

dimensions. In practice the vibrating screen introduces difficulties, but it can be replaced by a rotating helical screen, or a screen avoided altogether, by sweeping the pair of images in opposition across the eyes, in a way the observer's brain accepts as signalling depth.

Could we devise a way of drawing pictures in three dimensions? Do artists have to be for ever limited to flat planes on paper? The problem is to produce a pair of lines, one for each eye, produced under the control of the artist, so that correct stereoscopic depth is given by the horizontal separation of the lines. We have recently built just such a device. The depth artist holds a stylus, bearing a small bright light which is imaged on a pair of Thorn electroluminescent image-retaining panels. As he draws with the light, in three dimensions, glowing lines are presented to each eye and fused by the brain into a single picture in depth. He sees and creates in a

three-dimensional world, where artist and scientist meet.

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NEWS and VIEWS

The Royal Society: S. G. Brown Award and Medal

THE Royal Society's S. G. Brown Award and Medal has been won this year by Mr. F. T. Bacon, consultant to Energy Conversion, Ltd., for his work in the development of fuel cells, on which he has been continuously engaged for the past twenty years. The award is made annually by the Council of the Royal Society, on the nomination in turn of the Institutions of Civil, Mechanical and Electrical Engineers, for an outstanding contribution to the promotion and development of mechanical inventions. The nomination is based on work carried out during the year of the Award and the preceding five years. The 1965 nomination was made by the Institution of Mechanical Engineers, of which Mr. Bacon is an Associate Member.

Prof. A. C. Haddow, F.R.S.

THE cross of Chevalier de la Légion d'Honneur has been awarded to Prof. Alexander Haddow, director of the Chester Beatty Research Institute of the Institute of Cancer Research, London. This award is an indication of the esteem in which Prof. Haddow is held in scientific circles in France and is at the same time an expression of appreciation of much friendly collaboration over many years. Recently, Prof. Haddow has been closely associated with discussions about the international support of cancer research, in particular with the proposals put forward two years ago by the French Government.

Space Research in the Ministry of Aviation :

Mr. J. G. Lewis

MR. J. G. LEWIS has been appointed director (space) at the Ministry of Aviation Headquarters in succession to Mr. C. J. Stephens, who is now attending the Imperial Defence College. Mr. Lewis was born in Skipton, Yorkshire, in 1921 and educated at Skipton Grammar School and later at Christ's College, Cambridge, where he specialized in mathematics and physics. In 1942 he entered the Air Defence and Research Establishment at Malvern (now the Royal Radar Establishment), where he worked on searchlights control and surveillance radars. In 1956 he attended the 17th course at the Joint Services Staff College. He was promoted to senior principal scientific officer in 1957 when, as superintendent of the Special Projects Branch at the Royal Armament Research and Development Establishment in Kent, he became more directly involved in the development of guided weapons. For the past three years he has been an assistant director in the Defence Research Staff in Washington, D.C., concerned with U.S. guided weapons and space activities and Anglo-American co-operative programmes.

Psychology in the University College of Swansea :

Prof. C. E. M. Hansel

MR. C. E. M. HANSEL, who has been on the staff of the Department of Psychology in the University of Manchester since 1949, has been appointed to the newly established chair of psychology in the University College of Swansea. Mr. Hansel was born in 1917 and educated at Bedford School. From 1938 until 1946 he served in the Royal Air Force and reached the rank of squadron leader. After demobilization he proceeded to Fitzwilliam House, Cambridge, where he read psychology in Part II of the Moral Sciences Tripos. His principal research interests have been in the field of visual perception and, in particular, he has been developing a theory intended to integrate the physical and psychological phenomena of colour vision. In this sphere he is an authority. He has recently designed a new type of teaching machine. He has also excelled as the leading critic of the experimental basis of claims for extra-sensory perception. His thorough-going examination of this field of enquiry is to be published in the spring of 1966 (by Scribners, of New York) and will, no doubt, create considerable consternation among parapsychologists and their adherents. The topic will now be placed in its correct scientific perspective. While at Manchester, Mr. Hansel collaborated with Prof. John Cohen in researches into subjective probability, temporal phenomena, the spread of ideas, and other topics. This resulted in a joint book, *Risk and Gambling* (1956), and numerous papers on decision-making, the measurement of linguistic usage, and the kappa effect. Mr. Hansel is a talented musician, and for many years played first violin in the Alderley Edge Orchestra.

Second Chair of Electrical Engineering in the College of Advanced Technology, Birmingham :

Prof. J. E. Flood

DR. J. E. FLOOD has been appointed to the second chair of electrical engineering at the College of Advanced Technology, Birmingham. He gained his initial education at the City of London School and then went on to take an engineering course at Queen Mary College. After war-time service at the Admiralty Signal Establishment, he joined the Research Laboratories of the British Post Office and for the next five years was occupied with the application of electronics to automatic telephone switching. Deciding to get nearer the product, he joined the then Siemens Brothers of Woolwich, now the Telecommunications Division of Associated Electrical Industries, Ltd. Here he took an active part in furthering electronic applications to the telephone and, for a number of years, was chief engineer of the Advanced Development Laboratories