the organization and scope of this study should prove a model upon which investigations in other parts of the world might well be based.

V. J. CHAPMAN.

[1] Waksman, S. A., Bull. 55. Part A. Dept. of Conservation and Development, New Jersey (1942). Waksman, S. A., Schulhoff, H., Hickman, C. A., Cordon, T. C., and Stevens, S. C., Bull. 55, Part B, Dept. of Conservation and Development, New Jersey (1943).

[2] Shaler, N. S., Ann. Rep. U.S. Geol. Survey I (1884-5). Davis, J. H., State of Florida Dept. of Conservation, Bull. 25 (1943). Johnson, D. W., "The New England Acadian Shore-line" (New York, 1925).

[3] Chapman, V. J., *Proc. Geol. Assoc.*, **49**, 373 (1938).

OBITUARIES

Sir Thomas Barlow, Bt., K.C.V.O., F.R.S.

THOMAS BARLOW, who died in London on January 12, was within eight months of his hundredth birthday, which he would have well liked to see. Brought up in the cotton belt of Lancashire, in a household where character—rough hewn but solid—was the ruling factor, he was endowed with a good memory and a power of observation that has made famous naturalists; and his span covered a century in which medicine has progressed geometrically. If the wattage of life may be taken as a multiple of duration, brilliance and worth, no wonder Barlow has left a mark on his contemporaries. His middle period as popular consultant and physician to three reigning sovereigns—Robert Bridges said he knew no medical man with a more intimate personal sympathy with his patients—was preceded by a period in which he traced a common childish disorder to its origin as a deficiency disease, and was succeeded by an Indian summer in which he used his experience and still abounding energy to guide a benevolent fund which gave a sense of security to the declining days of less successful practitioners.

The early period is the one which deserves elaboration here. In 1874, when Barlow became registrar to the Hospital for Sick Children in Great Ormond Street, the hand-feeding of infants had taken a turn towards artificial foods and sterilized milk, with the result that what was called 'acute rickets' began to come to the notice of clinicians. Barlow's colleague, W. B. Cheadle (following Ingerslev in Sweden), suggested that here was scurvy grafted on the familiar tokens of rickets; but when Barlow came to make his classical study of thirty cases, published in 1883, it was evident rather that here was a clear-cut deficiency disease, namely, infantile scurvy, due simply to exclusion from the diet of something essential to healthy growth and development. It took another fifty years for the nature of scurvy to become generally recognized and the appropriate vitamin supplied. But for the first step which counts so highly, Barlow earned his election to the Royal Society in 1909 and the less glittering reward of having the disease he had described known abroad as *die barlow'sche Krankheit*.

E. C. M.

WE regret to announce the following deaths:

Dr. G. D. Elsdon, chief inspector of the Lancashire Rivers Board and formerly chief county analyst for Lancashire, on January 18, aged fifty-six.

Prof. C. B. Lipman, professor of plant physiology in the University of California, on October 22, aged sixty-one.

NEWS and VIEWS

Galton Chair of Eugenics at University College, London: Dr. L. S. Penrose

DR. L. S. PENROSE, who has just been appointed to the Galton chair of eugenics at University College, London, studied philosophy at Cambridge and proceeded to Vienna in 1923 for postgraduate work in psychology. On returning to England he took a medical degree, and during 1930–39 was research medical officer to the Royal Eastern Counties Institution at Colchester. His report on 1,280 mental defectives and 28,921 of their relatives has put the whole problem of mental defect on a new basis. Congenital mental defect may be due to single dominant genes such as that for epiloia, to single recessive genes such as that for phenylketonuria, or to numerous partially dominant genes, in which case it is inherited like other quantitative characters studied by Pearson. There are probably hundreds of types, each ultimately distinguishable clinically, with its characteristic mode of inheritance. He has paid particular attention to pre-natal environment in connexion with mongolism, placenta prævia and pyloric stenosis, and was the first to estimate the mutation-rate of an autosomal human gene. Since 1939 he has worked in London, Ontario, particularly on the genetics of insanity and on personnel tests for the Canadian Army.

Pearson and Fisher, the first occupants of the Galton chair, came to eugenics from mathematics, via statistics; Prof. Penrose comes from psychology via medicine. If his views are accepted, the eugenic movement will become a good deal more concrete. It may be no more possible to wipe out mental defect than to abolish fever; but appropriate eugenic measures might reduce certain types of defect as drastically as hygiene has reduced typhoid fever, while other types would not be reduced. Prof. Penrose will use the statistical methods developed by his predecessors, but he will use them on data which have been provided by up-to-date clinical and psychological methods.

Botany at University College, Nottingham

DR. C. G. C. CHESTERS has been recently appointed to the chair of botany at University College, Nottingham, in succession to Prof. T. A. Bennet-Clark. Prof. Chesters graduated in the University of Glasgow where he received his botanical training under the leadership of Prof. Bower and took up an appointment at Birmingham in 1927. From 1930 onwards, when he became lecturer, his energies were devoted mainly to the study of mycology, and he became reader in mycology in 1942. During this period, Prof. Chesters built up a flourishing school of mycological research. His chief mycological interests have been in the Pyrenomycetes and Phycomycetes. His work on British Pyrenomycetes, published in a series of papers from 1935 onwards, must rank as an important contribution to the study of the life-histories and taxonomy of the group and he is justly recognized as an authority in this field. More recently, Prof. Chesters has been experimenting with new methods of approach to the difficult problem of the study of the fungus flora of the soil, and he has designed special 'immersion tubes' whereby fungi can be directly isolated from the soil. Prof. Chesters' mycological activities are by no means confined to the university, for he is a prominent and active