

It has already been mentioned that Lady Bruce, who died a few days before him, was his constant companion. No account of the work of David Bruce would be complete, as he himself insisted, without some reference to the important part she played. Being a skilled microscopist and artist, with a practical knowledge of the details of laboratory technique, for which she had a greater patience and aptitude than her husband, she shared the work with him, indeed, to such an extent that it is difficult not to regard David Bruce and his wife as a single unit and to conclude that neither would have achieved success without the other. They worked alone, without help, in Zululand, but on other Commissions were accompanied by various collaborators, whose part in the work was duly acknowledged in the reports, and who contributed in no small measure to the success of the expeditions.

C. M. WENYON.

WE regret to announce the sudden death, at his home in Liverpool, of Mr. Andrew Scott, on Dec. 27, at the age of sixty-three years. Mr. Scott had been on the scientific staff of the Lancashire and Western Sea-Fisheries Committee since 1895, and, at the time of his death, was working in the University of Liverpool, mainly on the plankton collections made by the *Discovery* in the Antarctic Ocean. He had a quite remarkable knowledge of Crustacea, and, with his father, the late Dr.

Thomas Scott, had described collections of Copepoda from all parts of the world. He is survived by his widow and a son and daughter.

DR. JOHANN KIAER, professor of palæontology in the University of Oslo and head of its Palæontological Museum, died on Oct. 31, at the age of sixty-two years. Dr. Kiaer was distinguished for his work on the palæozoic formations of Norway and Spitsbergen and for his descriptions of their corals, trilobites, and, especially, the Silurian and Devonian fishes. He had often visited Great Britain, where he will be deeply mourned by many friends.

WE regret to announce the following deaths:

Mr. James Ford, superintendent of the Radcliffe Science Library, Oxford, on Dec. 18, aged seventy-four years.

Dr. Edward H. Jenkins, formerly director of the Connecticut Agricultural Experiment Station, who carried out important work on the culture, curing, and fermentation of tobacco, on Nov. 7, aged eighty-one years.

Prof. Olin H. Landreth, emeritus professor of engineering in Union College, Schenectady, New York, known for his work in engineering administration and sanitary engineering, on Nov. 5, aged seventy-nine years.

News and Views.

Isolation of Vitamin A.

FOLLOWING closely on the announcement of the probable preparation of vitamin D by several independent workers (NATURE, Jan. 9, p. 50), come two announcements of the isolation of a substance which *prima facie* appears to be the long-sought vitamin A. In a paper published in the issue of *Helvetica Chimica Acta* for December 1931, Prof. P. Karrer, of the University of Zurich, together with R. Morf and K. Schöpp, describes the isolation and purification from the unsaponifiable fraction of the liver oil of the skipper (*Scombrex saurus*) of an alcohol having the formula $C_{20}H_{30}O$ or $C_{22}H_{32}O$, optically inactive, and possessing the molecular weight 300-320. Esters of acetic and *p*-nitrobenzoic acid were prepared, and the alcohol gave geronic acid on oxidation with ozone. The same substance was obtained by a special method from the liver oil of the halibut (*Hippoglossus hippoglossus*). In an address on "Recent Progress in the Chemical Study of Vitamins", given to the London Section of the Society of Chemical Industry on Jan. 4, Prof. J. C. Drummond stated that he, in collaboration with Prof. I. M. Heilbron and Dr. R. A. Morton, had succeeded in isolating, by a process of fractional distillation, a very potent fraction from the unsaponifiable residue of the liver oil of the halibut. The substance is a heavy, viscid oil of a slightly yellow colour; it is an alcohol, its formula is probably $C_{20}H_{30}O$, and its vitamin potency is of the same order as that of the recently discovered 'calciferol'. Sufficient work has

not yet been done to enable us to say that the substance is pure vitamin A, but it seems very probable that its purity is approximately ninety per cent.

Ouabain.

OUABAIN, $C_{30}H_{46}O_{12}$, a crystalline glucoside occurring in the seeds of *Strophanthus gratus* and in the wood of various *Acoanthera* species, was first isolated from *Acoanthera Schimperii* by Arnaud in 1888 and named ouabain, from ouabaic, an arrow poison. It is described in the German Pharmacopœia (1926) and is included in the United States Pharmacopœia (1926) for use as a standard for the biological control of preparations of digitalis and strophanthus. It is particularly suited for use as a standard substance, since it is easily purified and the purity is readily ascertained by the ordinary methods of chemical analysis, so that the standard is easily reproducible. Ouabain for use as a biological standard is distributed by the Bureau of Standards in the United States, and has been recommended for use by the League of Nations Health Organisation. As a pure substance it offers decided advantages, and may eventually replace the by no means uniform strophanthin of commerce, which consists of a mixture of glucosides derived from *Strophanthus Kombé*, probably in many cases contaminated with other species not readily distinguishable. Ouabain has not hitherto been readily available commercially, but it has been prepared for a number of years past in the experimental laboratories of Messrs. Burroughs