

far more than 50 species have been recognised that have not previously been recorded from Great Britain, including at least 13 new to science. The particular aim of the collecting undertaken was the study of the fauna occurring in association with the relict arctic-alpine flora peculiar to elevations above 2,500 ft. In one group alone, consisting of the saw-flies, four species new to science, and 13 new to Great Britain were obtained, with a total of 18 species peculiar to the region specially investigated.

Botany at the Natural History Museum

MR. J. D. SNOWDEN has presented to the Department of Botany his herbarium of 2,300 plants. During his period of service as agricultural officer in Uganda, Mr. Snowden was an enthusiastic botanical collector with great opportunities of which he made full use. His collections rank, both in number and quality, among the best from the Protectorate, and include many plants discovered by himself. The specimens presented to the Museum formed his own personal set. Some of the plants were collected in the little-known Acholi Hills in the south of the Sudan, but the great majority came from Uganda, particularly from Mount Elgon, the flora of which—like that of the other great African mountains—is of exceptional interest. As an agricultural officer, Mr. Snowden knew just what was required, and his material is accompanied by adequate notes. He paid special attention to grasses, a group in which his name is commemorated by the genus *Snowdenia*.

SIR J. L. HANHAM, who accompanied Mr. J. M. Wordie's recent arctic expedition, made a collection of plants from West Greenland (500 numbers) and Baffin Land (200 numbers), together with a few lichens and mosses. Plants in the arctic are well known to be shy flowerers, and this collection contains exceptionally good specimens; they are unusually well dried, whereas so many arctic collections have suffered much from mould and mildew owing to the great humidity of the atmosphere in high latitudes. As a result, this collection is a valuable one apart from the fact that it has been made in little-known regions. Mrs. E. M. Day has presented the paintings of larger fungi made by her late husband. They number 1,400. Most of them have been examined by eminent mycologists or have been drawn from specimens named by them. An interesting fern herbarium of about 500 specimens from Trinidad has been presented by Archdeacon A. Hombersly. The herbarium is in very good condition and is of particular value as the donor used his collection as the basis of an account of the ferns of Trinidad which is now being prepared for Press. Mr. E. Heron-Allen has presented a copy of the valuable first edition of the "Thesaurus Evonymi Philatri de remediis secretis", by Conrad Gesner, 1557. This is a rare book, particularly in the first edition. It makes an interesting addition to the collection of herbals in the Department of Botany.

Die Physik

THE quarterly journal *Die Physik in Regelmässigen Berichten*, which is sponsored by the German Society

for Technical Physics, has completed its second year. As the full title implies, its contents are mainly surveys of larger or smaller fields of physics, the average length of an article being about 15 pages. The thirteen subjects dealt with range widely, and include hygrometry, acoustics, medical physics, corpuscular radiations and general quantum theory, the balance between the old and the new physics being carefully maintained. It is presumably the intention to give further surveys with the same titles, as the subjects develop, since the title of each article is followed by the numeral I. The reviews appear very thorough, considering the space available, and are all by acknowledged experts in their subjects. Thus F. Henning writes on thermal apparatus, M. Pirani on illuminants and illumination, W. O. Schumann on dielectrics and G. Wentzel on quantum theory and wave mechanics.

A FEATURE of the publication is the method of citing references to investigations mentioned in the surveys. Whenever possible, the volume and page number of the abstract in the *Physikalischen Berichte* is given, without more detailed reference, a note at the end of every article explaining that this has been done. Additional references are collected together at the end of the survey. An innovation which seems to have little to recommend it is that of numbering the pages of each survey independently, and printing this page number on the top corner of the leaf. A second set of page numbers running serially through the volume is also provided, but is in a less conspicuous position, at the bottom corner of the leaf. The periodical is published by J. A. Barth of Leipzig, and the annual subscription (post free) is 24.60 gold marks.

A New Modified Bunsen Burner

THE Bunsen burner is one of those simple and ingenious contrivances that could only have emanated from the brain of a practical genius. Unlike some of his successors to-day, Bunsen was never a *Schreibtisch-Chemiker*; flouting speculative hypotheses, he excelled in practical work of many kinds, and in devising his celebrated burner he created for himself a memorial that may well outlast his fame as an analytical investigator. Generations of chemists and physicists come, use his burner, and go; yet the principle of it stands fast. From time to time a useful modification, for example, the Meker and the Teclu, arises, and the latest, which has recently been marketed by Messrs. Amal Ltd., of Birmingham, appears to belong to this category. In this burner, a very sensitive control of the gas flow is obtained by means of a needle-valve, inserted in the orifice of the jet, which is capable of very fine adjustment by an external screw. Air-regulation is unnecessary, and the flame can be reduced almost to invisibility, by means of the needle-valve, without flashing back. As in the Meker burner, the combustion-head is perforated with many small holes, so that the flame consists of a cluster of perfectly aerated small cones. Attached to the base is an insulated hooked strip of metal for use as a holder should the burner become