

pine and European larch. Of the conifers, Corsican pine is particularly recommended, as it is not exacting in its requirements, stands up to smoky conditions, and thrives on a low rainfall.

Apart from soil conditions, the choice of tree species may be limited owing to exposure of the site to wind and insolation, especially at high elevations. In exposed situations, where shelter is required at any cost, alder, wych elm, thorn, elder, willow and stout birch plants have been recommended. The conifers, Sitka spruce and Scots pine, are suited to planting at relatively high altitudes. On exposed sites it is important that the planting stock be not too large in order to avoid damage by wind before it becomes properly acclimatized.

Air pollution by certain gases may prevent the establishment of any kind of vegetation, while with other forms of pollution, such as smoke, vegetation can be grown, but the species must be carefully selected. Deciduous species have an advantage over conifers in that they lose their foliage annually, whereas conifers usually retain their needles for several years. Among the species that have been recommended to stand up to smoky conditions are alder, willow, birch, mountain ash, London plane, certain species of poplar and Corsican pine.

A hazard to the success of spoil mound plantations that has nothing to do with choice of species or method of planting is the possible interference with, and injury and ultimate destruction of, the trees by animals or human beings. Fencing affords protection, but is expensive and not necessarily effective where children are concerned. It is far better to give them a personal constructive interest in the plantation by enlisting their help in its establishment.

The ultimate value of tree plantations depends not only on the successful establishment of the plants but also on their subsequent care, particularly in the early stages of development. Close attention should also be given to the sequence of succession that will best meet the needs of the planning authorities and at the same time satisfy ecological requirements.

With reference to the problem of spoil-mound reclamation in Great Britain, the general conclusion that can be drawn after visiting representative areas in the Birmingham conurbation and in South Wales is that a great deal can be done in a short period, and reasonably soon after tipping has stopped, provided soil analyses are made and expert advice taken regarding the selection of species and the methods that are to be adopted. A full statement of the information available from the literature and from local experience is now in preparation, to be issued as a Joint Publication of the Imperial Agricultural Bureaux.

## OBITUARIES

### Sir Julien Cahn, Bart.

SIR JULIEN CAHN, BART., who died on September 26, aged sixty-two, was known to a wide circle as a keen sportsman; he was particularly interested in cricket and he took teams to many parts of the Empire and to many countries. He was a far-seeing philanthropist, being a generous supporter of medicine and hospitals and particularly of the cause of reducing maternal mortality. It was due, too, to Sir Julien Cahn's munificence that it was possible to found the Cahn Hill Improvement Scheme in connexion with

the University of Wales, Aberystwyth—that was in 1932 and before any purposeful action was being taken to increase home food production in the event of war. The nation owes much to Sir Julien Cahn because, as a result of the experiments then started on the hill and rough lands of Wales, the foundations were laid for establishing a technique applicable to the radical improvement and more intensive utilization not only of such lands but also of much neglected pasture in the lowlands.

During the War of 1914–18, the rough and hill lands of England and Wales (more than 5,000,000 acres) made no materially increased contribution to our food resources: in this War the matter has been very different, as is well exemplified by the pioneer endeavours of the Montgomeryshire War Agricultural Committee and by the work undertaken by the Committees in Lancashire and Breconshire and by those of many other counties of England and Wales. The success and magnitude of all this work have been, in no small measure, due to the good and quick start that was rendered possible by the results of the investigations which Sir Julien Cahn had so largely financed. Of the many lessons of the War, few are more compelling than the emphasis that must necessarily be put on the importance of the rising generation and on a thriving agriculture, capable at all times of producing an abundance of food.

The War has, therefore, greatly accentuated the wisdom behind, and the value to the nation of, Sir Julien Cahn's benefactions—benefactions which have served as an inspiration to large numbers of workers in two of the most important fields of national endeavour.

R. G. STAPLEDON.

### Prof. F. Plzák

News has reached London that the death of Dr. F. Plzák, professor of organic chemistry at the Charles University of Prague, occurred there on May 4. Prof. Plzák, who was sixty-six years of age, had occupied the chair of organic chemistry since 1910 and was at one time well known in America and to a less extent in Great Britain, being a frequent visitor prior to the outbreak of the War of 1914–18. Before entering the University he was employed in a pharmacy and did not graduate until he was twenty-five years old. Then he went to Zurich to study under Prof. Lorenz before becoming, first lecturer and then (1910) professor of organic chemistry. His researches were not numerous and mainly related to the lesser known alkaloids (for example, tubocourare) and glycosides (for example, cyclamin,  $C_{63}H_{110}O_{32}$ , which he found in potatoes as well as in cyclamen tubers, and showed to contain various sugar groups). Plzák was part-author (with Prof. Baborovský) of a standard Czech work on electrochemistry.

As a part of the Czech University, his laboratory was closed by the Germans in 1939 and Plzák, like the other professors, was relieved of his post. Afterwards the Chemical Institute was reopened with a German staff.

WE regret to announce the following deaths:

Dr. E. L. G. Clegg, director of the Geological Survey of India, on September 8.

The Right Hon. Sir William Mulock, K.C.M.G., vice-chancellor (1881–1900) and chancellor since 1924 of the University of Toronto, on October 1, aged one hundred.