

omics is allowed to enter, are enormously greater and faster than they would have been during peace, and when peace comes mankind is assured of amazing benefits through them.

There is a hypothesis widely held by modern leaders of thought that the evolution of society, moving at an ever faster pace under the impetus given it by modern science, has up to now outstripped the capacity of human beings to adapt themselves. It is asked in the words of Herbert Read, "Is there a pattern or is it chaos; is it empty turmoil or is it progress?" That the world needs skill and vision to rebuild none will gainsay. Can we not say we are men of science and we believe we have the skill; we are artists and we believe we have the vision? Herein lies the future of this Royal Society of Arts. Shall we not repeat those Biblical words: "Be ye doers of the word and not hearers only, deceiving your own selves".

Perhaps then we may say with Shelley:

"The world's great age begins anew
The golden years return".

or with Carlyle: "Blessed is the man who has found his work—let him ask no further blessedness".

THE BIOLOGY WAR COMMITTEE

THE Biology War Committee was formed more than two years ago with the object of establishing a clearing-house through which ideas or knowledge relating to war-time biological problems could be exchanged between biologists and the Government. In order to ensure the closest liaison and co-operation, the Committee was linked to a special Joint Committee of the Department of Scientific and Industrial Research, the Medical Research Council, and the Agricultural Research Council. Moreover, it was agreed that while the Biology War Committee should cover the main fields of biology, medicine should be excluded and that representation should be weighted in favour of those fields which were not highly specialized and in which workers were not already closely linked with the three Government research councils.

In the exploratory period following on its initiation, the Committee was concerned in organizing and also establishing contacts with both Government Departments and biologists. Attention was also given to discovering the types of biological problems most likely to arise under conditions of war.

During the last two years memoranda and reports on a variety of problems have been prepared, some at the request of the Joint Government Committee and many on the Committee's own initiative. In addition, many other suggestions, inquiries and problems have been considered. The Committee is not, however, in the position to make public any summary of its activities to date since, on the grounds of the national interest, the Joint Government Committee considers that references to specific problems would be inadvisable. The Biology War Committee can, therefore, only state that the range of problems touched on or investigated is remarkably wide. In several instances the solution has required collaboration not only between biologists of varied interests but also with other scientific workers. In fact the complexity of some biological problems, where only one link in the chain of causation may be concerned with living organisms, has obscured to non-biologists

the realization that some war-time problems are in part biological. Again, lack of detailed knowledge has caused some confusion in assessing biological problems—for example, the tendency to group into broad categories and therefore a failure to distinguish between allied noxious and innocuous species.

When the original Committee, set up jointly by the Association of Applied Biologists, the British Ecological Society and the Society for Experimental Biology discussed the formation of the Biological War Committee with the Joint Government Committee, it was felt that the future Committee's usefulness would be enhanced if the composition was based solely on representation by subjects. The experience gained over the last two years has fully confirmed this view. At the same time, the Biology War Committee has been considering how best to ensure flexibility under the changing conditions of the War, and the need for maintaining close contact with biological societies.

With these ends in view, the Committee has been reviewing both its organization and its constitution. It has been decided that, as hitherto, much of the work can best be carried out by a small executive committee working in conjunction with sub-committees set up to deal with specific problems and with powers to co-opt members outside the Committee.

It has also been agreed that the membership of the full Committee should be reviewed annually and that before the final list of proposed members is settled, the list for the ensuing year should first be circulated to biological societies asking for their comments and suggestions as to the representation of subjects. In addition, it has also been resolved that two members of the executive committee, which includes the officers, should retire annually, and that only one member should be eligible for re-election. For the offices of chairman and vice-chairman, it has been decided that the tenure should not exceed one year, but that the secretary and treasurer should serve for three consecutive years.

After consultation with biological societies, the composition of the Biology War Committee for the ensuing twelve months is as follows: A. L. Bacharach; F. C. Bawden, Rothamsted Experimental Station, Harpenden; G. E. Blackman (*secretary*), Department of Botany, Imperial College of Science and Technology, London, S.W.7; Prof. P. A. Buxton*, Department of Medical Entomology, London School of Hygiene and Tropical Medicine; Prof. H. G. Champion (*vice-chairman*), Imperial Forestry Institute, Oxford; Prof. A. C. Chibnall, Department of Biochemistry, Cambridge; C. Elton, Bureau of Animal Population, Oxford; Prof. H. Munro Fox, Department of Zoology, Bedford College, London; Dr. W. P. K. Findlay, Forest Products Research Laboratory, Princes Risborough; Dr. H. Godwin*, Botany School, Cambridge; Dr. J. Hammond (*treasurer*), Animal Nutrition Research Institute, Cambridge; Prof. A. C. Hardy, Department of Natural History, Aberdeen; Dr. H. Martin*, Long Ashton Research Station, Bristol; Dr. K. Mather, John Innes Horticultural Institution, Merton, London; Dr. A. T. R. Mattick, National Institute for Research in Dairying, Shinfield, Nr. Reading; Prof. J. W. Munro, Department of Zoology and Applied Entomology, Imperial College of Science and Technology, S.W.7; Dr. J. Needham, Department of Biochemistry, Cambridge; Dr. F. C. Pantin* (*chairman*), Department of Zoology, Cambridge; Dr.

* Members of the Executive Committee.

O. W. Richards, Department of Zoology and Applied Entomology, Imperial College of Science and Technology, S.W.7; Dr. M. A. H. Tincker, The Laboratories, Royal Horticultural Society, Wisley; Prof. T. Wallace, Long Ashton Research Station, Bristol; Dr. E. B. Worthington, Freshwater Biological Association's Laboratory, Wray Castle; J. Z. Young, Department of Zoology, Oxford.

OBITUARIES

Prof. J. H. Priestley

PROF. JOSEPH HUBERT PRIESTLEY died at Leeds on October 31 at the age of sixty-one. He was born at Tewkesbury in 1883 and educated at Tewkesbury Grammar School (of which his father was headmaster) and at University College, Bristol. He was a graduate of the University of London and, in 1905, took charge of the Department of Botany at Bristol. In 1911 he succeeded V. H. Blackman as professor of botany in the University of Leeds. On the outbreak of war in 1914, he was in command of the University Officers' Training Corps and, as a captain, went to France with the B.E.F. During 1915-19 he served on the Staff (Intelligence), being twice mentioned in dispatches and awarded the Distinguished Service Order. In 1919 he became a Chevalier of the Crown of Belgium. After his return to Leeds, he built up a large and active botanical department there. He was a fellow of the Linnean Society and president of Section K (Botany) at the British Association meeting at York in 1932. He had for long served on the Forestry Commission, and also took a very great interest in the work of local naturalists, particularly of the Yorkshire Naturalists' Union, of which he was president in 1925.

Priestley was a man of such extreme vigour that it is not easy to give a balanced account of his activities. Quite apart from his service as a staff officer, he left his mark in each of three fields, as an administrator, as a teacher and as a botanist. To some extent, his work in each of these fields suffered from his continued and intense interest in the others, but the wider range of accomplishment was characteristic of the man.

At the time of his death, Priestley was the senior professor at Leeds, had long been a member of the Finance Committee and had served as pro-vice-chancellor for some four and a half years. His opinion on any matter of university administration was worthy of his long experience and profound interest. He had an almost equally long acquaintance with the work of the Joint Matriculation Board, of which he served as chairman; and as the head of a large department he could have had few, if any, equals. His powerful administrative judgment was based on mastery of detail, on great practical capacity and on a profound appreciation of the mentality of his fellow-men.

His botanical work started with the investigation, with F. L. Usher, of the role of the pigments in photosynthesis and the attempt to study their action *in vitro*. He was, however, chiefly interested in problems of growth, and, coming under the philosophical influence of W. H. Lang, became with characteristic enthusiasm a keen student of developmental morphology and anatomy. His preoccupation was with the organism as a living entity, and his studies of cell wall structures were intended to em-

phasize the view that the composition of these structures reflects the growth activities of the cells that formed them. With his great practical gifts, it was natural that Priestley should also be interested in the practical bearing of his scientific work, and he devoted much time to subjects like the influence of electricity on field crops, the propagation of plants by cuttings (Master's Lecture to the Royal Horticultural Society, 1925) and, finally, spiral grain in timber. His later work focused attention particularly on the properties of growing cells and tissues, on development in monocotyledons and on cambial activity in trees. The purpose of his work was to show that the form and structure of an organ reflects the "organisation of growth" in the tissue which formed it.

No doubt views will differ on the question of whether Priestley's success as a teacher was greater or less than that as an investigator. He was certainly a born teacher and the impact on his students of his powerful and vigorous personality was tremendous. Those who were going to teach science must have profited enormously by acquaintance with his methods, which always focused attention upon the fundamentals of the subject under review. The gift for seizing the main point at issue was certainly an outstanding feature of Priestley's character and it ran through all his work, administrative, educational and scientific. Combined as it was with never-failing courage, boyish enthusiasm and outstanding vigour, it made him sometimes didactic, often provocative, always interesting and, as a whole, one of the most colourful persons in biology.

W. H. PEARSALL.

IN the death of Prof. J. H. Priestley the botanical world and the Department of Botany of the University of Leeds have lost a man of originality and genius. Though cut off from fulfilling the period of university service to the usual age of retirement, his life has been a full one, and the record of his achievements is one of which any man might be proud.

As an undergraduate at Bristol, though primarily a student of botany, Priestley also attended the honours courses in chemistry and physics, a training which gave him an exceptionally sound basis upon which to found his botanical studies. At the close of his studentship, at the early age of twenty-two, his gift for leadership was recognized and he was deemed worthy to take charge of the Department of Botany in University College, Bristol. Coming into botanical science at a time when many botanists had been absorbed in confirming and amplifying the great discoveries of the late nineteenth century, he brought to botany an alert mind and a fresh outlook, which undoubtedly owed much to his sound knowledge of the pure sciences. One of his first lines of investigation was an attempt to ascertain the first product of photosynthesis, but later his interests turned more and more towards developmental and causal studies; in this new line of attack on plant problems he often turned for advice and encouragement to Prof. W. H. Lang, of Manchester, of whose work and judgment he held a very high opinion. The results of his studies along these original lines, with the complementary teleological work of Haberlandt and his school, gave to botany a much more satisfying understanding of many plant structures. His last and most outstanding phase of research dealt with problems of tree growth; he was much absorbed in the dynamic problems of