

comparable with those Junior Technical Schools preparing their pupils for entry to a specific occupation. Their usefulness and functions are not denied. He pointed out that this decision was based on the evidence received, but that though the door has at present been closed against their becoming Technical High Schools, it has not been locked or bolted; and indeed might be said to be

slightly ajar. In reply to other points raised, he pointed out that it was recommended that the word 'Junior' should be discontinued and that the official designation should be *Technical Schools* for the two and three-year course schools and *Technical High Schools* for the others; but it was also recommended that each school should have its own local name.

## Obituary Notices

### Prof. Karl Schröter

THE nestor of Swiss botanists, Karl Schröter, emeritus professor in the Federal College of Technology, Zurich, died on February 7 in his eighty-fourth year. Up to the last he was physically and mentally active, and so recently as January 28 he delivered a public lecture to a leading scientific society in Zurich. Unfortunately, after a brief attack of pneumonia following upon influenza, his long and active life came to a sudden end.

Karl Schröter was born in 1855 in Esslingen in Germany, where his father was then chief engineer in a large engineering establishment, but later appointed professor of engineering in the Federal College of Technology, Zurich. At this institution, his son Karl, who acquired Swiss nationality, commenced his studies of natural science and came under the stimulating influence of Karl Cramer, who persuaded him to devote himself to the study of botany. Two years after graduation in 1876, he established himself as *Privat Dozent* and a few years later he was invited to give a course of advanced lectures in place of Prof. Heer, who was taken seriously ill. He proved himself to be such a successful lecturer that on the death of Prof. Heer he was appointed, at the age of twenty-eight years, to the vacant professorship, which he held for forty-two years.

Schröter had been influenced in his botanical studies by his predecessor, choosing for his doctor's thesis the examination of some fossil woods collected by Heer in the far north.

Schröter was, however, more interested in living plants, and as an assistant he took an active part in the organization of botanical excursions for the students, by which means he acquired a very wide and varied acquaintance with the Swiss flora, which characterized his later work both as a teacher and as an investigator. In 1889, he published a pocket-flora of alpine plants which was translated into both French and English. He was, however, specially interested in the relationship of plants to their surroundings, and thus was one of the founders of the modern study of ecological botany. After many years work on alpine meadows and moorlands, he published, with the assistance of other botanists, in six parts during the years 1904-8 his "Plant-life in the Alps", a very comprehensive study of alpine vegetation. At the same time, he was collaborating

with J. Früh in the production of a monumental volume on the bogs of Switzerland. He did not, however, confine himself to flowering plants, but paid attention to the plankton flora of the Swiss lakes and published several accounts of the periodicity of some of its algal forms.

In 1898, Schröter undertook a journey around the world, visiting the United States, Honolulu, Japan and Java. The result of his trip made him an enthusiastic supporter of the movement to organize international phytogeographical excursions, and in connexion with these he visited both Great Britain and the United States. Though already ageing in 1923, he organized and led a party of plant geographers through the Swiss Alps. By that time, the Swiss National Park had been established in the Lower Engadine, and Schröter, who had been keenly interested and active in its establishment and had taken part in its botanical exploration, naturally included it in the itinerary of the excursion.

Schröter's many-sided botanical labours received due recognition both in Switzerland and abroad. He was elected a foreign member of the Linnean Society of London in 1925 and delivered the Hooker Lecture of the Society in 1926. His lively and charming personality gained him many friends at home and abroad, not a few in England, which he visited on several occasions.

He married in 1884 a fellow student, Margaret Middelberg of Amsterdam, who died in 1925. Five years later he married Mrs. Teterode, by whom he is survived.

F. E. WEISS.

### Prof. J. Versluys

THE death is announced, at the age of sixty-six years, of the eminent Dutch zoologist, Prof. Jan Versluys, professor in the University of Vienna.

Versluys was a fine, tall man, with a fluent command of English, German and French, and was well known to, and highly respected by, many British zoologists who met him either abroad or in Great Britain on the occasions when he attended the meetings of the British Association. He was a pupil of his life-long friend the late Prof. Max Weber of Amsterdam.

As a young man, Versluys accompanied Max Weber as a naturalist on the memorable voyage of S.S. *Siboga* on its marine exploration of the seas of the Malay Archipelago during 1899-1900, and on



his return to Holland wrote the monographs on the two families of the Gorgonacea—the Chrysogorgiidae and Primmoidae—collected by the Expedition. The care he took in the description of the species, his skilful illustrations and his references to type specimens, which he examined whenever available, have rendered these monographs of extraordinary value and interest. They are still the standard works on the subject. After the completion of his work on these coelenterates, he turned his attention to the study of the skull of reptiles and published his first paper on the morphology of the columella bone before he left Amsterdam. In 1904 he migrated to Germany and became a *Privat Dozent* and later an assistant professor in the University of Giessen, and during the following ten years he produced several papers on the skulls of recent and fossil reptiles bearing on what he called “Das Streptostylie Problem”, or the mobility (kinetism) of the bones of the jaws on those of the brain case.

At the outbreak of the Great War, Versluys remained in Germany, but after the occupation of Belgium by the German army he was appointed a professor in the Flemish University in Ghent and remained there until the Armistice. Returning to Holland, he made a home in the beautiful town Hilversum and there he began a study of another subject, which he called “Das Limulus problem”. Working in collaboration with R. Demoll, of Munich, a number of papers were published on the appendages and other structures of recent and extinct Arachnoidea, especially of *Limulus* and the other Merostomata.

The general conclusions reached by these authors were startling in their originality but have not been accepted by most of the zoologists in Great Britain. They suggested that the evolution of *Limulus* was on lines exactly the reverse of those suggested by Sir Ray Lankester in his well-known essays on this subject. *Limulus* was derived, according to their view, not from an aquatic but from an air-breathing, tracheate ancestry; and, moreover, that even the Crustacea are descended from a remote terrestrial group of animals of which *Peripatus* is the only living representative.

After a few years in Holland, Versluys accepted the position of professor in the University of Vienna and remained there until his death. I have not been able to find any record of his original work in this last period of his life, except an abstract of a paper he read at the British Association meeting in 1934, on the distribution of the Primmoidae with reference to the Wegener hypothesis.

He leaves a widow and three children.

SYDNEY J. HICKSON.

#### Eng.-Commander J. J. Walker

THE death on January 12 of Eng.-Commander James John Walker will be deeply regretted by very many British naturalists, especially by students of his favourite insects—Coleoptera and Lepidoptera.

Elected in 1878, Walker had been for some years the senior fellow of the Royal Entomological Society

of London, and was president in 1919 and 1920, his two addresses being on “The Fringes of Butterfly Life” and “Some Aspects of Insect Life in New Zealand” (*Proc.*, 1920 and 1921). Two of his papers in the *Transactions* of 1890 and 1895 dealt with Lepidoptera from the Straits of Gibraltar and the butterflies of Hong Kong, respectively, while the *Proceedings* (1907–31) includes many of his interesting notes on British and a few on foreign insects. The vast majority of his observations made on voyages and at home appeared, however, in the *Entomologist's Monthly Magazine*, of which he became editor in 1904, on the death of Robert McLachlan. The first of his notes and papers in this excellent journal—more than three hundred in number—appeared in 1872, and the last, dated December 20, 1938, less than a month before his death, was published in January. It records the more interesting of fully three hundred species of Coleoptera which he had observed in about thirty acres of meadow and cultivated land between his house and the River Cherwell.

Among Walker's papers were many on interesting subjects which he always kept in mind and added fresh records as they came to light. Such were his notes in 1908, 1911, 1912, 1928 and 1931, on immigrant insects which invaded Great Britain; in 1922, on butterflies which have reached Iceland and on the Lepidoptera of North Atlantic islands; in 1931, on insects at sea; in 1914, 1915 and 1928, on the Monarch butterfly, *Danaus plexippus*, and its migrations. Among the many British localities from which he published records the most frequently named are, Isle of Sheppey, Sheerness, Chatham, Kent, Portland, New Forest and especially Oxford, which became his home in May 1904. The honorary M.A. was conferred on him by the University in the following year.

Walker was a constant visitor to the Hope Department of Entomology in the University Museum, Oxford, where he gave immensely valuable help in describing, arranging and recording the historic collections. He joined the Ashmolean Natural History Society in 1904, became president in 1913–14 and from 1911 onwards was editor of the *Proceedings*, in which he published (1907–30) a valuable list of Oxford Coleoptera with supplements; also twenty-three interim reports (1911–38), the last four including Lepidoptera in addition to Coleoptera.

The above is a very condensed account of some of the chief publications of one who, in spite of his great age—eighty-seven years—retained to the very end his wonderful memory, keen interest and the never-failing desire and ability to help his brother-naturalists.

E. B. POULTON.

#### Prof. Albert Sauveur

PROF. ALBERT SAUVEUR, emeritus professor of metallurgy in Harvard University, whose death occurred recently in Cambridge, Mass., was a Belgian by birth, but was long known as the leading teacher of metallurgy in the United States.

Born at Louvain in 1863, he studied in the School of Mines of Liège, and later crossed the Atlantic to enter the Massachusetts Institute of Technology,