

and friends of diverse disciplines and outlook, and added much to the life of the University and of the wider community. While continuing, together with his students, the cytogenetic study of oats and wheat, his published papers of this period and later cover many fields of interest, notably the structure of chromosomes and their behaviour at meiosis, atypical features of cell division in relation to the cancer problem and the role of the nucleus in growth and differentiation.

Huskins was invited to a professorship in botany in the University of Wisconsin in 1945. He left Canada with many regrets, but kept in close contact with colleagues and friends there and with the Royal Society of Canada, of the Biological and Medical Sciences Section of which he was president in 1951. At Wisconsin he devoted much energy to general questions of education and helped to formulate and put into action the University's programme of integrated liberal studies.

In 1923 Huskins married Margaret Villy, a native of Manchester, who was at that time lecturer in English in the University of Alberta. Her steady wisdom and unusual artistic and spiritual qualities contributed greatly to the delight of their home, always generously open to many students and friends. Her death in March of last year, after a long illness, clouded the closing months of Huskins's life. They are survived by two daughters and a son.

In his scientific approach Huskins combined a mistrust of simplification and generalization with a driving desire to find a pattern in diversity. Never content to isolate a problem, however deeply absorbed in it, he always tried to relate his thoughts and findings not only to neighbouring scientific fields, but also to practical, social and philosophical questions. He was a champion of the exception, and throughout his life his receptive and tenacious mind built up a store of intellectual and spiritual valuables which he sought continuously to set into a meaningful pattern. He had great energy and a taste for the purposeful use of time, effort and material. These characteristics were expressed in a love of physical work (he was skilled in many useful crafts), in quick movements and speech, and in a rich imagination promptly and emphatically expressed. To his students he was a buoyantly enthusiastic and versatile personality and a stimulating friend. He will be sadly missed for the fire and colour which he lent to all his enterprises.

#### Prof. W. K. Fisher

WALTER KENRICK FISHER, professor emeritus of zoology at Stanford University, died on November 2 in California. He was born in Ossining, New York, on February 1, 1878, the son of A. K. Fisher, a prominent naturalist and one of the founders of the U.S. Biological Survey. After a boyhood in New York State and Washington, D.C., his entire academic career was associated with Stanford University, from which he graduated in 1901, with a doctorate in 1906. He was early interested in botany, as well as in art, but turned to zoology as the result of summers as field naturalist with the Biological Survey, and two voyages as assistant on the famous *Albatross* expeditions, in 1902 and 1904. The wealth of collections from these cruises and other Pacific sources led him into the taxonomy of the echinoderms, in which he soon became a recognized authority.

Prof. Fisher published "Starfishes of the Hawaiian Islands" in 1906, and in 1911 there appeared "Asteroidea of the North Pacific and Adjacent Waters", a monograph of the U.S. National Museum. Part 2 of this appeared in 1928 and Part 3 in 1930, making nearly a thousand pages. In 1940 he published "Asteroidea", based on the "Discovery" Expeditions. These are, however, but the chief monuments of his work. Dozens of smaller papers, not only on echinoderms but also on other invertebrates, attested his wide competence.

He was a Fellow of the California Academy of Sciences, and was a curator of its collections during 1916-32. He had a continuing interest in ornithology, having been a president of the Cooper Ornithological Society, and an editor of its journal, *The Condor*.

Appointed assistant professor of zoology at Stanford in 1909, in 1917 Dr. Fisher became resident director of the Hopkins Marine Station, a division of the University, which had just moved to new quarters at Pacific Grove. At first almost alone, later with an increasing resident staff, he studied the rich fauna of the Monterey Bay region, and built up the reputation of the laboratory as a year-round centre of biological and oceanographical investigation. He was an effective teacher, influencing the careers of many students.

After his retirement in 1943, Prof. Fisher found time to develop his artistic ability. He had long illustrated his own scientific papers in beautiful manner, but now he could take up oil painting. Many careful still-lives and portraits displayed his real talent in this direction: texture and the play of colour on surfaces especially intrigued him. Yet he also continued zoological study, as research associate of the Smithsonian Institution, and was working on collections from that Museum, and naming new species, up to the last week of his life.

In a biological science tending strongly in other directions, Prof. Fisher was admired and respected as a great protagonist of accurate, scholarly taxonomic work. As one of his colleagues recently wrote: "Systematic Zoology has lost one of its best friends, because he combined so many fine qualities with so much zoological knowledge". L. R. BLINKS

#### Dr. A. L. Hagedoorn

By the death of Dr. A. L. Hagedoorn, on November 20, genetics has lost one of its most colourful figures. An iconoclast by nature, he entered with zest into controversy, especially where established notions were the object of attack. Indeed, it was the lure of battle that brought him as an eager recruit into the Mendelian camp in the early days. But argument never soured Hagedoorn; he remained eager, full of wit and zest, always good-tempered and genial, and always ready with help, advice and encouragement.

Hagedoorn was born in Amsterdam in 1885 and studied at the University there for a short while before going to the United States in 1909, where he studied under Loeb at the University of California, obtaining his doctor's degree for a thesis on "The Purely Maternal Characters of the Hybrids produced from Eggs of *Strongylocentrotus*". He was one of the small band of early Mendelian experimenters, doing pioneer work mainly with mice and to a less extent with rats, guinea pigs and rabbits. He was quick to point out the analogies in the inheritance of coat colours in rodents, though he failed to formulate the generalization which some years later