Traits of Divine Kingship in Africa

By the Rev. P. Hadfield. Pp. vii+134. (London: Watts and Co., Ltd., 1949.) 8*s*. 6*d*. net.

THE author introduces this volume by giving in brief the story of Osiris. He apparently takes it for granted that agriculture began in Egypt; the divine king originated in a man of genius who discovered the secret of controlling the waters of the Nile and came to be regarded as controlling the forces of Nature; royal incest and human sacrifice both originated in this Egyptian cult. In the succeeding chapters various features of many African cultures are taken and referred to the corresponding practices in ancient Egypt. The author deals in this way with the functions of royalty, with the killing of the divine king, with the king's double (the placenta, umbilical cord, *ka*, etc.), with the life after death, and with other religious beliefs and practices of this kind.

In his conclusion, summarized in Chapter 14, the author seems to recoil from the extreme Egyptocentric assumption from which he starts and to recognize the possibility of the diffusion of parts of the divine king complex from Asia, though he rejects the views of Seligman as to its association with early Hamitic invaders. In an appendix he gives a brief compendium of African ethnic groups.

For the distribution of various traits of kingship in Africa, this is a useful little book. But it takes no account of the very close parallels to African beliefs and practices which occur very much farther afield. Royal taboos closely parallel to many of those mentioned of Africa are familiar enough in South-East Asia, Indonesia and Oceania. Superstitions connected with the jawbone, in regard to which a parallel is drawn between Egypt of the Sixth Dynasty and Uganda, reappear also not only in West Africa but at any rate in the Naga Hills, in Indonesia and in New Caledonia. The complex of beliefs in divine kingship is spread far wider than the African Continent. J. H. H.

Man the Tool-Maker

By Dr. Kenneth P. Oakley. Pp. 98+2 plates. (London: British Museum (Natural History), 1949.) 2*s*. 6*d*.

THE writer of an elementary book on prehistory for the beginner can approach the subject from one of two directions. Man is a child of Nature and appeared on this globe probably by the end of the Miocene period of Tertiary times. His early evolution coincided with the Great Ice Age, itself coterminous with the pleistocene epoch of the geologist. The early story of mankind, then, can be studied by the geologist working, as it were, upwards. Alternatively, the story can be developed by the historian working downwards from the written word to the uncharted prehistoric period. As the outlook of the prehistorian and the methods of study employed are purely geological, especially for the very early periods, the former approach would seem to be the more satisfactory.

Dr. Kenneth P. Oakley is a trained geologist and a first-rate prehistorian for the quaternary period. His little work, "Man the Tool-Maker", is altogether admirable for the purpose for which it has been compiled. Having been written by someone who really knows the subject, and not merely by a 'scissors and paste' author, as is so often the case with elementary works on the subject, the specialist will find not a few facts new to him and some lines of thought that will be of interest. Naturally, the book deals mainly with the industries, their typology and technology, but even while treated strictly scientifically, Old Stone Age man does come before us as really existing, and not merely as a fossil. Dr. Oakley has made the dry bones live.

The Songs of Insects

With Related Material on the Production, Propagation, Detection and Measurement of Sonic and Supersonic Vibrations. By Prof. George W. Pierce. Pp. vii+329. (Cambridge, Mass.: Harvard University Press; London: Oxford University Press, 1948.) 27*s*. 6*d*. net.

ALL lovers of Nature, and fortunately most of us come into that category, must welcome the application of physical methods to the investigation of living creatures. Few things are more delightful than listening to the songs of birds; one of those is making accurate records of these songs so that they can be heard by our friends and so that the song of one bird can be compared with that of another.

In this book it is not bird songs but insect songs which are being recorded, although the last chapter does deal briefly with birds and bats. The author describes the method of sound production by insects and the apparatus which he designed to record the sounds. He then gives a list of the many insects which have been investigated, including crickets, katydids and locusts. Almost all the photographs are extremely good; they include whole insects, parts of insects, recording apparatus and records. There are two omissions which are to be regretted—little is said about the hearing methods of insects, and there are no indexes either of contents or of references. It is hoped that these omissions will be made good in the next edition of this interesting book. H. HARTRIDGE

A Text Book of Theoretical and Inorganic Chemistry

By F. A. Philbrick and Dr. E. J. Holmyard. Revised in collaboration with Dr. W. G. Palmer. Pp. vii+854. (London: J. M. Dent and Sons, Ltd., 1949.) 13*s*. 6*d*.

THIS edition contains forty-nine more pages than the revision of 1941. The authors retain the same sequence of paragraphs and the same division into chapters. The more extensive revision of Part 2 ("General and Theoretical"), undertaken solely by Dr. W. G. Palmer, increases this section by thirty-seven pages. Items of new matter added to Part 3 ("Elements and Compounds") amount to six pages.

Advances in our knowledge of photochemistry, surface action and nuclear physics have made it very difficult to obtain a balanced and comprehensive view of modern theory. Dr. Palmer has brought to his task singular powers of selection and exposition. He has re-written many paragraphs and added new ones of great significance, such as those on nuclear action, the spin of particles, the electron-pair bond, mesomerism and the inhibition of reactions. He has re-cast the chapter on valency and doubled its size; and he has been drastic in bringing the bibliographies up to date.

In giving his energy to this revision, Dr. Palmer has done students a great service; for Part 2 now affords one of the best short accounts of modern theory hitherto published and assures the position of the book in the front rank of small advanced texts. G. F.