## **OBITUARIES**

# Sir Franklin Sibly, K.B.E.

THE life of the late Sir Franklin Sibly was notable as the triumph of a brilliant mind over physical After an almost precocious career as a student (he obtained the degree of D.Sc. at the age of twenty-five), he became a teacher and worker in geology. He seemed set for the life of an active academic geologist, and the work he accomplished in the ten years of this phase placed him in the front rank. But in 1920 his appointment as principal of University College, Swansea, brought out his latent genius for administration, and during the last twenty-six years of his active life he became successively vice-chancellor of the University of Wales, principal of the University of London and vicechancellor of the University of Reading. Such responsibilities might well have filled a normal life, especially since their holder was by no means physically robust; but from 1929 until 1946 he held, often concurrently, a series of administrative positions to which he brought qualities of sagacity and geniality beyond the ordinary.

There is no room in this brief account for even a bare enumeration of Sir Franklin's manifold activities; but a few aspects of his achievements may be selected to show something of his qualities. His published geological work is concerned chiefly with the Carboniferous rocks of the Mendip and Forest of Dean districts. After nearly thirty years, his papers still stand as fundamental clarifications of these complex areas—they are by way of becoming classics.

As first principal of University College, Swansea, he achieved a vast amount of constructive administrative work that gave a firm foundation for future developments. As second vice-chancellor of the University of Reading he had further opportunities for building tradition. It was in the last-named office that he spent the longest single period of his life (1929–46), and his colleagues rejoice to realize that the wisdom and friendliness that they found in him were reciprocated in his happiness among them.

In the wider academic sphere, Sir Franklin was chairman of the Executive Committee of the Universities Bureau of the British Empire from 1929 until 1934. Later (1938–43) he held a similar position in the Committee of Vice-Chancellors and Principals, and during the difficult war years exercised a guiding influence on the policy of all British universities.

As a member of the Advisory Council of the Department of Scientific and Industrial Research (for a cumulative period of ten years) he was largely instrumental in devising the conditions of award of the Department's scholarships—now widely recognized as a model for all such schemes. For thirteen years he happily combined both phases of his genius as chairman of the Geological Survey Board.

The honorary degree of LL.D. was conferred on him by the Universities of Bristol, Wales and Liverpool. He was knighted in 1938 and received the K.B.E. in 1943.

In spite of his notable services to British science and also his administrative skill, the abiding memory for those who knew him is one of friendship. His good humour and understanding sympathy were never lacking, even when failing health might have excused their lapse. He improved on the recommendation to be all things to all men by being

consistently himself to all; everyone who worked with him or for him knew him for a friend.

H. L. HAWKINS

### Mr. G. S. W. Marlow

GEORGE STANLEY WITHERS MARLOW, whose death occurred on March 5, was born in 1889, and educated at New College Choir School, Oxford, and King's College, University of London. He graduated B.Sc. in 1909, and the next year obtained his associateship of the Institute of Chemistry, taking as his special subject, food and drugs. The F.I.C. (now F.R.I.C.) followed in 1913. For a couple of years after graduating, he was assistant to Mr. E. Hinks, public analyst for the County of Surrey. In 1911, he joined the staff of the Government Chemist, where he remained until 1919, when he became assistant secretary of the Institute of Chemistry. After six years there, he left to become personal assistant to Mr. W. J. U. Woolcock, general manager of the Association of British Chemical Manufacturers. Meanwhile, in 1923, he had been called to the Bar, and decided to practise in 1927. He was a member of Gray's Inn, and pupil to the late Mr. W. Trevor Watson, K.C. He acted in such cases of chemical patents as arose, his first being the application of Boots Cash Chemists, Ltd., to revoke Sharp and Dohme in the matter of hexyl resorcinol.

In 1926, however, an event happened in Marlow's life which was to transform its pattern to a considerable extent and provide him with a task after his own heart. This was the suggestion by the Council of the Faraday Society that he should succeed the late Mr. F. S. Spiers as general secretary, and take over the management of its affairs, including the editorship of the *Transactions*. Marlow accepted, and in so doing initiated a tenure of some twenty-two years, during which the Society has advanced from strength to strength, largely due to his unflagging efforts, wisdom and guidance. Marlow lived for the Faraday Society, and his devotion to it knew no hounds.

The General Discussions, which have always been the Society's major activity, were a feature before Marlow took charge; but he managed to give them further weight and authority, at the same time enhancing their hospitable and social character. For more than a couple of decades, he always had at least one Discussion ahead, before he was clear of the one behind, and lived, scheming and planning, to make each one an individual success. He would journey to universities all over the country in search of appropriate places at which to meet, and no vicechancellor or principal was safe from his clutches in his efforts to obtain accommodation and comfortable surroundings for the participants. On these occasions, the guest-night dinners were distinguished, the secretary radiating good-fellowship throughout the evening. During one of these General Discussions, Prof. P. Debye wished to give an impromptu demonstration of the properties of a dipole. Marlow, as to the manner born, quietly handed him a cigar for the purpose. Foreign guests were his special concern; nobody was permitted to worry for a moment on account of lost luggage, money, passports, or even The secretary produced them all, safe and sound, with that engaging smile of his, as if nothing had happened.

So the years went on; the *Transactions* increased in bulk, and—during the War—no less an anxiety

for Marlow, who remained editor until 1946. But above all, they increased in quality until to-day they stand unrivalled in their own field. Marlow worked his referees hard, and they responded.

By nature, Marlow was ever ready to do people or causes a good turn, and this led to his being much in request just perhaps upon the periphery of his normal avocations. He served the Royal Institution as secretary of the Visitors' Committee, and was a manager at the time of his death. His magnanimous but firm reaction to the abortive proposal of that body to revise its by-laws somewhat drastically was characteristic. He was prepared for change, where change was necessary, but not for ruthless pruning of those noble, rounded phrases of which we shall never see the like again. He delighted in them, and all for which they stood.

In recent years, Marlow took much interest in the Society for Visiting Scientists, and would often be found at its headquarters, lending a friendly hand with whatever was afoot. But in all this, the Faraday Society was Marlow, and Marlow was the Faraday Society; wholly impossible was it to think of one without the other. And that, alas, is what in practice we are obliged to do now. Nobody is irreplaceable, but Marlow's life-line had been approaching the asymptote of indispensability for a number of years, and with its end the margin of contact is seen to be exceptionally narrow

ERIC K. RIDEAL

F. I. G. RAWLINS

### Prof. Selig Hecht

The death of Prof. Selig Hecht in New York on September 18, 1947, at the age of fifty-five, deprives the physiology of vision of one of its most outstanding workers. Hecht was born in Austria and was brought to the United States as a child. He studied and worked in the United States, in England, Germany and Italy. After a broad biological training, he devoted his life to the study of the mechanisms of vision, considered as a branch of general physiology. He became professor of biophysics at Columbia University and made his laboratory an international centre of visual research.

Hecht's main work was concerned with the investigation of the many visual functions in man, such as dark-adaptation, intensity discrimination, acuity and colour vision. He had begun, however, by studying the reaction to light of simple organisms, such as the clam Mya arenaria, and he carried out some remarkable experiments on the vision of insects. He also worked on the photochemistry of visual purple. All these researches were inter-connected comparative studies trying to reach the principles of visual response. Hecht's method was quantitative and his experimental standards exacting. The introduction to his lucidly written papers was often a concise but critical synthesis of a mass of literature on the subject, including the early classical work, of which he had an exhaustive knowledge. His aim, he said, was not to add to, but rather to subtract from, the literature on vision.

The leading idea of Hecht's research was that the very first reactions which take place between light and the photo-receptors are bound to determine to a large extent the characteristics of the visual response. He therefore concentrated his attention on these reactions, because they were easier to study than more central processes, especially those in the brain.

One result of his work was to establish beyond doubt the duplex nature of the mechanisms of the human retina, corresponding to the division of its photoreceptors into rods and cones. He clarified the relation between the rod visibility curve and the absorption of visual purple, and he devoted much attention to the photo-chemistry and kinetics of the reactions initiated by light in the receptors, introducing the notion of the 'stationary state' of excitation.

Just before the War, Hecht took up with characteristic thoroughness the problem of the minimum energy necessary for vision. He found that a man can see a source of light which delivers to his retina only six quanta or so, absorbed by the visual purple of the rods. Stimuli consisting of such small quantities of light have unique properties; for example, they undergo from one trial to the next uncontrollable variations, which are related to the uncertainty of seeing observed in the measurements.

Hecht worked strenuously on visual research for the American Forces during the War. As he was preparing to return to the study of quantum problems, he died suddenly of a coronary thrombosis.

A painter and a man of discriminating taste, Hecht had many interests. A well-done piece of scientific work would fill him with delight. It was both as a scientific man and as an artist that, for example, he admired Schultze's pioneer work and his drawings of the retina. He was a brilliant lecturer and expositor -he wrote a book entitled "Explaining the Atom". The lack of synthesis discernible in present-day knowledge and teaching perturbed him, and he took an active interest in all the human implications of science. He dealt with persons and ideas on the basis of their intrinsic worth and was always ready to give genuine help, so that he won the affection of all those working with him. Selig Hecht will be mourned by many friends and colleagues throughout the world, and his death is a great loss to science.

M. H. PIRENNE

#### Prof. M. C. Potter

Prof. N. S. Alexander, Physics Department, Raffles College, Singapore, writes: An interesting link with Victorian science ends with the death at the age of nearly ninety of Prof. M. C. Potter [see Nature, April 17, p. 590]. Some time ago, Prof. Potter presented me with a copy of "A Treatise on Hydrostatics and Hydrodynamics" written by his uncle, Dr. Richard Potter, formerly professor of natural philosophy in University College, London. Part 2 of this work was completed in 1880, the author being then eighty-one years of age, and was published by M. C. Potter in 1887. These two lives between them span nearly 150 years.

Richard Potter's book takes one back into the 'caloric' controversy, and his views are sufficiently shown by the following quotations: (a) referring among others to Rumford's experiments, "The whole three cases are mills for grinding atmospheric air under pressure with the production of heat from its condensation"; (b) "In Mr. Joule's experiments which were performed in air, the effect rising from its presence is entirely neglected, and the phenomena of heat being attributed to the mechanical force applied alone . . . the conclusions drawn from them are erroneous"; (c) "c/c" (the ratio of the principal specific heats of a gas) = 1 nearly for small values of  $\delta$  (the condensation), and the *instantaneous* change