tempts to arrange and classify. There is little attempt either to use the material to test newer concepts of evolution or to question the utility of methods in terms of more recent data. While this is an excellent summary of accomplishments to date, it does not point directly to the problems of tomorrow.

The papers are well illustrated; the volume is well indexed; some of the paper is of good quality, but it is not well bound.

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BONES FOR THE ARCHAEOLOGIST. By I. W. Cornwall, pp. 255. $7.50. Macmillan, New York. 1956.

A background in comparative osteology is essential for workers in archaeology and of considerable value to physical anthropologists since most historical studies of ecology and evolution are based in large part on bone material. I. W. Cornwall's *Bones* appears to be a source from which much of this background can be gleaned and we are most fortunate in being provided with this excellent guide to knowledge in a related discipline.

The author has attempted to assemble sufficient data on the comparative osteology of the *Mammalia* to enable the student of archaeology to sort and roughly classify bone material brought to light in excavation. He confines himself to the characteristics of mammalian orders likely to be found by the British archaeologist, for whom the book is designed. Despite this geographical limitation the work is an excellent text in comparative mammalian osteology, especially valuable since no similar work has been in print for many years (since Flower's *Osteology of the Mammalia,* 1885). The book is not purported to be an atlas for specific identification, but is meant as a general guide to be used with comparative collections of osteological material in taxonomic studies. As such, the confinement of illustrative material to Old World species does not materially handicap the American student, although a comparable work using New World material would certainly be most welcome.

Introductory chapters cover the purpose of the book and a brief outline of organic evolution. While the latter adds depth to the following technical material, several of the views expressed (e.g. man's future adaptation as social rather than biological) might be questioned by many students of evolution.

Cornwall follows Flower's presentation closely, dealing in the main body of the book with the major divisions of the skeleton as seen

in each taxonomic order. An emphasis on human osteology, prolific illustrations, and numerous examples of adaptational changes in bone structure through evolution add to the value of the book as a reference in physical anthropology. A chapter dealing with the aging and sexing of skeletal material is largely confined to the interpretation of human remains and, while admitting that statistical population studies are the surest key to the determination of sex in skeletal material, Cornwall restricts himself to the standard qualitative observations (pelvic girdle shape, pre-auricular sulcus, etc.). Further interpretation is left to the specialist in physical anthropology. The reader is frequently reminded of the context in which the archaeologist is working; and a separate chapter is devoted to the limitations and possibilities in the archaeological interpretation of skeletal remains.

Considerable useful anatomical terminology is presented in the course of the text, and it is here that the lack of an index will be most sorely felt by readers unfamiliar with the material. The inclusion of this feature should be considered essential in any future revision. In addition, a few minor errors might be mentioned. One view of the human humerus (fig. 39a) is illustrated with a pronounced proximal extension of the greater tuberosity, far more than is normal in man. The vertebral formulae (pp. 112–113) vary to some extent from those given by Flower; the *Rodentia* especially seem oversimplified, even in the limited context of European families. On page 150, under *Probiscidea,* line 3, "tarsus" should obviously read "carpus."

The above-mentioned limitations do not greatly modify the value of the book as a reference and basic text in comparative mammalian osteology for interested anthropologists. It is to be hoped that with this reference available, osteological material recovered by archaeologists will be put to much fuller use in interpretation than has been the case in the past.

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THE AETIOLOGY OF IRREGULARITY AND MALOCCLUSION OF THE TEETH. 2nd ed., part 1, by James Couper Brash. Part 2 by H. T. A. McKeag and James H. Scott, with an appendix by Miriam L. Tildesley. xiv + 503 pp. $6.00. Dental Board of the United Kingdom, London. 1956.

This long and comprehensive work constitutes at once a new edition of the book published by Doctor Brash in 1929, and an addendum by Doctors McKeag and Scott covering the literature since that time.