

in particular. Beginning the First World War as a company commander, he ended it as a lieutenant-colonel. Had he not chosen the path of scholarship, Kenyon might have been a soldier of distinction. He touched nothing which he did not adorn.

He married in 1891 Amy, daughter of Rowland Hunt. She died in 1938. Of his two daughters the elder is a well-known archæologist.

F. G. RENDALL

#### Dr. William McRae, C.I.E.

WILLIAM McRAE was born in Scotland in 1878 and graduated in the University of Edinburgh, from which he later received the degree of D.Sc. He arrived in India on March 28, 1908, and joined the Agricultural Service as a mycologist at the Imperial Institute of Agricultural Research, Pusa, now the Indian Agricultural Research Institute, New Delhi. Dr. McRae's services were placed at the disposal of the Government of Madras with effect from January 1, 1910, for employment in the local Agricultural Department, where he served for nine years as Government mycologist and as the principal of the Agricultural College. During the period of his tenure in Madras he developed both mycological research and teaching. He successfully conducted campaigns against the serious disease of palms which is responsible for bud-rot. Earlier he also investigated the blister blight of tea which was responsible for heavy losses in tea plantations in Darjeeling, and published an extremely valuable bulletin on the subject, in which he described the control measures of this serious disease.

In 1920 Dr. McRae returned to Pusa as head of the Mycological Section of the Imperial Institute for Agricultural Research, a post which he held until the end of his service, except for intervals when he acted as agricultural adviser to the Government of India or as agricultural expert to the Indian Council of Agricultural Research. He was responsible for valuable investigations on the wilt disease of pigeon-pea, the mosaic disease of sugar-cane and also foot-rot of betel vine. He held the posts of joint director and that of director of the Imperial Institute of Agricultural Research, Pusa, in addition to his own duties, for short periods.

Dr. McRae made valuable contributions to the investigation of plant diseases and published more than twenty-one scientific papers. In recognition of

his work he was appointed C.I.E. in 1934. He was placed on the retired list after more than twenty-five years service on June 23, 1934. He was one of the most energetic men in the Indian Agricultural Service, and besides being an able scientist he also had the reputation of a good administrator and a great disciplinarian, who spared no pains in the development of mycological research and kept up the standards so well established by Dr. E. J. (later Sir Edwin) Butler, whom he succeeded. In Dr. McRae's death on July 8, India has lost not only an outstanding scientist, but also a friend who will be held in esteem for a long time to come.

R. S. VASUDEVA

#### The Right Hon. Lord Macmillan, G.C.V.O.

MR. W. D. STURCH, secretary to the Royal Commission for the Exhibition of 1851, writes: "Lord Macmillan, who died on September 5, was chairman of the Board of Management of the Royal Commission for the Exhibition of 1851. He took a close personal interest in the Commissioners' scheme of science research scholarships, and those who were present at the 1851 Scholars' Centenary Dinner in 1951 will surely remember him with affectionate respect. His great humanity enabled him to see scientific achievement in a true perspective, and he was not afraid to remind a gathering of distinguished scientists that they were first and foremost human beings. He was intensely proud of the scientific record of the Commissioners' research scholars, and maintained his active interest in the work of the Royal Commission until the day of his death. Scientists may well join with those in many other walks of life in mourning the loss of a great friend".

WE regret to announce the following deaths:

Prof. C. B. Fawcett, emeritus professor of geography in the University of London (University College), on September 21, aged sixty-nine.

Mr. E. H. Godfrey, formerly chief of the Agricultural Branch, Dominion Bureau of Statistics, Canada, on September 22, aged ninety.

Prof. C. H. Lees, F.R.S., emeritus professor of physics in the University of London, formerly vice-principal of Queen Mary College, on September 25, aged eighty-eight.

## NEWS and VIEWS

### Emil Fischer (1852-1919)

EMIL FISCHER, who in his life-time exerted a profound influence on chemistry and chemists of his generation and whose discoveries in biochemistry are still yielding rich harvests, was born a century ago, on October 9, 1852, at Euskirchen in Rhenish Prussia. The son of a prosperous merchant, he was apprenticed for two years to his brother-in-law, a timber-merchant, on leaving school in 1869. His interest in experimental science led to his becoming a pupil of Friedrich August Kekulé at Bonn. After working as assistant to Adolf von Baeyer at Strasbourg and Munich, he held the chairs of chemistry at Erlangen and Würzburg, and in 1892 succeeded August Wilhelm von Hofmann as professor of chemistry at Berlin. As early as 1875

he discovered phenylhydrazine, "the path-finder of carbohydrate chemistry", and described its reaction with the sugars to form osazones. He synthesized and formulated caffeine, xanthine, theobromine, glucose, fructose and veronal—the first of the barbiturates; developed a 'family tree' of gout, based on the purine nucleus; devised quantitative methods for isolating amino-acids, with which he prepared polypeptides; and, with Emil Abderhalden, did fundamental research on the specific action of enzymes. Keenly interested in the requirements of the chemical industry, he was instrumental in founding the Kaiser-Wilhelm Institut für Chemie in 1912 and in the First World War organized Germany's chemical resources. A tremendous worker with a splendid memory, Fischer was idolized by his