

tributed many film and book reviews to *School Nature Study*, besides several illustrated articles based on her discriminating observations; for example, a life-history of a beautiful, ineradicable weed, a pink-flowered *Oxalis*.

Her small garden at Kew contained many cherished plants, some under glass; in the large collection of dwarf trees, each in its own pot, are an English elm

forty-two years old and a youthful common lime. I was delighted to learn that this collection had been accepted recently for the Royal Botanic Gardens, Kew.

Other evidence of the lasting influence of a gifted botanist will be passed on by her many grateful pupils, students, colleagues and other friends.

MADELINE MUNRO

## NEWS and VIEWS

### Botany at Singapore: Prof. R. E. Holttum

PROF. R. E. HOLTUM, who was the first professor of botany in the University of Malaya, has just retired after spending the greater part of his life in Malaya. He intends to live at Kew, where he will continue his studies on Malayan plants, particularly ferns. Prof. Holttum was born at Linton in Cambridgeshire and was educated at Bootham School, York, and St. John's College, Cambridge. He took the Natural Sciences Tripos with first-class honours in Parts I and II, winning the Frank Smart Prize in 1920. He first went to Malaya in 1922, when he joined the staff of the Botanic Gardens. He was appointed director of the gardens in 1933 and remained at this post until 1949, when he joined the newly created University of Malaya and brought the Department of Botany into being. Prof. Holttum's appointment was particularly valuable in the early and formative years of the University, for he has travelled widely through Malaya, Borneo and Indonesia and has an unparalleled practical knowledge of the flora of this region. During the past five years he has been very active and has set a tradition that his successor will find it hard to surpass. He has published many papers on ferns, bamboos, gingers and orchids, which are his principal botanical interests, and the past two years have been marked by the publication of some of his major works: "Orchids of Malaya" (Singapore, 1953), "Gardening in the Lowlands of Malaya" (Singapore, 1953), "Plant Life in Malaya" (London, 1954); a fourth volume, "Ferns of Malaya", is in the press. Prof. Holttum's activities in Singapore have been by no means confined to botany, for he has taken a leading part in various important societies. He will be remembered with affection by his students, his colleagues and his many friends in Singapore, who wish him a long and happy retirement near the Royal Botanic Gardens at Kew.

### Research in British Power Industries:

#### Gas and Electricity

IN a debate in the House of Commons on November 9 on the annual reports and statements of accounts of the gas and electricity industries, the Minister of Fuel and Power, Mr. Geoffrey Lloyd, said that he had agreed with the Gas Council for capital expenditure this year of £61 million. Electricity development was estimated by Lord Citrine at £1,250 million over the next six years; it should provide 1.6 million kilowatts next year and 1.95 million kilowatts in 1959. This includes a five-year programme costing £50 million to bring electricity to 70 per cent of the farms and 80 per cent of rural housing of Britain. In the first half of this year, industrial consumption of gas increased by 8 per cent and that of electricity by 14 per cent; but the gas industry had saved 250,000 tons of coal last year and the electricity

industry 1 million tons. Mr. Lloyd also referred to research on the utilization by the gas industry of inferior and cheaper coals, and to the discovery of a process for making gas from fuel oil alone, for which sixteen new plants are being erected. Questioned by Mr. A. Robens as to whether sufficient money was being spent on research in these two industries, the Parliamentary Secretary to the Ministry, Mr. L. W. Joynson-Hicks, said that the figures quoted by Mr. Robens, £229,000 for the gas industry and £242,900 for the electricity industry, did not represent anything like the full expenditure on research of these two industries. Much of the expenditure, he said, is to research; much work is also being done by the British Electrical and Allied Industries Research Association, and the British Electricity Authority contributes to research being carried out by at least half a dozen other bodies. He promised to attempt to obtain a figure for the total expenditure on research by the industries, but was of opinion that research is not being held up on financial grounds.

#### Nuclear Power

MR. LLOYD, referring to nuclear power, emphasized the dependence of industrial power from this source upon the ordinary electricity supply system, the expansion of which is already being planned to feed industry from nuclear power stations when the practical difficulties have been overcome. Mr. Lloyd explained why at present in the experimental atomic power stations steam generation is not close-coupled with the furnace, and also referred to the problem of nuclear fuel and the possibility of utilizing as fuel most of the uranium extracted from the ore. Engineers from the British Electricity Authority are already attending training courses at Harwell, and from now on there will be a steady stream of electrical engineers attending these courses. The British Electricity Authority is collaborating closely with the Atomic Energy Authority, and also with the plant manufacturers, in the design of experimental nuclear power stations by making freely available its experience regarding turbines and power-station construction generally. Mr. Lloyd also said that, with the view of encouraging enterprise and, where proper, a spirit of adventure, the Government has decided to encourage these two nationalized industries to compete with each other as actively as possible and with the oil industry. In the course of the debate, Mr. G. Nabarro expressed the opinion that the prototype and pilot nuclear power station at Calder Hall, with a capacity of 60,000 kW., would be completed by the end of 1956, and that such plants would be making a substantial contribution to grid supplies of electricity well within ten years. Mr. Joynson-Hicks, however, maintained that it would be unreasonable, in view of the vast amount of work and planning to