

diffusion (in earlier nomenclature) increased as the four-thirds power of the scale of the diffusion process. This same 'law' has been inferred by Von Weizsäcker, Heisenberg and others from current theory, and Richardson's last hydrodynamical paper, in 1952, was a return to this field of study.

Richardson's association with the Meteorological Office ended in 1920 when it became a department of the Air Ministry and he felt compelled to resign on grounds of conscience. He became head of the Physics Department at Westminster Training College and, in 1929, principal of the Paisley Technical College. His interest shifted in the late '20s and the '30s to international relations and the psychological factors leading to war, and to this end he equipped himself in 1929, when nearly fifty years of age, with a degree in psychology. He retired from Paisley in 1940 in order to prosecute this study more fully, and the results are largely contained, in microfilm form, in a revised edition of his 1939 volume on "Generalised Foreign Politics".

Richardson was honorary secretary of the Royal Meteorological Society during 1921-24, a D.Sc. of the University of London and was elected Fellow of the Royal Society in 1926. He was a patient and original teacher, delighting in ingenious practical demonstrations with simple apparatus. His writings were utterly individual in style and highly entertaining; but few concessions were made to the reader. A fellow undergraduate at King's College said of him, "Lewis was a rock and flew his colours with superb, audacious gallantry". The audaciousness became with the years an understanding gentleness, but the superb gallantry increased. He married Dorothy, daughter of the late Dr. William Garnett, by whom he is survived with their two sons and daughter.

P. A. SHEPPARD

Prof. E. Bataillon

EUGÈNE BATAILLON died on November 1 at the age of eighty-nine. He started his scientific career in the Faculty of Sciences at Lyons, his first publication on amphibian embryology appearing in 1888. Afterwards he became professor of zoology at Dijon and, after 1918, professor in the University of Strasbourg. Later he became professor of zoology in the University of Montpellier, where he remained until he retired in 1932. He was a member of the

Paris Academy of Sciences and received a number of prizes, including the Prix Osiris.

Bataillon covered a wide field of experimental cytology, including studies on the parthenogenetic activation of amphibian, lamprey and fish eggs, on morphogenesis and evolution, on the effect of heat on the gametes of the frog, on interspecific and intergeneric fertilization, on polyspermy and on the electrical properties of unfertilized, activated and fertilized frog eggs; but he became world-famous through his discovery that the unfertilized egg of the frog could be induced to develop parthenogenetically by puncture with a fine glass or metal needle. Bataillon found that this treatment was more successful when the needle was contaminated with blood or other foreign bodies. What is the nature of the stimulus exerted by these contaminating materials? Are they thromboplastic or must they contain nucleoproteins? This is a problem which is just as interesting to-day as it was when Bataillon first formulated it at the beginning of this century.

In a famous paper on traumatic parthenogenetic activation, published in 1910¹, Bataillon said: "Cette parthénogenèse effective chez un vertébré était, pour moi, un résultat inespéré. L'élevage des larves étant en général facile, un chercheur bien installé pourra peut-être aborder sur ce matériel la solution de problèmes fondamentaux"—a prediction which was confirmed by Loeb and Bancroft² when they announced in 1913 that a parthenogenetic frog, obtained by Bataillon's method, was a female. Bataillon went on to say: "... ce n'est pas au hasard que ces expériences ont été faites". I think Bataillon was stimulated to do these experiments by the belief that spermatozoa puncture or bore through the egg surface at fertilization. To-day we do not believe that this is the case and consider, rightly or wrongly, that after enzymes from the head of the spermatozoon have softened up the egg surface, the egg engulfs the spermatozoon, as in phagocytosis.

Whatever the reasons that prompted Bataillon to carry out his experiments, they remain some of the most exciting and important in cell physiology. Many experiments still remain to be done using the elegant technique he discovered nearly fifty years ago.

ROTHSCHILD

¹ Bataillon, E., *C.R. Acad. Sci., Paris*, 150, 996 (1910).

² Loeb, J., and Bancroft, F. W., *J. Exp. Zool.*, 14, 275 (1913).

NEWS and VIEWS

Cavendish Chair in Cambridge:

Prof. N. F. Mott, F.R.S.

PROF. N. F. MOTT, Henry Overton Wills professor of physics in the University of Bristol, has been appointed Cavendish professor of experimental physics in the University of Cambridge in succession to Sir Lawrence Bragg, who is going to the Royal Institution (see *Nature*, May 9, p. 819). The departure of Prof. Mott from Bristol next autumn will end twenty-one years service to its University. Succeeding Sir John Lennard-Jones as professor of theoretical physics in 1933, he chose to take up fields of inquiry new to him, but suited to facilities in men and equipment available in the Wills Laboratory. Soon contributing to the theory of metals and alloys through his standard treatise with H. Jones, he was

then led to the study of electronic processes in crystals with special reference to semiconductors, insulators and the photographic latent image. Since the Second World War he has been particularly concerned with the mechanical properties of the solid state. His work in all these fields has been marked by a flair not only for initiating and stimulating theoretical work, but also for guiding experimenters into new and exciting fields of laboratory study. Moreover, by organizing successful conferences and summer schools in the Wills Laboratory, he has done much to promote a wider interest in these subjects throughout the country. As a leader of a combined team of theorists and experimenters with a common purpose, he has no superior. When he succeeded Prof. A. M. Tyndall as director of the Wills Laboratory in 1948, Prof. Mott met his increased administrative