

species, varieties and garden hybrids; and there is no doubt that he too appreciated an epicurean discussion of the virtues and failings of apples old and new. He frequently aroused the interest and envious admiration of professional and amateur fruit growers alike, less fortunate perhaps than he was in regard to frost damage to their trees, when he described the quality and quantity of the crops he gathered in his own garden.

When in South America, Sir Arthur noticed the three coloured forms of the oca (*Oxalis tuberosa*). He wished to study the relationship between the tuber colour and the structure of the flowers which proved very difficult to obtain in Great Britain, but by controlling the period of light we found it possible to obtain a few flowers at Wisley for comparison with other material grown at very high altitudes in central Europe.

During the last seven years Sir Arthur edited *Curtis's Botanical Magazine*, published by the Society, thereby maintaining the tradition so firmly established by Sir Joseph Hooker during his forty years editorship. It is deeply regretted that these activities have been so tragically terminated, but one records with gratitude the high value to us of his interest and work.

M. A. H. TINCKER.

FOR nineteen years Sir Arthur Hill held with outstanding success an official position which developments of the science of botany have made very exacting. In the middle of last century the expansion of the Empire had confirmed the commanding position of Great Britain in systematic botany: Kew was its centre, and the Hookers its leading figures. But the study of botany in the universities was at a low ebb. The publication of the "Origin of Species" led to that revival of interest in the morphology and physiology of animals and plants which sprang up at South Kensington under Huxley and Thiselton-Dyer.

Hill did not himself participate in the change, for he was then too young. Even Gardiner, under whose guidance at Cambridge he acquired the finest microscopical technique, was a product rather than an agent in the revival of botanical study there in the 'seventies. Thus Hill passed on imbued with the 'new botany' already widely current. As assistant director of Kew he had under Prain an unrivalled opportunity for systematic study. The result was that, when appointed as director after Prain's retirement, he was able to give to the botanists of his time advice and help in both branches. His genial personality made him a friend to all inquirers. In fact, he was for many years an ever-ready adviser for students, whether in the garden, the laboratory or the herbarium.

Others are giving detailed accounts of Hill's life, and its widespread Imperial activities. Here a very old friend has pleasure in telling how fully he maintained the old systematic tradition of Kew, while promoting and expanding its adaptation in the widening scope of the science to meet the needs of a later time.

F. O. BOWER.

OTHERS will have expressed their appreciation of Sir Arthur Hill's eminence as a botanist; I knew him best as a man and a gardener. What was most distinctive of him was the very wide circle of friends to whom he was "Arthur". He had a gift for friendship and as his official position at Kew brought him into contact with the lovers of gardens and trees, not only in Great Britain but also all over the English-speaking world, these acquaintances ripened easily and at once into something warmer and more intimate.

He knew plants as few men did; he appreciated their points of interest and he liked to draw others into his own appreciations; I remember him perhaps at his happiest when at certain dinners, where gardeners or men of science met to exchange experiences, he was explaining the special features of things he had brought from Kew. This ease of intercourse was of great value to him officially. As a Government Department Kew Gardens belongs to the Ministry of Agriculture, its expenditure requires the sanction of the Treasury, its buildings, glass houses and the like have to be dealt with by the Office of Works. It is easy for any of these great offices to adopt an unsympathetic attitude to a relatively small spending organization which does not lie within the great stream of public affairs; but Hill's tact and friendliness smoothed the way to many improvements in the Gardens and in the conditions of work of its extensive staff.

Hill's contacts with gardening were many and various; he was closely associated with the Royal Horticultural Society, from the council of which he only retired to edit on their behalf *Curtis's Botanical Magazine*, that record of new plants running back for more than a century and a half. He was long a member of the council of the John Innes Horticultural Institution, in the affairs of which his quiet judgment was always of value. No record of Hill would be complete that ignored his devotion to the Church and its social work; my last business with him was concerned with the education of two boys in difficult circumstances who had been brought to his notice through the Church.

Hill was not a player of games, his recreations were conversation and riding, and if the latter did bring him down at last, his end came instantaneously in the full tide of his enjoyment—and what better end can any man desire?

A. D. HALL.

ONE evening early in 1907 Arthur Hill called at my house in Cambridge to discuss the prospects of an appointment of which he had just heard. The post in question was that of assistant director of the Royal Botanic Gardens, Kew, in itself an attractive one; but Hill was much attached to Cambridge and to King's, and the thought of leaving was disturbing. I knew of these Cambridge attachments, but I knew, too, something of the prospects offered by Kew under Sir David Prain, then recently returned from India, and I had no hesitation in strongly advising Hill to accept the London post.

I have never had any doubt, nor I feel sure had he, that this advice was right. The more one saw of Hill and of Kew, the plainer it was how well man and post were assorted. Of this, visitors to Kew had much evidence in the condition of the Gardens; but it was not so much from the broad general picture as seen by the public as from minor indications that Hill's deep love of Kew and all that Kew stands for were to be gained. Watch him, for example, exult as a friend fails to detect on some smooth lawn the spot where a month or two before a bomb-crater yawned; or, again, note his pleasure over the complete recovery of some tropical plant, saved from destruction by the temporary repairs effected to badly damaged glass. Or accompany him on some Sunday afternoon to the loose boxes in which were two fine teams of Suffolk horses waiting impatiently for the carrots which clearly were expected as soon as Hill was seen. Trivial things these, but pointers to conditions that make the duties of a post not merely matters to be attended to, but a worth-while job.

In recent years my own association with Hill arose chiefly from the fact that we were both members of the Council of the John Innes Horticultural Institution. Here his Kew experience was most helpful to Hill's colleagues, and his loss will be much felt.

THOMAS H. MIDDLETON.

My first recollection of Arthur Hill is of seeing him riding through the streets of Cambridge. My next is of attending six lectures he gave on Algæ in the Easter Term of 1906 when he shared the elementary course with R. H. Biffen and A. C. Seward owing to the illness of Marshall Ward. By that time he had travelled to Iceland and the Andes and had written short accounts of their vegetation; his chief interest was, however, in histology, his work on protoplasmic connexions being of fundamental importance. The following year he left for Kew.

I do not think that Hill seriously concerned himself with the practice of systematic botany. He had no flair for herbarium work possibly because the new order in botanical ideas prevalent in his student days apparently regarded such studies as worthless. He was, however, a keen observer of growing plants and attributed his interest in natural history generally to the stimulus of his Marlborough days. He published a number of small systematic monographs but was attracted mainly by general problems of taxonomy, particularly the origin of Monocotyledons, which interested him to the end. The plants growing at Kew provided him with material for a steady flow of notes and papers on morphology and development; at the last meeting of the Linnean Society he exhibited a *Streptocarpus* with cleistogamous flowers.

The Royal Botanic Gardens were to Hill almost a religion. No improvement he carried out, so far as I recollect, did anything but enhance their beauty.

After the War of 1914-18 there was money available for schemes of imperial development, and Hill, always keen on travel, characteristically made full use of his opportunities. He believed in the eminence

and prestige of Kew and pushed his belief to the utmost. The Kew collections benefited from the contacts he made and he himself gained a wide first-hand knowledge of botanical conditions overseas, and in the years that followed continued and extended his interests. The tragedy of his death is that it should have occurred now, for his experience would have been invaluable in the reconstructions that are inevitable when peace ensues.

Arthur Hill was very much the boy at heart. He was the kindest of men, showing an understanding sympathy not only in the written word but also in unostentatious generosity to those in need.

J. RAMSBOTTOM.

Mr. M. Ussishkin

PALESTINE and the Jewish people have suffered a great loss through the death in Jerusalem at the age of seventy-eight of Menachem Ussishkin. He was known as "the grand old man of Zionism", and his influence was felt in every Jewish activity in Palestine. But he had a particular love for the soil of Palestine, and for the last eighteen years of his life devoted himself to the buying of land in Palestine as the collective property of the Jewish people.

Ussishkin was closely associated with the Hebrew University in Jerusalem, which was inaugurated by the late Lord Balfour in 1925. He was a member of its Board of Governors, and attended the meetings of this body not only in Palestine, but also in many different centres in Europe. He was also a member of the executive committee of the University in Jerusalem. His enthusiasm for every branch of university life, and in particular his close personal contacts with successive generations of students, gave him a great influence on the development of the Hebrew University, which now has 1,100 students with a staff of more than 125 professors and lecturers.

Ussishkin's early training in his native land, Russia, was as an engineer, but he very soon became a leading figure in the movement for the return of the Jews to Palestine, and later in the Zionist movement. He was particularly ardent in the support of the movement to revive Hebrew as a language of daily intercourse, and as a language of literary and scientific writing.

Ussishkin's most obvious characteristics were indomitable courage and uncompromising adherence to principles. At the same time he was the kindest and the most courteous of men. When he died, 50,000 people followed his coffin to the grave, for Palestine had lost in him its greatest figure.

WE regret to announce the following deaths:

Mr. V. M. Foster, geologist in the U.S. Geological Survey, on September 2, aged thirty-seven.

Prof. A. C. Fraser, professor of plant breeding in Cornell University, on September 17, aged fifty-one.

Prof. E. E. Maar, professor of the history of medicine in the University of Copenhagen, aged sixty-eight.

Mr. J. D. Martin, assistant conservator of forests, Northern Rhodesia, on November 10, aged thirty-two.