

and Berlin, he joined the staff of the Kaiser-Wilhelm-Institut für medizinische Forschung, working upon the sensory physiology of *Xenopus* and upon the metabolic processes of poikilotherms. In 1934 he was appointed assistant at the joint German-Italian Marine Biological Laboratory at Rovigno d'Istria, and three years later assistant director of the Physiological Department of the Stazione Zoologica at Naples. Here it was that he married an Italian zoologist. During this period he continued his work on the metabolism of poikilotherms, concentrating upon cœlenterates and lizards. From this arose an investigation into the island and mainland races of lizards, with biometrical, genetical and hybridization findings.

It was not until after the Second World War, when he spent two years as lecturer in Heidelberg, that Dr. Kramer's life-long interest in birds led him into the field where his name will best be remembered, that of bird orientation, and when, in 1948, he was appointed as a departmental director at the Max-Planck-Institut at Wilhelmshaven he was able

to devote most of his energies to investigating this problem. The decade since this appointment has seen the publication of a remarkable series of papers in which he has established the dependence of birds on the Sun and upon an 'internal chronometer' for their feats of orientation, homing and migration. In 1958 the Max-Planck-Gesellschaft recognized Dr. Kramer's achievements and promise by appointing him to direct an institute of animal behaviour, which was to be built at a site of his choosing. It is still under construction at Walddorf (Tübingen). Less than three weeks before his death, the Gesellschaft made him director of its Radolfzell bird observatory (formerly the well-known Rossitten bird observatory).

Gustav Kramer was an athlete and climber of some note, and it is ironic that he should have met his death while using his climbing ability in his scientific work. He is survived by his widow and by three children. His unflinching charm and hospitality and the inspiration he gave to his students, staff and scientific acquaintances will be remembered with affection.

D. B. CARLISLE

NEWS and VIEWS

Dr. Warren Weaver

ON August 1, Dr. Warren Weaver retired from his present position as vice-president for the natural and medical sciences of the Rockefeller Foundation. He has been appointed vice-president of the Alfred P. Sloan Foundation, and he will continue his activities on the National Science Board, on the National Advisory Cancer Council, on the Council for Library Resources, as vice-chairman of the Health Research Council of the City of New York, and as vice-president and chairman of the Committee on Scientific Policy of the Sloan-Kettering Institute for Cancer Research. For twenty-seven and a half years Dr. Weaver has had, within the Rockefeller Foundation, administrative responsibility for all activities in the natural sciences. When the Rockefeller Foundation became active in agriculture in the early 1940's this field was placed under Dr. Weaver's general charge. Still more recently, in 1955, he was also assigned supervisory responsibility for the Foundation's activities in the medical sciences.

Astronomy at Glasgow : Prof. W. M. Smart

PROF. W. M. SMART, regius professor of astronomy in the University of Glasgow since 1937, is to retire on September 30. Prior to 1937 Prof. Smart had a background which combined Cambridge mathematics and theoretical astronomy with naval navigation practice and teaching. During this period he was engaged in research in stellar dynamics, particularly with the phenomena of star streaming and stellar motion. His development of a flourishing school of theoretical astronomy in Glasgow was based on this experience. To assist in his teaching work, and to help theoretical astronomy everywhere, he wrote three well-known and widely used astronomical text-books in addition to a number of other books of academic, educational and popular interest. He encouraged his department in studies in stellar

motion and other theoretical problems. It is understood he will move to the London area on retirement.

Prof. P. A. Sweet

DR. P. A. SWEET has been appointed to succeed Prof. Smart. He has, since 1952, been a lecturer in astronomy at University College, London, and also assistant director of the University of London Observatory. The incoming professor is not new to Glasgow, having lectured there during 1947-52. After completing the Mathematical Tripos at Cambridge in 1946, Dr. Sweet commenced theoretical researches in the field of stellar structure and plasma physics. His theory concerning the rate of mixing of the material in stars has had wide consequences in the analysis of stellar structure and evolution. His more recent work has been connected with the influence of magnetic conditions on the control of energy reactions in cosmic material. The applications of his theories to stellar and other problems are still in progress. We may anticipate a development of these and other studies with Dr. Sweet's appointment to the regius professorship in astronomy at Glasgow.

Jacob Bell : Founder of the Pharmaceutical Society of Great Britain

ON June 12, the hundredth anniversary of his death, tribute was paid by the Pharmaceutical Society of Great Britain to its founder, Jacob Bell, when the president, Mr. Gwilym Hughes, unveiled a tablet to Bell's memory in Woodbury Park Cemetery, Tunbridge Wells, where he is buried. By his work for the Society, said Mr. Hughes, Jacob Bell was acting in the public interest as well as in the interests of his calling. When he commenced his labours, pharmacy in Great Britain was ill-defined, unregulated and unorganized, without acknowledged standards of education or practice. It had no authoritative means of expression and lacked official recognition.