

It is not unduly rash to say that a long way has been traversed towards the realization of the vision that inspired a few enlightened men and women eighteen years ago. Then it faded and all but vanished under the chill blast of the economic blizzard. Now that the vision once more seems on the point of taking shape, it has to face yet another such crisis. If a similar fate is not to befall it, the Government must be urged to appoint forthwith the National Parks Commission and at least the nucleus of the biological service.

G. F. HERBERT SMITH

- <sup>1</sup> The Report of the National Parks Committee. Cmd. 3851. (London: H.M. Stationery Office, 1931.)
- <sup>2</sup> Report of the Committee on Land Utilisation in Rural Areas. Cmd. 6378. (London: H.M. Stationery Office, 1942.)
- <sup>3</sup> Memorandum No. 1. (London: Society for the Promotion of Nature Reserves, 1941; second edition, 1942.)
- <sup>4</sup> Nature Conservation in Great Britain, No. 3. (London: Society for the Promotion of Nature Reserves, 1943; second edition, 1945.)
- <sup>5</sup> National Geological Reserves in England and Wales, No. 5. (London: Society for the Promotion of Nature Reserves, 1945; second edition 1946.)
- <sup>6</sup> National Nature Reserves and Conservation Areas in England and Wales. No. 6. (London: Society for the Promotion of Nature Reserves, 1945.)
- <sup>7</sup> Memorandum on Wild Life Conservation and Ecological Research from the National Standpoint; Nature Conservation and Nature Reserves. (London: Cambridge University Press, 1943.)
- <sup>8</sup> National Parks in England and Wales. Cmd. 6628. (London: H.M. Stationery Office, 1945.)
- <sup>9</sup> Ministry of Town and Country Planning. Report of the National Parks Committee (England and Wales). Cmd. 7121. Pp. ii+144. (London: H.M. Stationery Office, 1947.) 4s. 6d. net.
- <sup>10</sup> Ministry of Town and Country Planning. Conservation of Nature in England and Wales. Report of the Wild-Life Conservation Special Committee (England and Wales). Pp. v+139. Cmd. 7122. (London: H.M. Stationery Office, 1947.) 4s. net.
- <sup>11</sup> National Parks: a Scottish Survey. Cmd. 6631. (London: H.M. Stationery Office, 1945.)

## OBITUARIES

### Prof. E. Laqueur

THE death of Prof. Ernst Laqueur at the age of sixty-eight occurred on August 19, while he was on holiday in Switzerland.

Laqueur's death removes from the field one of the pioneers of modern endocrinology, and particularly that branch of it dealing with the sex hormones. Laqueur had had a very sound training in both chemistry and biological methods, and was himself also a qualified physician. This latter training gave him that great interest in the practical application of scientific work which undoubtedly acted as a stimulus for his investigations into the internal secretions.

His first major contribution to the subject of endocrinology occurred in the very early days of insulin. In the close of the year 1922, Banting and Best had published their classical paper demonstrating the presence of a stable anti-diabetic substance in the pancreas. From that moment biochemists all over the world concentrated on attempts to make possible the production, on an economic basis, of this new substance, insulin. Well in the forefront of this investigation was Prof. Laqueur with his team at Amsterdam. They made a large number of very important communications on both the preparation and the properties of insulin.

It was, however, mainly on the question of the sex hormones that Prof. Laqueur's reputation rests. It will be remembered that in 1924 Allen and Doisy started an entirely new epoch in research on the female sex hormone by applying the vaginal smear method of Stockard and Papanicolaou to the stand-

ardization of the ovarian hormone, as it was then called. Prof. Laqueur immediately started work on similar lines and was certainly in possession of one of the purest specimens of the hormone up to the time of the announcement by Aschheim and Zondek of the presence of the hormone in the urine of pregnancy. Again, this discovery completely changed the whole outlook on the biochemical research into the nature of the hormone; but again Prof. Laqueur was well in the forefront in the crystallization of the hormone from the new source.

In the early 1930's, Butenandt had succeeded in isolating a steroid substance from male urine. This substance, androsterone, proved to have the properties of the male sex hormone in that it was capable of causing growth of the capon's comb. Laqueur was the first to point out that an extract of the testis could be obtained which was more powerful, weight for weight, than the actual crystalline androsterone. At first Laqueur inclined to the view that there was some activator present in the testes and suggested the name of the 'X substance'. Later, however, he characterized the actual hormone and named it 'testosterone'. This research was brought into line with the brilliant discoveries being made at Zurich in the laboratories of Prof. Ruzicka. He had shown that by oxidizing away the side-chain of sterols such as cholesterol, it was possible to obtain the cyclopenteno-phenanthrene nucleus with the right stereochemical configuration, and that this could be used as a basis for the partial synthesis of sex hormones. Testosterone is produced by this method. We have, therefore, in this brilliant research of Prof. Laqueur an excellent example in which skilful and penetrating biological observational work can be combined with organic chemistry, leading to the isolation, characterization and large-scale production of new compounds.

Prof. Laqueur was a frequent visitor to Britain and was well known to all those who worked in this field through his assistance at the various international congresses before the War. With the invasion of Holland by the Germans he was removed from his post, and both he and his family were subjected to the cruelest of treatment. He emerged from the War with severely impaired health, but those who saw him after his ordeal commented on his completely unbroken spirit.

Holland and the science of endocrinology have lost a great pioneer.

E. C. DODDS

### Prof. Ll. Rodwell Jones

By the death on August 15 of Ll. Rodwell Jones, shortly before his sixty-sixth birthday, British geography has lost one of its rapidly dwindling group of 'elder statesmen'.

Rodwell Jones was born on August 28, 1881. In due course he proceeded from Kingswood School, Bath, to the University of London, where he took a science degree, and then commenced school-teaching. It was while so engaged that he came under the stimulating influence of Mackinder, then at the London School of Economics, and found his vocation in geography. An appointment as lecturer in geography in the University of Leeds in 1913 was all too soon interrupted by the First World War, in which he served in the West Yorkshire Regiment, reached the rank of major and was decorated with the Military Cross. Shortly after his release from the

army he returned to London to join Mackinder's staff at the London School of Economics, and in 1925 succeeded him as professor of geography and co-head of the King's College, London School of Economics Joint School of Geography. He had planned to retire on reaching the age of sixty, but the Second World War necessitated an unwelcome postponement, and it was not until 1945 that he felt justified in vacating his post.

It is difficult to assess with any confidence the relative value of Rodwell Jones's contributions to his subject. His output of published work was limited both by his devotion to the needs and interests of his very large department and by his extremely exacting standards of scholarship. He committed nothing to print until he had tested and

re-tested materials and methods, and satisfied himself of the soundness of his conclusions. His major works, "Northern England", "North America" (in collaboration with Dr. P. W. Bryan), and "The Geography of London River" are, in consequence, not merely interpretations of first-class importance, but models of method as well. Yet it is as class teacher and research adviser that he will probably be most vividly and gratefully remembered by his students. Shy in nature, and lacking the platform brilliance of a Mackinder or a Lyde, he gained the respect, admiration and enduring affection of successive generations of students, who experienced at close range the humour and the kindness behind his shyness, and were helped to acquire permanent habits of critical and constructive thinking in their subject.

## NEWS and VIEWS

### International Control of Atomic Energy

SIR CHARLES DARWIN opened a discussion on "Atomic Energy and the Veto" which formed part of the programme of a meeting of the Atomic Scientists' Association held at Oxford on September 20. He said he wanted to examine carefully the grounds on which a case might be built for treating atomic energy in a different way from other armaments, in the setting up of the proposed Atomic Development Administration and in its freedom from the veto. This he analysed coldly under seven headings: (1) pure military, (2) novelty, (3) mass destruction, (4) start of war, (5) treachery, (6) scale effect and (7) feasibility. Under the first three headings he found no reason for special treatment; but under the last three he found there is a definite case. The strongest argument is the unanimous report of the Atomic Energy Technical Committee of the United Nations Organisation that international control is, in fact, a workable proposition from a technical point of view. Sir Charles discussed the seven headings in some detail. In relation to (1), he said he thought that the atomic bomb is not a 'good weapon'. Although it would certainly be effective for use on naval bases, he did not believe it would be used for land warfare. In relation to (4), he said that although the bomb could deliver a tremendous blow, it could not prevent retaliation in kind, which he thought might act as a severe deterrent to its use. With regard to (5), he stressed the possible use of the bomb as a secret weapon of treachery by an unidentifiable third party in a dispute.

Prof. N. F. Mott, in thanking Sir Charles Darwin, said he thought there might be a case for 'de-bunking' the atomic bomb, but wondered whether Sir Charles had not 'de-bunked' it too much. Dr. W. J. Arrol stressed the importance from a purely military point of view of attacks on ports and convoys. The extreme danger of its use for attack on industry and for mass-destruction was implicit in the remarks of most of the speakers. Captain Blackburn, M.P., for example, said that the scientific men had done their job in showing that atomic control is technically feasible, and that the problem is now a political one. Control is being frustrated, he said, by the U.S.S.R., and he advocated an urgent meeting of Mr. Attlee and Mr. Truman with Mr. Stalin to put the danger to the latter in the plainest terms. Failing agreement, peace-loving nations must develop predominance in atomic and other power. Mr. Conybeare did not agree that

the U.S.S.R. is frustrating control, and Dr. H. W. B. Skinner said that, while agreeing with most of Captain Blackburn's remarks, he deprecated the atmosphere of crisis. Dr. A. T. Waterman, a guest from the United States, stressed the value of international co-operation in science. Dr. K. Lonsdale asked whether there would be any purpose in the Association of Atomic Scientists calling on scientific workers not to take part in the manufacture of atomic weapons; but Prof. Mott thought that it would not be possible to secure a majority opinion on this suggestion. Another speaker complained of the placidity of the discussion of a situation in which we were running into another war, and there was some argument as to the future aim of the Association, Mr. Freedman, in particular, feeling a lack of guidance in the present dangerous situation. But Prof. R. E. Peierls said that, though scientific men should not be afraid of politics, policy must be clear-cut and united. Urgency does not replace judgment, and he felt that, at present, no straightforward lead could be given. The functions of the Association must therefore remain for the moment mainly educational.

### Electron Jubilee Exhibition

To mark the fiftieth anniversary of the discovery of the electron, an exhibition, illustrating the scientific and industrial developments and the numerous electronic devices resulting from that discovery, is being held at the Science Museum, London. The exhibition is arranged around one gallery of the Museum, and is divided into eight sections, each of which is devoted to one particular aspect of the subject. By photographs, diagrams (some of which are animated), working exhibits, and the display of historical and modern apparatus, the visitor is shown how the wave-like and particle-like properties of the electron were discovered, and is given an appreciation of the way in which these discoveries have opened up a new era, both in science and industry.

An attractive handbook to the Exhibition, with an intriguing cover and a photograph of Sir J. J. Thomson, the discoverer of the electron, as frontispiece, has been prepared by Mr. D. H. Follett (Institute of Physics, London. 1s. 2d. post paid). It is in two parts. The first is a guide to the exhibition and lists the exhibits in the eight sections in the order in which they are displayed. The second is a descriptive account of the background to the several