the duties of which should include considering the tabulated statistics prepared by the regional committees and advising them on the schemes submitted and as to improvements, amalgamations and variations. Mr. Smith emphasises that if problems of water supply are to be solved on rational lines, the first step must be the accumulation of accurate information, and the second the examination and consideration of the facts by recognised authorities.

The 24-Hour Time System

THE question of the 24-hour time system was raised in the House of Lords on July 27 by an inquiry from Lord Lamington whether a report on the working of this system by the British Broadcasting Corporation would be laid on the table of the House. Lord Templemore, speaking for the Government, said that no formal report has yet been received from the Corporation, but the Postmaster-General understands

that the Corporation will, before very long, make a statement on the subject. In the light of information given by the Corporation, the Government has had under consideration the question of extending the use of the 24-hour method of expressing time. Lord Templemore added that he was authorised to say that the Government, after carefully reviewing the whole question of adopting the 24-hour notation for official purposes, has come to the conclusion that there is still no sufficient evidence of a general public demand for any change to justify it in taking any action in the matter.

The British Broadcasting Corporation Experiment

THE B.B.C. has stated that there has been no evidence of either widespread opposition or support to the experimental use by it of the 24-hour system. An announcement will be made in due course to what extent, if at all, it will continue the use of the system for other than internal purposes. The experiment was intended to familiarise the public with the 24-hour notation, but has been widely misrepresented in a certain section of the Press as an attempt to impose the 24-hour system for the purposes of everyday life. One paper published photographs of the well-known 24-hour clock at the gate of Greenwich Observatory, and of an ordinary 12-hour dial, and held what was stated to be a plebiscite on the question of the 24-hour system. The voting paper required a cross to be placed against whichever dial was preferred, and the result was announced as a large majority against the 24-hour system. An increasing number of engineering, electrical and other organisations, which are in continuous operation by day and by night, are using the 24-hour system owing to its conveniences and no difficulties of any sort have arisen from its use. The use of the system by the B.B.C. should have educated the public sufficiently for time-tables using the 24-hour notation to be understood. It is to be hoped that the railway companies and road transport organisations will not wait any longer for a Government lead, but that they will introduce the 24-hour system in their time-tables by mutual agreement.

Scientific Research on Works of Art

THE forthcoming academic year will witness an important new development at the Courtauld Institute of Art, University of London. Since its inception, the Institute, which is under the directorship of Prof. W. G. Constable, has recognised the necessity for systematic and scientific research into the physical constitution of works of art: and a new Department and Laboratory of Scientific Research has now been brought into being at the Institute, at which such lines of investigation will be actively pursued. Such problems as the nature of the changes undergone by works of art on cleaning and renovation, and on exposure to atmospheric moisture and light, and the advantages of different methods of treating 'diseases' of works of art, will receive systematic investigation. So far, work in Great Britain has been carried out for the most part