

the time in England. It was illustrated with many beautiful coloured plates, drawn, some by himself and others by Mrs. Crookshank. He was elected at about this time to a professorship of bacteriology in King's College, London, and founded there the first laboratory of bacteriology to be established in Great Britain.

Crookshank now devoted himself to research and educational work. He studied photomicrography, and in 1887 published a volume entitled "Photography of Bacteria." Many of his photomicrographs of this early period are excellent, and scarcely to be bettered now. In 1885 and 1886 he was studying the malaria parasite and trypanosomes. He was one of the first to recognise and confirm Laveran's work on the malaria parasite, and also confirmed the work of Evans on the trypanosome of surra, a disease of horses; and he published a paper in the *Journal of the Royal Microscopical Society* (1886) on the trypanosome of the rat, and his study of this parasite left little for later investigators to describe as regards its morphology and structure. Crookshank now in quick succession undertook researches on behalf of the Government, and furnished reports to the Agricultural Department of the Privy Council on scarlet fever and the Hendon cow disease (1887); anthrax, particularly in swine (1888); tuberculosis and actinomycosis in cattle (1888). His investigation of the Hendon outbreak of disease in cows, also of a similar outbreak in Wiltshire, proved that the condition was one of cow-pox.

This doubtless directed Crookshank's attention to smallpox and vaccination, with the result that he published in 1889 a considerable work in two large volumes on the "History and Pathology of Vaccination." He surveyed the earlier literature, and for this purpose the old book shops of Leipzig and elsewhere were searched for early and rare tracts and treatises, of which he acquired a unique collection. His views on the subject were decidedly heterodox, and at the time gained few adherents, though his criticism of some of the then popular conceptions would now be admitted as sound. He also studied the bacterial flora of calf-lymph, and while isolating numerous species from it, definitely asserted that not one of them is peculiar to vaccine

lymph, and that the nature of the contagion is unknown.

With the exception of two papers on the chemistry of Koch's old tuberculin, this was Crookshank's last work of scientific importance, and in 1901 he resigned his professorship, being elected emeritus professor, and retired to his estate near East Grinstead. Here, while taking his share in local interests and becoming a Justice of the Peace, he maintained to the last a keen interest in scientific work and took a deep and active interest in the Royal Veterinary College, where he had lectured in early years, and of which he was a governor for nearly forty years, and had much to do with the recent developments in that institution.

Crookshank travelled much, was a keen fisherman, a good shot, and a skilled hunter of big game. Within the last year he had the good fortune to find and excavate some interesting Roman remains on his estate.

R. T. HEWLETT.

As a result of a motor-cycle accident near Aberdeen on July 2, Mr. Alexander Reid has died at the early age of twenty-two years. A young man of great personal charm and scientific promise, he took his degree with honours in mathematics and natural philosophy two years ago at the University of Aberdeen. Since then he has been engaged in teaching and research. His work on the diffraction of cathode rays through thin films of celluloid, a preliminary account of which appeared in *NATURE* a year ago, has attracted wide interest. By a melancholy coincidence his definitive paper appeared in the *Proceedings of the Royal Society* within a day or two of his death. His remarkable success in the short time allowed him makes his early death peculiarly tragic, and his lovable nature had endeared him to all who knew him.

WE regret to announce the following deaths:—

Sir Frank Sly, K.C.S.I., formerly Governor of the Central Provinces, who took a prominent part in the development of agricultural research in India, on July 16, aged sixty-two years.

Sir George Wills, Bart., president of the Imperial Tobacco Company, a munificent benefactor of the University of Bristol and of the Bristol Museum and Art Gallery, on July 11, aged seventy-four years.

News and Views.

MANY scientific workers will remember the disappointment caused at the Oxford meeting of the British Association by the exclusion of a film of Chilian and Peruvian birds with which Mr. R. C. Murphy, of the American Museum of Natural History, had intended to illustrate a lecture. This year two similar incidents have occurred. Mr. Beebe, the eminent naturalist, was obliged to pay full duty on a film of a microscopical subject which he introduced for the purpose of exhibition to a learned society, and Mr. Wright, the distinguished American astronomer, who wished to use a film to illustrate a lecture before the Royal Astronomical Society, not only had to pay duty on his film, but was also put to a good

deal of trouble by the Customs authorities. On hearing of Mr. Beebe's experience, the Association of Scientific Workers communicated with the Financial Secretary of the Treasury asking, either that special concessions should be granted as a matter of courtesy to accredited scientific workers wishing to introduce such films from abroad, or that the Finance Act be so amended as to allow for their importation without payment of duty. Independently, Captain Ian Fraser moved an amendment to the Finance Act of 1925 in the House of Commons on July 3 to the same effect. No decision has yet been reached, but, replying in the House of Commons to a question put by Sir Harry Brittain, the Financial Secretary to the Treasury