genetics and personality by Professor Eysenck; others are of even greater value in giving us a new contribution to knowledge, e.g. Professor Parkes on seasonal variation in human sexual activity, and Drs. Douglas and Ross on delinquent boys and their homes. The reviewer is particularly sorry to have missed the film in which Dr. Kalmus showed what the world looked like to a colour-blind man.

ELIOT SLATER

Current Topics In Microbiology and Immunology.

Vol. 42, Insect Viruses. Edited by Karl Masamorosch. (Pp. vii + 192; 34 figures + 11 tables. DM. 36. \$9.00.) **Vol. 43, Biological Significance of Structural Adenovirus Components.** Edited by Erling Norrby. (Pp. iii + 233; illustrated and tables. DM. 49.60. \$12.40.) Berlin: Springer. 1968.

The first of these volumes consists of 7 papers given at a Symposium on Insect Viruses. The first 2 papers deal with those viruses that form inclusion bodies and those that do not. The types of body produced by the former are well illustrated. The important subject of arboviruses (arthropod-borne animal viruses) is clearly reviewed by Chamberlain who points out that about 75 arboviruses, which cause disease in man, are now known and many more are suspected.

In the second volume, the pathogenesis of neurotropic arbovirus infection is reviewed by Albrecht in considerable detail, with some emphasis on the importance of fluorescent antibody techniques which show the presence of the virus in cells which otherwise appear to have no abnormality. The fourth paper of the symposium is concerned with the sigma virus of *Drosophila*: this is of especial interest, because it is possible to study the influence of genetic mutations in the fly as well as that of viral mutation. Two other chapters deal with plant pathogenic viruses in insects and the use of insect tissue culture for the study of these viruses. Finally, Ignoffo makes a strong case for using viruses as living insecticides. As is shown in one of his dramatic illustrations, this is a feasible and an apparently commercial proposition which might give us insecticides that will not incidentally kill off valued wild-life. In this volume, apart from the article by Albrecht, there is a valuably precise chapter by Norby on the structural components of adenovirus, and their biological significance; another on Marek's disease of the chicken; and a review of the phenomenon of delayed-type hypersensitivity to synthetic antigens, particularly to polyamino acids. The volume is concluded by a review of how the enzymes involved in DNA-synthesis respond to viral infection.

J. CHAYEN

Child Care in Health and Disease. Symposium to Commemorate the Dedication of the Silvain and Arma Wyler Children's Hospital and the Joseph P. Kennedy Jr., Mental Retardation Center, August 29–September 2, 1966, University of Chicago. Edited by Albert Dorfman. (Pp. 390; 86 figures + 21 tables. 164s.) Chicago: Year Book Medical Publishers; Sussex: John Wiley. 1968.

This book is the proceedings of a symposium held in the Autumn of 1966. It covers a very wide range of topics of current interest in child care: the problems of child care in underdeveloped countries, with no piped water or sewage systems; the problem of juvenile delinquency courts and the danger of losing judicial safeguards in the effort to decrease formality in juvenile courts; the scope for special education in mitigating culturally determined mental retardation. Of special interest to geneticists are: the admirable account of the evolution of immunological mechanisms in vertebrates by Dr. Good and his colleagues, the account by Professor Prader of the genetics of the various forms of adrenal hyperplasia; the account by Professor Schull of the attempt to demonstrate mutagenic effects of ionizing radiation in Hiroshima and Nagasaki; the description by Professor Bearn of the then newly discovered X_m locus on the X chromosome; Professor Penrose's account of the sources of genetic variation in which he stresses the interest of parental age and birth order effects, and suggests that the increase of chromosomal non-disjunction with increasing maternal age may be due to the destruction of the spindle attachments on the centromere of chromosomes.

C. O. CARTER

Shorter Notices

The Science of Genetics: an Introduction to Heredity. By George W. Burns. (Pp. xii + 399; 140 illustrations + many tables. 84s.) New York: The Macmillan Co.; London: Collier-Macmillan Ltd. 1969.

This excellent textbook is one of the Macmillan Biology series. Its subtitle emphasizes the broad lines on which it is planned—the emphasis being on the 'how' and 'why' rather than on the 'what' of classical Genetics. Most of the text—in fact 13 of the 19 chapters—is of necessity devoted to an exposition of Mendelian genetics, but this is followed by a chapter on chromosomal aberrations and four more on biochemical genetics. The background is mainly botanical and microbial. A forward-looking concluding chapter is an excellent summary of the social problems facing human genetics.

Genetic Engineering. Edited by David Paterson. (Pp. 72. 7s.) London: British Broadcasting Corporation. 1969.

This is a record of broadcasts in the B.B.C. Third Programme during 1968. They were devoted to the biological changes already produced by genetic manipulation and those that may become possible in human affairs. Five of the eight broadcasts were concerned with human genetics: evolution, heredity, and eugenics, by J. F. Crow; reproduction: chance and choice, by R. G. Edwards; genetic counselling, by A Physician; genes and populations, by Anthony Allison; and Man's choices, by T. M. Sonneborn. An excellent account of microbial genetics was given by D. J. Cove, while nutritional aspects were discussed by Alan Robertson and by Ralph Riley.