

was born at Biamble, New South Wales, on September 10, 1876. After attending King's School, Parramatta, he worked on a cattle station in north Queensland and spent much of his spare time studying birds. He amassed a large collection, supplemented by many specimens received from correspondents all over Australia. For long he had planned to write a work on Australian birds, and in 1902 went to England for the purpose. At first he resided near Watford, which was convenient for the British Museum (Natural History) and Lord Rothschild's museum at Tring, where much of his work was done.

As a preliminary to his larger work, he published in the *Emu* during 1908 a "Handlist of the Birds of Australia"; then in 1912 the "Birds of Australia" began to appear, and this was finally completed in 1927 in twelve thick folio volumes. His next work was a check list of the birds of Australia and the Polynesian region, entitled "A Systema Avium Australasianarum", brought out under the auspices of the British Ornithologists' Union. Mathews had long been interested in two small islands lying between Australia and New Zealand, and in 1928 he published an account of the birds entitled "Birds of Norfolk and Lord Howe Islands", followed eight years later by a supplement.

In his earlier works he was an extreme 'splitter', and a large number of his races are not now recognized. In genera, too, he went to the same extreme, and this to a great extent was due to his confining his

studies to Australian species only. In recent years, however, he greatly modified his views. He was greatly interested in nomenclature and the study of early writers on Australian birds, and his best work was done in this connexion. Between 1912 and 1927 he edited a magazine of his own, *Austral Avian Record*, which contained much useful information. But by far the most important of his publications was the "Bibliography of the Birds of Australia", which appeared in 1925 as a supplementary volume to "Birds of Australia". This is more than a bibliography, and might be considered the foundation for a history of the study of birds in Australia.

Mathews was a great collector of books and amassed the finest collection of works dealing with Australian birds. This he presented to the Australian Government in 1929, and it is now housed in the National Library in Canberra as the Mathews Ornithological Library. His collection of birds passed into the hands of the late Lord Rothschild and is now in the American Museum of Natural History in New York.

Mathews was a keen sportsman, interested in both hunting and shooting, and while engaged in his ornithological studies travelled widely, visiting most of the more important museums both in Europe and the United States. In 1924 he was vice-president of the British Ornithologists' Union and during 1936-38 was chairman of the British Ornithologists' Club. He married Marian, daughter of H. C. White, of Mudgee, New South Wales, who died in 1938, and is survived by a son. N. B. K.

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## NEWS and VIEWS

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Zoology at King's College, London:

Dr. J. F. Danielli

DR. DANIELLI who is succeeding Prof. MacKinnon as professor of zoology in King's College, London, commenced research work in 1931 at University College under the direction of Prof. N. K. Adam. He was then working on monolayers of steroids and on cell permeability. In 1933 he went to Princeton University with a Commonwealth Foundation Fellowship and continued his work under the influence of Prof. E. N. Harvey and Prof. C. G. Conklin. He returned to University College, London, under the auspices of Sir Jack Drummond and Prof. A. V. Hill. From University College he went to Cambridge in 1938, with a Beit Memorial Medical Research Fellowship tenable in the Department of Biochemistry. Here his work was extended to the blood capillaries. He became a member of a Ministry of Supply extra-mural chemical defence research team and a fellow of St. John's College in 1942. During his later years in Cambridge he was attached to both the Departments of Zoology and Biochemistry, and his main attention was turned to cytochemistry. In 1946 he went to the laboratory of the Marine Biological Association as physiologist, and then became reader in cell physiology of the University of London at the Chester Beatty Research Institute of the Royal Cancer Hospital, and also honorary lecturer in pharmacology at University College. He plans to continue the programme developed at the Royal Cancer Hospital, and to develop research work in cytology particularly in collaboration with Prof. T. A. Bennet Clark and Prof. J. T. Randall.

Geography at Cambridge:

Mr. J. A. Steers

MR. J. A. STEERS, who, in September, is to succeed Prof. F. Debenham as professor of geography in the University of Cambridge, was one of the first generation of geographers to take the newly constituted Geographical Tripos after the First World War. After a short spell of teaching at Framlingham, Mr. Steers returned to Cambridge to join the staff of the Geographical Department under Philip Lake. His College elected him to a fellowship, and before many years St. Catharine's became the first men's college to offer scholarships in geography. This led to a remarkable concentration of able geographical students in the College, which has resulted in a rapidly lengthening list of St. Catharine's geographers entering university posts—fifteen in the last ten years. In his College, Mr. Steers has served successively as dean, tutor, senior tutor, and president.

The Norfolk coast was the scene of Mr. Steers' early researches, and his frequent visits led to Norfolk replacing his own native Bedfordshire as his favourite county. These activities centred mainly on Scolt Head Island, where for many years parties of Cambridge men mixed the more sober academic pursuits with strenuous bursts of bathing and creek jumping. His taste for coastal problems led him to other parts of Britain, and culminated in two expeditions to the Great Barrier Reefs of Queensland, and one to Jamaica. A succession of papers followed promptly on various aspects of the physiography of coral reefs—the main work of writing up was sometimes accomplished on board the ship while returning to England. During the Second World War his love of the coastline led him to turn his attention to the

preservation of its amenities, and his major publication, "The Coastline of England and Wales", was intended to serve the double purpose of summarizing the state of our knowledge of the coastline and of focusing attention on the need for preserving this ample but easily marred heritage. He has completed a report on the English and Welsh coasts for the Minister of Town and Country Planning, and is now engaged on a similar project for the Scottish Office. Mr. Steers's interests have by no means been confined to the coastline. His first book, "Map Projections", was a surprising and most adequate production for one who lays no claim to mathematical knowledge. "The Unstable Earth" is more representative of his real interests, which have always been close to geology; but perhaps "Scott Head Island" expresses most nearly his approach to problems, in that it brings together the work of specialists on the various field studies in the elucidation of one specific region.

#### Hosiery Research Council: Dr. D. Starkie

DR. DAVID STARKIE has been appointed director of research by the Hosiery Research Council. The appointment is one of the most important preliminary steps yet taken in the establishment of a research organisation for the hosiery industry. Dr. Starkie, who is forty-four, was educated at Staveley Grammar School and the University of Sheffield, and obtained a degree in physics, with first-class honours, in 1925. He was awarded his M.Sc. in 1926 and Ph.D. in 1927 as a result of work on the band spectra of the alkali compounds. After leaving the University, Dr. Starkie lectured and carried out research on the physical properties of glass. He spent two years on research with the Metropolitan-Vickers Electrical Co., Ltd., and then became chief physicist at Messrs. A. Jobling and Co., Ltd., glass manufacturers. In 1939 Dr. Starkie was appointed head of the physics research department of the Plastics Section of Imperial Chemical Industries. Much of his time was devoted to the investigation of the properties of synthetic yarns and fibres, and he worked in close collaboration with a special fibres development department formed to develop the use of synthetic fibres in the textile industry. When it was decided to create an optical development department in 1944, Dr. Starkie was placed in charge of its formation, and the results of his work have had important effects in the optical field. Dr. Starkie is a member of a number of scientific societies and service committees and is also on the Council of the British Scientific Instrument Research Association. He will be responsible for the plan and organisation of the new Hosiery and Allied Trades Research Association now being formed. The Hosiery Research Council, which has done the preliminary work, already possesses premises equipped for research at Thorneywood House, Nottingham, where there is the nucleus of a trained staff.

#### Rumford Medals: Dr. I. S. Bowen

THE Rumford Medals for 1949 of the American Academy of Arts and Sciences, given for the most important discoveries in the fields of heat and light, have been awarded to Ira S. Bowen, director of the Mount Wilson and Palomar Observatories in California. It was Bowen's early laboratory study of high-excitation spectra which laid the foundations for his brilliant work on the identification of the 'nebular' lines in the spectra of galactic nebulae as forbidden transitions in doubly ionized oxygen.

Later, his analysis of the spectra of planetary nebulae brought to light the unexpectedly high cosmic abundance of the inert gases. The puzzle of the selective excitation of certain permitted lines in nebular spectra was explained by him in a completely satisfactory way in terms of close chance coincidences between the wave-lengths of emission lines in the inaccessible ultra-violet. Dr. Bowen is well known also as an optical designer. Perhaps the most useful device associated with his name is the 'image slicer', by which the starlight that would otherwise be wasted on the slit-jaws of an astronomical spectrograph is directed into the instrument, thus greatly increasing its effective speed. He is now in charge of the installation of the new 200-in. reflector at Mount Palomar, and is credited with a number of devices used in the optical tests. His many friends look forward with confidence to the successful initiation of the new telescope under his direction.

#### The Palaeobotanical Society and Institute of Palaeobotany, Lucknow

ON April 3, the Hon. Pandit Nehru, Prime Minister of India and Minister for Scientific Research, laid the foundation stone of the newly formed Institute of Palaeobotany in Lucknow. This Institute has come about as the result of a resolution passed on September 10, 1946, by the governing body of the Palaeobotanical Society which had just previously been founded. The president of the Society is Mrs. Savitri (Birbal) Sahni, and the secretary, Prof. Birbal Sahni, professor of botany in the University of Lucknow.

Both Society and Institute have clearly come into being as a result of the enthusiasm of Prof. Sahni, who himself is one of the world's leading palaeobotanists, and the keen interest of his wife. On the schedule of the Palaeobotanical Society are Prof. Sahni's collections of scientific literature and fossil specimens; funds up to Rs. 100,000 given by Prof. and Mrs. Sahni for the building of the Institute; a perpetual endowment of Rs. 1,000 in 3½ per cent Government paper, presented by Pandit L. D. Pant for the Chandra Datt Pant Commemoration; two scholarships, furniture and laboratory equipment given by the Burmah Oil Company. It is also interesting to note that after the death of Prof. and Mrs. Sahni, all their assets are to go to the Society and Institute. Pending the completion of its own building, the work of the new Institute of Palaeobotany is being carried out in a building (given to the Society by the Government of the United Provinces) by the director (Prof. B. Sahni), assistant director (S. R. Narayan Rao), curator (J. Hsü), research fellow (R. V. Sitholey), research assistants (R. N. Lakhanpol and D. C. Bhardwaj) and registrar (B. R. Agarwala). K. R. Surange has also recently joined the staff.

#### Commonwealth Scientific and Industrial Research Organisation, Australia

THE Australian Government in March repealed the Science and Industry Research Act of the Bruce-Page Government of 1926, replacing it and its subsequent minor amendments by a single Act modifying several of the main features of the original legislation. From the Council for Scientific and Industrial Research, which has functioned for twenty-three years, all former powers and functions have been taken away, and it becomes for the future merely advisory. A new body has been set up under the title Commonwealth Scientific and Industrial Re-