evolution and the facts upon which they are based, written with the authority and clarity that we would expect from the author.

Following an historical introduction, successive chapters give accounts of the sources of variability, the organisation of genetic variability in populations, the differentiation of populations, isolation and speciation, the role of hybridisation in evolution and the major trends of evolution. A final chapter is devoted to the evolution of Man with particular emphasis on cultural evolution and man's future development. The factual evidence presented ranges from drug resistance in bacteria to sickle-cell anaemia in man.

The sections on chromosomal variation in wild populations and on reproductive isolation deserve particular mention for their breadth and the excellence of the illustrative examples. The accounts of the Hardy-Weinberg equilibrium and of types of selection, however, would benefit from a fuller treatment and more examples. The text is abundantly illustrated by 75 well-chosen figures, two of which, unfortunately, I was unable to interpret fully either from the legend or from the text. These, however, are minor blemishes on a book that provides a useful introductory text for undergraduate students of evolution and population genetics.

J. L. JINKS.

GENETICS IN MEDICINE. Alwyn Smith. Livingstone. Pp. 71. 6s.

Dr. Alwyn Smith has produced a short and lucid pamphlet (book is perhaps too strong a word) which has the commendable and unusual feature that any medical student who buys it will probably read it right through. In so far as a subject of such complexity can be covered in 71 pages, it is covered with speed and continuity. There is no index or glossary, and no advice on further reading.

There are a number of errors; sperm are 3μ across, not 10μ; pronuclei do not fuse in mammals; there are no telocentric chromosomes in man; there are three, and not two, established trisomic syndromes of infancy; polymorphisms are probably maintained by the advantages of various pairs of alleles, not of various alleles. The implications that sperm may not be propelled by the tail, that chromosomes may not persist in interphase, or that meiosis has not been seen in man, are likely to mislead, even if, in part, logically defensible.

This appears to be a transcript of a balanced, but rapid, lecture course; for those who cannot face the more substantial fare offered at the same price by Penguin Books (*Human Heredity*, by C. O. Carter), it provides a well-planned whirlwind tour, without pedantry or serious error, at the considerable price of 1d. a page.

J. H. EDWARDS.

BOOKS RECEIVED

ANIMAL SPECIES AND THEIR EVOLUTION. A. J. Cain. 3rd impression, paperback, Hutchinson and Co. Ltd., London, 1966. Pp. 190. 12s. 6d.

VARIATION IN CHEMICAL COMPOSITION OF THE NERVOUS SYSTEM AS DETERMINED BY DEVELOPMENTAL AND GENETIC FACTORS. Ed. G. B. Ansell. Pergamon Press, Oxford, 1966. Pp. 119. 25s.

NEMATODES. H. D. Croften. Hutchinson and Co. Ltd., London, 1966. Pp. 160. Paperback, 13s. 6d. Hardback, 32s. 6d.

PHILOSOPHISCH-METHODOLOGISCHE PROBLEME DER MOLEKULARGENETIK. Gustav Fischer Verlag, Jena, 1966. Pp. 200. 39s. 2d.

THE INDIAN JOURNAL OF GENETICS AND PLANT BREEDING. THE IMPACT OF MENDELISM ON AGRICULTURE, BIOLOGY AND MEDICINE. Ed. S. Ramanujam. 1966. Pp. 485. Rs. 30.

KARYOTYPE, MEIOSIS AND SPERMATOGENESIS IN A SAMPLE OF MEN ATTENDING AN INFERTILITY CLINIC. Monographs in Human Genetics. S. Karger AG, Basel, 1966. Pp. 74+tables. Frs. 23.50.

HEALTH, HAPPINESS AND SURVIVAL. J. A. Parr and R. A. Young. William Heinemann, London, 1966. Pp. 248. 25s.

THE GENETICS OF GASTRO-INTESTINAL DISORDERS. R. B. McConnell. Oxford University Press, London, 1966. Pp. 282. 70s.

MOLECULAR BIOLOGY OF HUMAN PROTEINS. Vol. 1. H. E. Schultze and J. F. Heremans. Elsevier Publishing Company, Barking, Essex, 1966. Pp. 904. £15.

DIE WICHTIGSTEN GENETISCH-STATISCHEN FACHAUSDRÜCKE IN DER TIERZUCHT. Verlag Eugen Ulmer, Stuttgart, 1966. Pp. 38. DM. 6.

ADAPTATION AND NATURAL SELECTION. George C. Williams. Oxford University Press, London, 1966. Pp. 307. 52s.