

perience, she had a wide knowledge of the clinical and epidemiological effects of staphylococcal infection; when penicillin and other antibiotics became available she was quick to appreciate the great opportunities and the dangers created by their use. She was able to give sound advice to clinicians on the proper use of antibiotics, but without attempting to usurp the responsibility of the physician for the care of patients. She was one of the first to point out the dangers of the development of drug-resistant strains of staphylococci and other bacteria, and saw very clearly that the only rational way to meet this threat was to have a rational policy for the use and, if necessary, the restriction of antibiotics and for the control of cross-infection.

But Mary Barber was more than a clinical bacteriologist. She was intensely interested in bacteriology or microbiology for its own sake, as a branch of biology. She was always experimenting with different laboratory methods for demonstrating the behaviour of staphylococci in laboratory media, and particularly for detecting the penicillinase-producing strains which have become so prevalent in hospitals in almost all parts of the world—though she had great faith in the well-tried and simple

method of the ditch plate, a fact familiar to all who heard her give papers at meetings or read her published works. Besides her technical skill as a bacteriologist, she had also a wide knowledge of microbiology, of microbial chemistry, microbial genetics and of the relation of structure to function in antibiotics and chemotherapeutic drugs. Although in these fields she never claimed expert and detailed knowledge, her mastery of the principles, her ability to see the wood for the trees, and even at times her command of detail were remarkable. The semi-synthetic penicillins with their new range of antibacterial activity presented an exciting challenge which she was quick to take up, since it brought together so many different facets of microbiology.

As a speaker she was always interesting and stimulating, often humorous and provocative, never dull. As a person she was unique. Essentially friendly, sociable and humane, she had no use for pomp or pretentiousness. But she was forceful and outspoken in attacking attitudes of mind with which she did not agree, and in defending causes in which she believed. The world of bacteriology, and indeed the bacteriology of the world, has lost far too soon one of its most active and stimulating workers. R. KNOX

NEWS and VIEWS

Metallurgy in the University of Cambridge :

Prof. R. W. K. Honeycombe

PROF. R. W. K. HONEYCOMBE, whose election to the Goldsmiths' chair of metallurgy in the University of Cambridge was announced recently, was born and educated in Australia. He studied metallurgy in the University of Melbourne under Prof. J. Neill Greenwood. As a research officer in the lubricants and bearings section of the C.S.I.R.O. from 1942 to 1947, he worked on bearing metals and plastic deformation under Dr. F. P. Bowden. His collaboration with Dr. W. Boas during this period led to an appreciation of the role of the anisotropy in the plastic deformation of non-cubic metals when they are thermally cycled. In the Cavendish Laboratory from 1948 until 1951, first as I.C.I. Fellow, and then as a Royal Society Armourers' and Braziers' Fellow, Honeycombe's principal work was concerned with the deformation of single crystals. On his appointment as senior lecturer in physical metallurgy in the University of Sheffield in 1951, he became deeply involved in teaching as well as research and played a prominent part in developing postgraduate courses. In 1955 he was appointed to the chair of physical metallurgy. At Sheffield he has conducted researches into the deformation of alloys and into tempering, intergranular brittleness and precipitation hardening in alloy steels. He holds a substantial Science Research Council research grant in support of his work on alloy steels. Prof. Honeycombe has received the Rosenhain Medal and the Sir George Beilby Medal and Premium; he was awarded a D.Sc. by the University of Melbourne in 1961 and he has held visiting professorships in that University and in Stanford University. He has taken an active part in the life of the University of Sheffield, has served as Dean of the Faculty of Metallurgy and has been a member of the small Senate Committee charged with planning future academic developments in the University. Prof. Honeycombe succeeds Prof. A. H. Cottrell, who has been appointed deputy chief scientific adviser, Ministry of Defence (*Nature*, 208, 19; 1965).

U.S. National Bureau of Standards : Samuel Wesley Stratton Award

DR. HARRY ALLEN, deputy director of the Institute for Materials Research, and Dr. Deane B. Judd, assistant

chief of the Metrology Division, have received the 1965 Samuel Wesley Stratton Award of the National Bureau of Standards, U.S. Department of Commerce. The Award is given each year to recognize outstanding scientific or engineering achievements by a member of the staff of the Bureau. Dr. Allen was cited for "distinguished research contributions to infrared and quadrupole spectra of molecules and for leadership in advancing high resolution analysis of asymmetrical molecular tops". Dr. Allen was chief of the Analytical and Inorganic Chemistry Divisions and of the Inorganic Materials Division of the Bureau before being appointed to his present position in 1965. Dr. Judd's award was for "major basic contributions to the science of color measurement and color vision and the development of color standard for business, science and industry". Dr. Judd has worked in the National Bureau of Standards for 38 years on problems ranging from standards for colour measurement to camouflage and colour blindness.

U.S. National Bureau of Standards : Dr. R. C. Casella

DR. RUSSELL C. CASELLA has joined the U.S. National Bureau of Standards as a theoretical physicist in the Solid State Physics Group of the Institute for Materials Research. An expert in the theory of solids, he will be investigating the problem of penetration depths in the superconducting, heavily doped semiconductor, SrTiO₃. Dr. Casella has conducted investigations into the symmetry of electronic band structures, optical and superconducting properties of solids, and elementary-particle physics at the Watson Research Center of International Business Machines. From 1952 until 1958 he was a graduate student and research associate at the University of Illinois. He has also worked at the Air Force Research Center at Cambridge, Massachusetts. Dr. Casella was born in Framingham, Massachusetts, and received his B.S. from the Massachusetts Institute of Technology in 1951 and his Ph.D. from the University of Illinois in 1956. He is a member of the American Physical Society.

Sir Arthur Keith (1866-1955)

AMONG this year's centenaries of note is that of the birth, on February 5, of Arthur Keith, of Aberdeen.