

Khami Ruins

Report on Excavations undertaken for the Commission for the Preservation of Natural and Historical Monuments and Relics, Southern Rhodesia, 1947-1955. By K. R. Robinson. With Reports by G. Bond and E. Voce. Pp. xvi + 192 + 28 plates. (Cambridge: At the University Press, 1959.) 40s. net.

IT seems likely that iron-working, agriculture and the manufacture of well-made pottery reached Central Africa at the same time and as elements of the same culture complex, within a century or two of the beginning of the Christian era. The event marks the beginning of the history of the Bantu-speaking peoples in the area, and forms a most important field of pre- and proto-historical research. None the less it is a sadly neglected field of study, and much credit must go to prehistorians working on this period in Southern Rhodesia.

Miss Caton-Thompson's work on Zimbabwe is well known, and earlier this year Roger Summers produced a most important book on the terraces and ruins of Inyanga. Keith Robinson's excellent book on the Khami ruins now enables us to make some sense of the third of the great ruins sites of Southern Rhodesia.

The book is an excellent objective study of the ruins based on many years of intimate study, backed by carefully selected excavation. It is attractively set out, with good illustrations, and in Chapter 5 the conclusions are logically and clearly presented. The over-riding weakness in all three of the works mentioned is the lack of conclusive dating evidence. This is no fault of the writers concerned and is entirely due to the difficult nature of the evidence. Radiocarbon dates are urgently needed.

It is to be hoped that the future will see a continuation of the excellent work now being done in Southern Rhodesia, perhaps, we may add, with rather more emphasis on the crucial earlier phases of the Rhodesian Iron Age. R. R. INSKEEP

Rock Pressure in Mines

By E. de St. Q. Isaacson. Pp. x + 212. (London: Mining Publications, Ltd., 1958.) 45s.

SEVENTY-FIVE years ago Fayol published results of his investigations into ground failure. While his conclusions were valid at shallow depths, it was found that at deeper levels stresses, which had little significance near the surface, began to play an ever-increasing part. During the past thirty years many workers have investigated the problem, and in "Rock Pressure in Mines" we have a comprehensive account of the theoretical and practical principles that govern the behaviour of pressure in underground workings. The author, who is in charge of the Rockburst Research Unit of the Kolar Gold Mines, devotes the first four chapters to theoretical considerations, dealing with elastic stresses and strains, elastic stresses in isotropic rocks around differently shaped excavations, the behaviour of rock stressed beyond the elastic limit, and modifications due to departures from homogeneity. He then applies these considerations to the planning and lay-out of workings. In a chapter on rock-bursts he shows how strain energy may be built up. He considers that good planning coupled with destressing should substantially reduce the danger of rock-bursts. Descriptions and criticisms of several occurrences are given. Finally, some of the instruments suitable for measurement of stresses and strain underground are described. The book is

well planned and pleasingly written. There are 125 simple line-drawings and some plates. References to standard text-books and technical papers are adequate. It is a book which will be invaluable to all who are concerned with problems of rock pressure.

J. K. L. GRAHAM

Plant Nematodes

Their Bionomics and Control. By Dr. Jesse R. Christie. Pp. xi + 256. (Gainesville, Fla.: Agricultural Experiment Stations, University of Florida, 1959.) 3.75 dollars.

NEMATOTOLOGY as a separate discipline is a relatively recent development and, as a result, the information on the bionomics and control of plant parasitic nematodes is spread widely through technical journals and bulletins. This literature has not only been surveyed and compiled by the author but is also presented in a clear and logical manner. The author of this relatively small book has succeeded admirably in fulfilling his declared intention of writing a work for specialists which is also understandable to others generally interested in agriculture and horticulture. This he has done in fourteen chapters of which the first is a general introduction to nematodes and nematology, while the second is a general discussion of the principles of nematode control. Each of the remaining chapters deals with one group of related nematodes and each is laid out in the same sequence, so far as the subject-matter will allow. First, the taxonomy of the parasite, then the life-history and habits, the injury caused to the host, a list of hosts, the parasites' known distribution and methods of spread, and, finally, methods of control. Five tables, in an appendix, list the parasites and their distribution, under the crop plants attacked; control measures; details of hot-water treatments; the common names of plant parasitic nematodes; and in the fifth table a list of scientific names of nematodes attacking plants, and their synonymies, is given. The symptoms resulting from nematode attack are illustrated by photographs which are generally of a high standard. The book should form a useful source of reference to experienced workers as well as a text-book for the student. W. G. INGLIS

Acetophenetidin

A Critical Bibliographic Review. By Prof. Paul K. Smith. (Monographs of the Institute for the Study of Analgesic and Sedative Drugs, No. 4.) Pp. x + 180. (New York: Interscience Publishers, Inc.; London: Interscience Publishers, Ltd., 1958.) 45s.

P. K. SMITH'S book on acetophenetidin is the fourth in a series of monographs reviewing the literature on individual drugs. It deals with 529 references on the clinical uses, pharmacological properties, metabolism and side-effects of acetophenetidin (phenacetin) and its metabolite N-acetyl-p-aminophenol. The book throws an interesting light on the history of the use of antipyretics, and reflects the changes in medical thought on disease during the past seventy years. If the purpose for which the drug is employed has changed, its popularity has stood the test of time, and justifiably so, since acetophenetidin is not only efficacious but virtually free from harmful side-effects. Pharmacological work on the substance will continue, as we are far from understanding the reasons for its pain-relieving action. MARTHE VOGT