

applied to tropical conditions. We are still grossly ignorant of the interaction of all the factors that control plant growth near the equator, and this information can, he claimed, be gathered in only one way—by the slow, careful, even laborious method of the preliminary, detailed survey. “The more revolutionary the cultural methods to be used,” he warned, “the greater the need for pilot schemes and for working in small units.”

Statements like these do not appeal to the politician or to the official who wants quick returns and speedy and convincing results. But they are typical of the caution and realism of the scientific worker and, significantly, were endorsed by all those taking part in the discussion. They are clearly the convictions of the organizers of the World Land Use Survey,

which will provide an objective record of the existing facts of land use and which is intended as a foundation for schemes of improvement and development in all parts of the world. It is to be hoped that a small part at least of the many millions at present available for development and welfare schemes will be directed towards this Survey in different countries, so that it may speedily be established on a permanent basis. Here is a project in which all the sciences are interested and all men of science can, and should, co-operate: and it cannot fail to make a real and substantial contribution to the scientific study of under-developed, as well as other, areas and also to the progress and happiness of those who are sometimes termed the world's under-privileged peoples.

ROBERT W. STEEL

NEWS and VIEWS

Sir Arthur Fleming, C.B.E.

AFTER fifty years of distinguished service to the causes of industrial research and the education and training of industrial personnel, Sir Arthur Fleming has resigned his post as director of research and education to the Metropolitan-Vickers Electrical Co., Ltd., although he will remain a director of the firm; he has also agreed to assume general direction of research and education for the group of electrical firms known as A.E.I., Ltd. The Research Laboratories at Trafford Park, Manchester, which Sir Arthur was responsible for creating and developing, have produced outstanding contributions to scientific and technical knowledge and achievement over a very wide field, and have afforded unique opportunities to a long succession of investigators many of whom have attained eminence in their respective subjects. He will be most remembered, however, for the influence he has exerted on technical education in Great Britain. The number of apprentices and trainees of all grades for whom systematic training has been provided in the Metropolitan-Vickers works now totals more than ten thousand, and a glance through the register of them, published a short time ago, reveals the amazing extent to which these facilities have benefited the electrical industry as a whole, the government services and the educational institutions of the country; and have also provided trained personnel for almost every other country. The Metropolitan-Vickers training scheme acquired a world-wide reputation many years ago, and established a pattern which has been widely adopted.

Sir Arthur's activities have not been confined to Metropolitan-Vickers. His knowledge and experience have been placed unsparingly at the disposal of numerous societies, the universities and government establishments, and, in particular, he has held the positions of president of the Institution of Electrical Engineers and of both the Engineering and Education Sections of the British Association. He has been the recipient of many honours, including the Faraday Medal of the Institution of Electrical Engineers and the Hawksley Medal of the Institution of Mechanical Engineers; he was granted the degree of D.Eng. *honoris causa* by the University of Liverpool; was appointed O.B.E. in 1918 and C.B.E. in 1920 for his work on submarine detection, and in 1945 was knighted for his outstanding services to education. Sir Arthur retains remarkable physical and mental

vitality, and it is to be hoped that he will long continue to give industry and education the benefit of his far-sightedness and intense enthusiasm.

Dr. C. Dannatt, O.B.E.

DR. C. DANNATT, who succeeds Sir Arthur Fleming at Manchester, has had some thirty years service with the Metropolitan-Vickers Electrical Co. After military service in the First World War, he graduated in electrical engineering from the University of Durham and went to Metropolitan-Vickers in 1921 as a college apprentice. He joined the Research Department in 1922 and over many years has built up a very close association between the Research and Engineering Departments of the Company on design and related matters. He is the author of many papers and articles on electrical engineering subjects, and in 1936 was awarded the D.Sc. degree of Durham. In 1940 Dr. Dannatt was appointed to the chair of electrical engineering in the University of Birmingham; but due to war-time commitments he filled it only on a part-time basis. Before and during the Second World War he was actively associated with the Admiralty in the application of remote control to gunnery, being one of the original members of the Admiralty Remote Power Control Committee, and for this work he received the O.B.E. in 1943. In 1944 he vacated his university chair and rejoined Metropolitan-Vickers, this time on the electrical engineering side, and became in 1947 chief electrical engineer of the Company with a seat on the Board. Dr. Dannatt therefore brings to his new post a very broad understanding of the requirements of a large manufacturing organization in industrial research and also in the recruitment and training of technical staff. Coupled with his additional appointment as assistant managing director of the Company, there is every reason to believe that under his guidance the forward-looking policy of the Metropolitan-Vickers Co. in these vital activities will be fully maintained.

Institute of Biology: Mr. D. J. B. Copp

MR. D. J. B. COPP has been appointed secretary of the Institute of Biology as from October 1. Mr. Copp is a graduate of University College, Southampton, where his studies were interrupted by the War, when he was engaged on radar research at the Admiralty Signals Establishment (Extension), Witley. In 1947 he was appointed assistant secretary of the