

An exhibition of Army telephone instruments showed the evolution from the early sets to the latest efficient light-weight telephone set which is carried in a small webbing-pouch by the lineman.

Equipment and Component Testing

S.R.D.E. has a very well-equipped laboratory for testing component parts and complete sets. Every imaginable climatic test can be applied—heavy and tropical rain, sand-storms, low temperatures and pressures, even tropical storage, which includes typical fungi and mould growths. The rigours which Army sets must withstand were also demonstrated by vibration, bumping and dropping tests. Microscopy and X-ray examinations are used to assist in locating faults.

The G.O.C. Southern Command provided a display of R.E.M.E. mobile workshops. These are lorry vehicles provided with work-benches, test equipment and repair facilities ingeniously arranged to make the most of the limited space. By means of these workshops, Army signals equipment is maintained and kept in good repair in the field. R.E.M.E. personnel were shown at work repairing radio and line sets.

¹ Bloch, F., *Phys. Rev.*, **70**, 460 (1946).

OBITUARIES

Prof. F. Weidenreich

THE distinguished anatomist Dr. Frank Weidenreich died after a short illness in New York on July 11, 1948, at the age of seventy-five. Although he was known to the present generation primarily for his work in the field of human palaeontology, he had in the early part of his career gained a considerable reputation as a histologist. After taking his doctorate of medicine in the University of Strassburg in 1899, he joined the staff of the department of anatomy and studied under Prof. Schwalbe, and in 1904 he was appointed professor of anatomy. His interests at that time were concentrated on the blood-forming tissues of the body and he contributed a series of papers on the histology of the spleen and the blood-lymph system. Some of these papers, it is interesting to note, are still quoted as standard references.

At the end of the First World War, Weidenreich was compelled to vacate his position at Strassburg, and in 1921 he was appointed to the chair of anatomy at the University of Heidelberg. From that date he seems to have transferred his attention to problems of physical anthropology, mainly, it would appear, as the result of studies which he made on the structure of bone in relation to function. In 1921, he published an extensive monograph on the comparative anatomy and evolution of the human foot, and in 1926 he entered the field of human palaeontology by a comprehensive study of the famous Ehringsdorf skull.

In 1928, Weidenreich was elected to the chair of anthropology at Frankfurt. This he held until 1935, when the difficulties of the political situation in Germany became too great. It was then that Weidenreich was invited to take the chair of anatomy at Peking Union Medical College, recently vacant by the death of Dr. Davidson Black. This appointment was combined with the directorship of the Cænozoic Research Laboratory of the Geological Survey of China. Dr. Weidenreich's energetic studies

of the skeletal remains of the early type of fossil man, *Sinanthropus*, excavated at Choukoutien, are too well known to need recapitulation here. He produced a series of magnificent monographs, richly and profusely illustrated, which proved of the greatest value to anthropologists everywhere. Their value has now been even more enhanced by the fact that almost all the original material on which these monographs were based—material of supreme importance to the student of human evolution—was lost during the Japanese invasion of China.

Dr. Weidenreich himself was forced to leave China in 1941 in order to escape the invasion. He made his way to the United States, and was there offered hospitality in the American Museum of Natural History. Here he continued his researches, and published a number of articles in which he strove to integrate the results of his earlier studies in a constructive account of what to him appeared to be the probable sequence of human evolution. Shortly before his last illness, Dr. Weidenreich was engaged on an intensive study of the Solo skulls discovered in Java a few years before the War, and brought to America after the cessation of hostilities by Dr. von Koenigswald. This study was still unfinished, but it was rapidly approaching completion—sufficiently so, it is to be hoped, to make possible its publication in some form.

Weidenreich's life was one of intense and continuous intellectual activity, the more remarkable since his work was so often interrupted by the disruptive effects of wars and political dislocations. But he had an indomitable spirit, and his long series of scientific publications bears witness to the energy with which he pursued his intellectual inquiries, regardless of obstacles which would certainly have frustrated a lesser man. W. E. LE GROS CLARK

Dr. J. W. S. Macfie

By the death of Dr. J. W. S. Macfie at the age of sixty-nine, tropical medical research has lost a worker of outstanding ability and high character. He was educated at Oundle School and at the Universities of Cambridge and Edinburgh, taking the degrees of B.Sc. and M.B., Ch.B. (1906), and later the D.Sc. After residence at the Radcliffe Infirmary, Oxford, and work in physiology under Sir Charles Sherrington, he took the diploma of the Liverpool School of Tropical Medicine in 1910 and joined the West African Medical Staff. He investigated sleeping sickness in Nigeria and took charge of the Medical Research Institute there. In 1914 he became successively pathologist in charge and director of the medical laboratory at Accra, Gold Coast, and held this post until his retirement in 1923, with an interval from 1917 to 1919, when he worked in Liverpool with Prof. Warrington Yorke and others on malaria. Shortly before his retirement he designed the plan of the present Medical Research Institute at Accra. He afterwards studied in Liverpool and London, accompanied Dr. Melly with the British Red Cross to Abyssinia in 1935, and during the Second World War had war duties in London and went to Egypt, Palestine and Syria as malariologist in the R.A.M.C. He was awarded the Mary Kingsley Medal by the Liverpool School of Tropical Medicine.

Macfie was a keen investigator with original ideas and a critical mind; his laboratory technique was of a high standard, and his experiments seldom needed repeating. His researches in tropical medicine