

RESEARCH COLLECTION OF MAMMALS

A SURVEY was carried out by the Bombay Natural History Society between 1911 to 1923 with a view to collect a series of carefully prepared and labelled skins and skulls of India, Pakistan, Burma and Ceylon for a critical study of their taxonomic status, variations and distributions. The survey was carried out by trained collectors, and a large collection, consisting of about 26,000 skins and as many skulls, was made at a cost of Rs. 1,80,000. The collection was then critically studied, identified, labelled and the more interesting groups or at least known groups reported upon by the experts at the British Museum, which greatly enhanced the value of the collection. In accordance with the conditions of an agreement between the Bombay Natural History Society and the British Museum, the latter selected 8159 specimens for their own collection and the rest has been lodged with the Society.

In view of the great scientific value of this collection to Indian Mammalogy and because of the great loss sustained by the national zoological collection during the flood of 1943 at Banaras, the Zoological Survey of India decided to obtain a representative set of specimens from the Mammal Survey Collection. In 1949, Dr. S. L. Hora, Director, Zoological Survey of India, on his way back from the U.S.A., visited the British Museum to examine this collection and discussed with the authorities of the British Museum the problems of its return to India. On his arrival in India, he impressed on the Bombay Natural History Society, the owner of the collection, the great value of the specimens lying in London and the urgency of their early removal to India. The Zoological Survey of

India offered to acquire a part of the collection and to pay for certain other contingent expenses. Thanks to the generosity of the Scindia Steam Navigation Company, the whole collection was brought to Bombay free of charge, though much had to be spent in verifying, listing and packing the specimens before its despatch from London.

On account of the great value of the collection, the Bombay Natural History Society was approached by some of the Governments of the countries surveyed and also by some foreign museums for the purchase of specimens. The Zoological Survey of India was, however, given the priority right and has obtained for the National Collection 3558 skins and an equal number of skulls, this being 20 per cent. of the total collection received from London. This percentage, was, however, restricted to the total number of specimens selected and the Survey was given freedom to select upto 40 per cent. from any group which was poorly represented in the National Collection. Such a basis for the division of the collection has tremendously increased the value of the share of the Zoological Survey for scientific research purposes.

The work of selecting specimens for the National Collection was entrusted to the Mammal Assistant, Shri. H. Khajuria. The specimens selected for the Zoological Survey of India include 408 forms, many of which are very rare and many are new to the National Collection. About 95 per cent. of the specimens selected had been collected from localities and in seasons which are unrepresented in the collection of the Survey.

SIR LAWRENCE BRAGG

THE managers of the Royal Institution have appointed Sir Lawrence Bragg, F.R.S., to the offices of Fullerian Professor of Chemistry, Resident Professor, and Director of the Institution's Laboratories. He will take up the duties

of the Fullerian Professorship immediately and the Laboratory and Resident duties on January 1, 1954. Sir Lawrence Bragg has been Cavendish Professor of Experimental Physics, Cambridge University, since 1938.

PROF. JAMES W. McBAIN—OBITUARY

THE sudden passing away of Professor James W. McBain, formerly Director, National Chemical Laboratory of India, Poona, due to a heart attack on March 12, 1953, in California, will be received with deep regret both in India and abroad.

Prof. McBain was born on March 22, 1882, at Chatham, New Brunswick, Canada, and passed most of his boyhood at Port Dover, Ontario, Canada, and at Providence, Rhode Island, U.S.A. He obtained the degree of M.A. in 1904 from the University of Toronto and Ph.D. from the Universities of Leipzig and Heidelberg. He started his career as a Lecturer in Physical Chemistry at Bristol University, England. Honours came to him fast from all directions. In 1906, he was made Leverhulme Professor of Physical Chemistry in a chair created for him by the late Lord Leverhulme, in recognition of his fundamental researches on soap.

He was elected Fellow of the Royal Society in 1923 and offered the post of Professor of Chemistry at Stanford University, California, in 1926 and awarded the Davy Gold Medal of the Royal Society in 1929 for his pioneer and outstanding work on the physical properties of soap. He was starred in *American Men of Science* in 1933, elected Fellow of the New York Academy of Social Sciences in 1940 and of the California Academy of Sciences in 1946. He represented the United States at the Centenary of Mendelejef at Leningrad, U.S.S.R. and flew round the world to attend the 220th Anniversary of the Academy of Sciences of Moscow.

He did a splendid job in training 1,300 officers of Cadet Battalions and captaining the Territorial Forces in the First World War for which his name was mentioned in despatches.

He had been Consultant on Research Committees of Colloids, Corrosion, Building Materials, Dental Materials, Adhesives and to the Oil Companies of California and Lever Brothers.

He was Chairman of Colloid Division, American Chemical Society, Vice-President of the Faraday Society, President of the Association of University Teachers of Great Britain, Guest of Honour at the Meeting of the International Union of Pure and Applied Chemistry at Cambridge, England, a Member of the Editorial Board of the *Journal of Physical Chemistry* and the *Journal of Colloid Science*.

Prof. McBain was a world authority on the colloid chemistry of soaps and published over 400 memoirs on various aspects of physical chemistry, notably those relating to the molecular structure of soap solutions, the McBain-Bakr sorption balance, which presents a simple quantitative method of determining surface areas and the simplest air-driven spin-top ultracentrifuge with photographic recording.

He is the author of two reference books, one entitled *The Sorption of Gases by Solids* and the other *Colloid Science* discussing with authority, insight and discrimination, fundamentals and important aspects of the subject. He delivered two of the Frontiers of Chemistry Lectures in 1943 which were published recently in the book entitled *Frontiers of Chemistry*.

The zeal and single-minded devotion with which he worked for the development of the National Chemical Laboratory of India, won him the esteem of his colleagues. He encouraged healthy criticism, original thinking, initiative and enterprise in every scientific worker. He showed keen interest in the social life of scientists working in the NCL and donated the McBain Colony Centre, housing the NCL Club and Co-operative Stores, on his 70th and last birthday on 22nd March 1952.

Prof. McBain is survived by his wife Dr. Mary Evelyn McBain, daughter Junet and son John McBain, to whom we offer our most sincere sympathy in their bereavement.

J. P. VARMA.

IONOSPHERIC RECORDING

THE results of observations on the ionosphere carried out by the Radio Research Station, D.S.I.R., from 1930 to 1946 are now available in the form of a Report* which discusses the results in general terms and describes the development of ionospheric recording in this country. It contains tables from which a particular range of observations can be chosen and explains how the detailed results can be obtained.

Regular ionospheric recording began at Slough in 1931. Since then, as knowledge and technique have grown, the scope and frequency of the measurements have been expanded. For the

past few years, the results of these measurements have been compiled in tables and circulated to the Post Office, the B.B.C., radio communication companies, shipping lines, airlines, scientists, engineers and others concerned with radio transmission. A large quantity of detailed material, however, has not been available before now except in small amounts and on special request.

* Radio Research Special Report No. 23, available from H. M. Stationery Office, London, S.E. 1—Price 1s. 7½d. by post.