mines at Mogok, Upper Burma. Chrysoberyl is usually of pronounced colours, the variety alexandrite, for example, being green by daylight and red by lamp-light, and a colourless gem of this species has not previously been recorded.

THE Department of Botany has received more than 2,900 numbers as a result of the British Museum Expedition to East Africa. These were collected by Dr. G. Taylor, assistant-keeper in the Department: some additional numbers collected by Mr. P. M. Synge have not yet arrived. Four groups of mountains were visited-Aberdare, Beringa, Ruwenzori and Elgon. The longest period was spent on Ruwenzori itself, and extensive collections were made in the Namwamba valley up to the snow line: the plants from the adjoining Nyamgassani valley, where Mr. Synge collected, will afford an interesting floristic comparison. Although main attention was paid to the mountains, the flora of the plains was worked so far as possible, and the aquatic flora from the rivers vielded much of interest in relation to researches being carried out in the Department. It is not possible to give an analysis of the collection at present, but it contains several new species and a large number of plants not previously represented in the Museum. The herbarium of William Rashleigh (1777-1855) was recently purchased from a second-hand bookseller. This is entirely of seaweeds and is contained in three volumes. Its main interest is that it contains the herbarium of John Stackhouse (1742-1819) the author of "Nereis Britannica" (1795-1801) in which some of the first post-Linnean genera of algæ were published. Some years ago, an effort was made to trace the herbarium in order to clear up some points which had arisen regarding nomenclature, but nothing could be learned beyond the fact that it had been bequeathed to Rashleigh. The collection was offered for sale in the ordinary way. A small volume of mosses collected by Dr. W. K. Kane on the U.S. Grinnell expedition in search of Sir J. Franklin (1853-55) has been purchased. These were apparently the original set of the "Kane Portfolio" arranged by T. P. James. Most of the cryptogams collected on the expedition were lost when the vessel was abandoned.

## Linnean Society of London

AT the anniversary meeting of the Linnean Society of London held on May 24, the president, Dr. W. T. Calman, delivered a presidential address, "The Meaning of Biological Classification". The Linnean Gold Medal was presented to Sir David Prain, a past-president of the Society, in recognition of his services to botany. In making the presentation, Dr. Calman mentioned that Sir David began his scientific work as a member of that great service which has produced so many eminent naturalists, the Indian Medical Service, that he became the head of Indian botany when he was superintendent of the Botanical Survey of India and of the Royal Botanical Gardens, Calcutta. When Sir David returned to England, he became director of the Royal Botanic Gardens at Kew, an office which he filled with conspicuous success

until his retirement in 1922. But although his success as an administrator has been conspicuous, he has never forgotten that the business of a scientific man is scientific research, and his contributions to systematic botany, particularly that of the Indian Empire, are of a kind that would have gladdened the heart of Linnæus himself. The following officers were elected for the year 1935-36: President, Dr. W. T. Calman; Treasurer, Mr. Francis Druce; Secretaries, Mr. John Ramsbottom (botany), and Dr. Stanley Kemp (zoology). The new members of the Council are Dr. B. Barnes, Mr. D. J. Scourfield, Lieut.-Colonel R. B. Seymour Sewell, Mr. W. H. Wilkins and Dr. E. B. Worthington. The president announced that he had appointed the following vicepresidents: Prof. G. D. Hale Carpenter, Mr. Francis Druce, Dr. Margery Knight and Prof. Macgregor Skene.

### Temperament in Industry

PROF. MAJOR GREENWOOD delivered the second of his Heath Clark Lectures, under the auspices of the National Institute of Industrial Psychology, on May 20, on "Temperaments, Physical and Psychological, in Modern Science". He pointed out that the ancient physicians were deeply conscious that differences of temperament entailed psychological consequences which expressed themselves in bodily as well as mental reactions, and that it was the duty of the physician to diagnose and treat these conditions. In Great Britain the work of Kretschmer has received considerable attention, but the infinitely clearer and scientifically more rigorous work of Boldrino and the Italian School has been unduly neglected. Boldrino has shown that it is probable that certain morphological types, roughly corresponding to the old 'sanguine' and 'melancholics', do differ in resistance to such diseases as tuberculosis, in distribution through the social classes, and even in fertility, but in respect of psychological characters there is much less evidence of any such relation. Prof. Greenwood considered the claims of some modern work on temperament that had relied on statistical correlations: he emphasised that statistical description is fundamentally group-description only, and has little diagnostic value in individual cases. He illustrated this by data on accidents, and showed that, while the application of tests would undoubtedly eliminate many likely to be accident prone, yet they would also eliminate some who are not, and so do an injustice to individuals. Although Prof. Greenwood feels that, with respect to a finer gradation of temperamental qualities, we are indefinitely far from any fool-proof system of routine testing, yet we may be near to the time when an elimination of extreme variants on a basis of temperamental tests will be practicable.

#### Poisons and their Detection

Dr. G. Roche Lynch delivered the thirtieth Bedson Lecture in Newcastle-upon-Tyne on May 16. After a brief outline of the history of poisoning from ancient times up to the beginning of scientific

investigation with Marsh, about a century ago, and Stas in 1850, Dr. Roche Lynch discussed the general characteristics of poisons. With the exception of a few of animal origin, like snake venom and certain serums, tolerance toward all poisons increases with repeated small doses; narcotics, alkaloids, metals and even castor oil. This seems to be due to growing immunity of the cells as well as to increased rate of excretion or destruction. In general, detoxication takes place mainly in the liver with increasing efficiency, the processes seeming to be developments of natural responses. Quite large amounts of the heavy metals have been found, lead up to 146 parts per million being demonstrated in normal bone where no industrial or similar causative contact had occurred. Difficulty arises with the modern synthetic medicinals; they have often only a narrow margin between the medicinal and the toxic doses and have little allowance for idiosyncrasy. Many of them are completely destroyed, or changed in the tissues into something else in a short time. The barbituric acid group are particularly dangerous, and should be brought under regulation. They are all hypnotics, but their behaviour from a toxicological point of view is very different. Some of these compounds are almost completely destroyed in the body, so that analysis only reveals a trace, and others are readily found in considerable quantity both in the excreta and in the organs. Opinion therefore as to the cause of death must depend on the type of barbiturate present and the amount isolated. Dr. Lynch then dealt in greater detail with arsenic, strychnine and carbon monoxide, illustrating his remarks with references to, and exhibits from, famous criminal

### Conservation of the Flora of Great Britain

In the report of the work of Flora's League, a society for the preservation of wild flowers, ferns and trees, covering the years 1932-34, the League records its work, in collaboration with other bodies, for the conservation of the British flora, and its plans for the future. In co-operation with the Cotteswold Naturalists' Field Club, the Gloucestershire station of Ranunculus ophioglossifolius, which grows in this and one other county only in England, has been secured for all time, while in Lancashire special efforts are being made to preserve the endangered flora of the sand-dunes in the vicinity of Ainsdale, the only known habitat of Epipactis dunensis. Following on the successful re-introduction of Maianthemum biflorum, the may lily, in Ken Wood, under the direction of Mr. J. S. L. Gilmour, assistant director of the Royal Botanic Gardens, Kew, the League has plans for the cultivation of rare species of wild-plants for their seeds, to sow in wild flower gardens or in haunts from which they have disappeared; though record of the site and other details of each such experiment will be reported to the Department of Botany of the British Museum (Natural History) to avoid any confusion of records of field botanists. Under the auspices of the Wild Plant Conservation Board of the Council for the Preservation of Rural England, the British Wild Plant Nurseries and Seed

Exchange Agency has been originated by Mr. C. S. Garret at Derby, for this purpose, but not to be run as a commercial profit-making concern; while the Green Cross Society and the British Empire Naturalists' Association, affiliated organisations, have similar seed-distributing schemes. The president and founder of the League is Sir Maurice Abbot-Anderson, and it has offices at the Council for the Preservation of Rural England at 17, Great Marlborough Street, London, W.1.

### Meteorology in Northern Rhodesia

THE Meteorological Report for Northern Rhodesia for 1931-32 (No. 9) is the first of this series that has appeared since responsibility for the direction of meteorological work in that colony was taken over by the Director of the British East African Meteorological Service (Mr. A. Walter), for although the new service was officially inaugurated in 1929, it was not until the end of 1931 that Northern Rhodesia was included in it, control being meanwhile in the hands of the Director of Surveys. The new regime began soon after the completion of the Territorial First Order Meteorological Station at Broken Hill-a station exactly similar to the other first order stations already established in Kenya, Tanganyika and Uganda. Before the end of the year, autographic records of temperature, humidity and atmospheric pressure were in operation there, and were used for obtaining the hourly readings of these elements that appear in this report for the six months January-June 1932. The work of Broken Hill includes the distribution of forms and equipment to the subsidiary stations within the colony, the handling of all the records obtained at such stations, and the issuing of weather reports, including the results of pilot balloon ascents, to aeroplanes passing over Northern Rhodesia. The report is on the same general lines as the earlier annual reports; it includes, in addition to statistical tables on normal lines, discussions of the separate meteorological elements, among which rainfall, as in the tropics generally, is of the greatest immediate practical importance. There is in addition an account of a waterspout that was seen near Nsalushi Island, in the swamp area of Lake Bangweolo, on February 19, 1932, and particulars of slight earth tremors reported from a number of subsidiary climatological stations.

# Distributing Electricity to Country Districts

During the last ten years, the distribution of electricity by means of overhead lines has made rapid progress; but there are still nearly 80 per cent of the occupied rural areas of England where electric supply is not available. There is a vast amount of development work to be done in these areas. Already the capital sunk for distributing power is considerably in excess of that used for generating power. The annual expense in distribution is at the present time three times greater than that for generation. The progress already made shows that there is plenty of scope for technical improvements which would increase the factor of safety and lower the cost of