

by the resemblance between these effects and those of adrenaline. These researches led him, far in advance of his time, to propose the concept of the chemical transmission of nerve impulses, thereby anticipating by nearly a quarter of a century the flood of productive work in this field. His election to the Royal Society in 1913 was a well-merited recognition of his brilliance.

In 1906, Elliott resumed his medical studies and, four short years later, he was appointed physician to University College Hospital, London. There he became closely associated with Thomas Lewis. This was the turning-point. The traditional structure of education in medicine had long been giving cause for concern, and the appointment of a Royal Commission under Lord Haldane to report on university education in London was the occasion for its searching analysis. Among the proposals made was that recommending the creation of whole-time professorial posts in clinical subjects. But the First World War came and delayed its implementation, and Elliott was in France by September 1914. Then followed four years of intensive work in which Elliott became the projection into the battlefield of the medical knowledge and skills which Walter Fletcher, of the old Medical Research Committee, was brilliantly mobilizing at home. As Elliott himself admitted, it was here that he discovered his power for combining science and administration.

The War ended; attention returned to the Haldane Report and Elliott became, inevitably, one of the first whole-time professors of medicine in London. It was expected that this would herald a spate of researches in the clinical field comparable to those that distinguished his early days in physiology. That this did not happen was largely Elliott's conscious decision. He recognized that, if clinical research was to draw level with the experimental biological sciences, then his generation had to sacrifice their personal advancement to developing and organizing the new scientific medicine; and the state of medical progress in Britain to-day is the present memorial to him and his fellows. The advancement of knowledge was his criterion. From the earliest days he was associated with the Medical Research Committee, and he was the only man who has ever served three full terms as a scientific member of its successor, the Medical Research Council. As an indication of the respect in which his judgment was held, it may be mentioned that, young as he was and not a member of the Committee, his advice was asked on the appointment of the first secretary, and it was he who suggested Walter Morley Fletcher.

But in the notices that have appeared since Elliott's death there has been one note common to all—respect for him as a man. Many men have been intelligent, upright and courageous, but in addition Elliott possessed an almost disconcerting ability to detect bias and an indifference to credit that, but for his tolerance, would have made him forbidding. It is no wonder that he remained the trusted counsellor of men with great responsibilities, or that, in need, his was the aid that was sought.

H. P. HIMSWORTH

Rev. J. E. Hull

WITH the death of the Rev. J. E. Hull in October 1960 at the advanced age of ninety-seven we have lost the last of the Rev. O. Pickard-Cambridge's pupils in the study of spiders.

After leaving St. Bede's College, Hull took a degree in mathematics in the University of Durham before returning to St. Bede's as vice-principal in 1890. Later, his work as a clergyman in various North-umberland parishes confined his natural history work mainly to that county.

He shared with Dr. A. R. Jackson and W. Falconer the chief credit for making known the spider fauna of northern England. He described two British spiders new to science, and six of his proposed new genera have survived. He also did extensive work on mites and edited a northern quarterly journal, *The Vasculum*. His last paper was published when he was ninety-two.

W. S. BRISTOWE

Dr. M. F. E. Nicolai

DR. M. F. EMLIE NICOLAI, algologist and biophysicist, director of the Hydrobiological Institute at Hilversum, Holland, died suddenly at her home in Holland on March 13. There can be few people whose passing has brought sorrow to such a wide circle of devoted friends.

Dr. Nicolai was born at The Hague on June 27, 1900 where she received her early education. In 1918 she entered the University of Leyden as a student in biology and in the subsequent years she studied botany, zoology, mineralogy, geology, chemistry and physics. Her doctor's degree was awarded in 1929 on a thesis "On Changes in Permeability in the Root Cells of *Sinapis alba*". She remained associated with Leyden until 1942 first as assistant, and later head assistant, to Prof. J. M. Janse and then, from 1931 onwards, to Prof. L. G. M. Baas Beeking. During this time her published work lay in the fields of physiology and ecology, though one of her papers (on chlorophyll multilayers, with Dr. C. Weurman) already indicated her interest in the application of physical principles and methods in biology. Her first serious work in the fields both of algology and in biophysics came during this period when, in 1937, she visited the Eidgenossische Technische Hochschule, Zurich, to work under Prof. Dr. A. Frey-Wyssling on the cell wall structure of *Chaetomorpha*. It was no mere coincidence that at this same time my own interests had turned toward the related genus *Cladophora*, causing us afterwards to work closely together for so many years. In 1942 Dr. Nicolai transferred to the Fibre Research Institute, Delft, under Dr. J. R. H. van Nouhouys, and in 1946 became head of the Biological Department. Though, so far as I know, she never worked with him, she was deeply impressed by Prof. G. van Iterson, jun., and it was largely through his influence that in 1947 she came to England first as my research assistant and then as lecturer at Leeds. This was the beginning of a fruitful collaboration on wall structure in the algae lasting almost ten years, opening up a new field and laying down a foundation of work for many years still to come. It was during this period that she made her name as an algologist. Our collaboration terminated when her loyalty to her country led her in 1957 to accept the position of director of the newly founded Hydrobiological Institute in Holland, though she frequently returned to Leeds.

Dr. Nicolai was a botanist of wide experience and a first-class investigator, and for this alone her death would be a serious loss. But she was much else beside. Warm-hearted and generous and with friendliness overflowing to all, 'Nick's' intuitive