- ¹ Oppenheimer and Stern, "Biological Oxidations", The Hague (1939).
² Green, "Mechanisms of Biological Oxidations", Cambridge (1940).
³ Stephenson, "Bacterial Metabolism", Ed. 2, London (1939).
⁴ University of Wisconsin Biochemists (Arnold *et al.*), "Respiratory Enzymes", Minneapolis, Minn. (1939)—see also various papers by Keilin and his collaborators in *Proc. Roy. Soc. London*, Ser. B, from 98, 312 (1925).
⁵ Frickhinger *et al.*, "'Degesch'-Methods for Pest Control", Frankfurt (1937).
⁶ Barcroft, *J. Hygiene*, 31, 1-84 (1931).
⁷ Stiles and Leach, "Respiration in Plants", London (1932).
⁸ Zellner, "Chimie der höheren Pilze", Leipzig (1907)—see also Hasenöhrl and Zellner, *Akad. Wiss. Wien, Mat.-nat. Kl., Sitz. Abt. IIb*, 120, 479-490 (1921).
⁹ McCallan *et al.*, *Contr. Boyce Thompson Inst.*, 11, No. 5, 325-342 (1940)—see also Tomkins, *Proc. Roy. Soc. London*, Ser. B, 111, 210-226 (1932) and Proctor and Nickerson, "Fungicidal Properties of some Food Fumigants" (paper read at the New York Convention of the American Chemical Industry, April, 1935, but apparently never published; made available to me through the courtesy of Imperial Chemical Industries, Ltd.).
¹⁰ Thornton and Setterstrom, *Contr. Boyce Thompson Inst.*, 11, No. 5, 343-356 (1940).
¹¹ Page, Lubatti and Gloyns, *J. Hygiene*, 39, 12-34 (1939)—see also "The Principles of Fumigation of Insect Pests in Stored Produce", H.M. Stationery Office, London (1941).
¹² Page and Gloyns, *J. Soc. Chem. Ind.*, London, 55, 213T-217T (1936).
¹³ Paul, Birstein and Reuss: various papers in *Biochem. Zeitschr.* from 25, 367 (1910).
¹⁴ Waksman, "Principles of Soil Microbiology", Ed. 2, London (1931).

OBITUARIES

Mr. William R. S. Ladell

MR. WILLIAM R. S. LADELL, whose sudden death in Jamaica on November 6 has just been reported, was born in 1887 and educated at the Merchant Taylors School and Finsbury Technical College. Before completing his degree, he went abroad and started work on agricultural science in the tropics, which was to occupy the greater portion of his life. After three years in South Africa with the Department of Agriculture, part of which was at the Cedara Experimental Station, he accepted in 1912 a position with a commercial company in Malaya, where he carried out many field and laboratory experiments on rubber cultivation. During the War of 1914-18 he served at first in the Far East and later in Great Britain and reached the rank of major in the Royal Army Ordnance Corps.

After the War, Ladell took up an official appointment in Siam and in 1923 was put in charge of the newly formed Bureau of Agricultural Science. The greater part of his work for the next twelve years was connected with problems of rice cultivation, in which he obtained a world-wide reputation. During this period also he developed a keen interest in general natural history, particularly entomology, and was for many years honorary secretary of the Natural History Section of the Siam Society.

In 1934, owing to the disturbed political situation in Siam, Ladell returned to England and worked for four years in the Entomology Department at Rothamsted on problems of soil insects and insecticides. His wide experience and chemical knowledge was here a great asset and he developed the method of separating insects from the soil by flotation in a heavy solution.

In 1938 an opportunity occurred for Ladell to return to the tropics, where his heart was always, and he became agronomist and soil chemist to the West Indian Sugar Company in Jamaica. There he found congenial work, and shortly before his death

he had been appointed chief research officer for the Associated Sugar Companies of the Island and editor of a new Journal, *Sugar Technology*.

Ladell was elected a fellow of the Chemical Society in 1907, of the Institute of Chemistry in 1911 and of the Royal Entomological Society in 1929. He was very modest in character and a pleasant and enthusiastic colleague; he is survived by his wife and three children.

C. B. WILLIAMS.

Flight-Lieut. A. N. David

FLIGHT-LIEUT. DAVID, who died recently on service at the age of fifty-three, had been associated with the Forest Products Research Laboratory at Princes Risborough since its earliest days in 1922, when he joined the Department of Scientific and Industrial Research after his retirement from the Indian Forest Service.

After being educated at Aldenham and Oxford, David joined the Indian Forest Service in 1911, and between 1916 and 1919 saw service as a pilot in the Royal Flying Corps. At the outbreak of war in 1939 he at once rejoined the R.A.F.V.R., receiving a mention in dispatches shortly before his death.

During his connexion with the Forest Products Research Laboratory, his work was mainly concerned with the collection of home-grown timber for the various investigations, and the related information on the field conditions of its growth. His cheerful, hard-working personality secured the ready collaboration of the woodland owners, without which it would have been very difficult to obtain suitable material. The collection of field information needed much painstaking work in all sorts of weather; indeed bad weather seemed to dog his expeditions, but never stopped him. His contribution to the work of the Laboratory was most useful, though attracting little attention to itself.

Sir Charles Hyde, Bt.

WE regret to record the death at the age of sixty-six of Sir Charles Hyde, proprietor of the *Birmingham Post* and its associated papers. He was, perhaps, relatively little known outside Birmingham except in newspaper circles and on the racecourse, for he shunned publicity. In Birmingham he was known as a most generous philanthropist. Born at Worcester, the son of a surgeon, he was educated at Clifton and Exeter College, Oxford. At the age of twenty-one he entered the newspaper world at the invitation of his uncle, John Feeney, then proprietor of the *Birmingham Post and Mail*; on the death of his uncle he became, in 1913, the proprietor of the *Birmingham Post*, *Birmingham Mail* and *Birmingham Weekly Post*. To the University of Birmingham Sir Charles gave freely, contributing £10,000 to the appeal fund in 1920. He also bought and equipped a large house in Edgbaston as a hostel for men undergraduates, now known as Chancellor's Hall. In 1925 he gave a further £100,000, part of which was to be devoted to the building of the Students' Union, a fine building which has been of supreme importance in the social life of undergraduates. He also gave £10,000 for a Joseph Chamberlain Memorial Museum in the University Medical School.

Sir Charles was a munificent supporter of Birmingham hospitals, the Children's Hospital in particular. He was chairman of Queen's Hospital and from

1919 until 1926 was chairman of the War Pensions Hospital Committee.

Archæology, too, benefited by his generosity, for he financed the excavations at Viroconium, near Wroxeter, of which the results have lately been published. Farther afield his help enabled the University of Belgrade to resume excavations on the prehistoric site of Vinča. He also bore the cost of British Museum excavations at Nineveh and assisted an expedition working on the Necropolis at Vounous Bellapais in Cyprus. His name will long be remembered with gratitude.

G. A. SHAKESPEAR.

WE regret to announce the following deaths :

Dr. E. J. Allen, C.B.E., F.R.S., secretary to the Marine Biological Association of the United Kingdom and director of the Plymouth Laboratory from 1895 until 1936, on December 7, aged seventy-six.

Prof. R. A. Gortner, professor of biochemistry in the University of Minnesota, on September 30, aged fifty-seven.

Prof. T. M. Putnam, professor of mathematics in the University of California, on September 22, aged sixty-seven.

NEWS and VIEWS

Reconstruction in Great Britain : The People

THE widespread interest in the problems of post-war reconstruction and planning was reflected in the House of Commons debate on December 1 and 2 on an amendment to the Address. The debate was characterized by notable speeches from Mr. Greenwood, Sir William Jowitt and Mr. Anthony Eden. Sir William Jowitt gave a comprehensive but general account of the Government's policy. Sketching the post-war position and stressing the importance of international co-operation in a deliberate effort to improve the standard of living throughout the world in order that consumers abroad may be able to buy that which we produce, he said that he believes we must become as a nation more scientifically minded, prepared, whatever industrial system we adopt, to use scientific methods and to aim at the greatest efficiency in those methods. The Ministerial Committee over which he presides is, he said, trying to work out practical schemes of reconstruction to which effect could be given in the first few years after the War, and presupposing in its plans a social and economic structure designed to secure equality of opportunity and service among all classes of the community. The Ministerial Committee is assisted by an external and an internal committee of highly placed and experienced Civil Servants. Demobilization plans are being prepared; these include the question of education and training for those whose educational careers have been interrupted by the War. With regard to getting the workers back into industry, the Government considers that each industry should be surveyed separately, because the structure of industry will not fit into a common mould. The points of contact between Government and industry require strengthening, and Sir William said that capital must be ready to seek new opportunities and labour must be prepared to be more fluid.

The Land

Fully accepting the views of the Scott and the Uthwatt Committees as to the need for correlating policy, the Government has decided, Sir William said, in view of the importance of maintaining Parliamentary responsibility, to ask Parliament to constitute a separate Ministry of Town and Country Planning. This Minister will be a member of the Ministerial Committee already supervising reconstruction policy, and there are also important functions for which a permanent commission, acting under the Minister of Town and Country Planning, will be the most appropriate body. The Government has

reached no decision as to the acquisition by the State of development rights in all undeveloped land or on a levy on increases in annual site values, but it is proposing in forthcoming legislation to confer wide and simple powers on local authorities for the compulsory acquisition of land. In regard to food, Sir William said that the wise developments of the last few years should not be abandoned after the War. Close attention is being given to the formulation of a permanent post-war agricultural policy, on which the Dominions will be consulted. A really vigorous forestry policy will be adopted after the War, for which the Forestry Commission has been instructed to formulate a programme. Sir William also referred to the organization of electricity supply on the most efficient basis, to the close review of water supply, and finally to the place of education in reconstruction.

International Aspects

Sir William Jowitt's references to the importance of international co-operation and to collaboration with the International Labour Office were amplified in the speech with which Mr. Eden replied to the second day's debate. Reiterating our determination to assist in the immediate relief of post-war Europe, Mr. Eden pointed out that the manner in which, and the extent to which, we succeed or fail in co-operating with our Allies now will largely determine the course of post-war foreign policy. Whether we are able to maintain peace or not afterwards will depend on whether we can carry through the co-operation we have now established with the United States of America, with Soviet Russia and with China. The first need of Europe will be to build up an enduring system of defence against the possibility of renewed German aggression. He hoped that we are prepared to make our contribution to take our part because we understand that peace and security in Europe are part of our own peace and security.

Welcoming a recent speech of Mr. Sumner Welles indicating American readiness to accept world-wide responsibility for maintaining peace, and recognizing the value of the International Labour Organisation as possibly the main instrument for giving effect to Article 5 of the Atlantic Charter, Mr. Eden pointed out that for any international organization to have a chance to achieve its purpose it must be fully representative of the Powers that mean to keep the peace. Second, the Powers themselves must have the unity and the determination to arrive at agreed and positive decisions; and third, they must have the force behind them to give effect to their decisions. Mr. Eden believes that out of this organization of the United