book is divided up on the basis of the mineralogy of the deposits studied. Thus, three occurrences of allophane, sixteen of kandites, eight of smectites, eight of clay micas (including dillnite), and three of sepiolite and palygorskite are dealt with. The data given on each sample is remarkably exhaustive, consisting of macroscopic and microscopic data, differential thermal and dehydration curves, X-ray diffraction data, electron micrographs, and in most instances chemical analyses. The description of each sample examined is completed by some remarks on its genesis. An extensive bibliography and very adequate name and subject indexes are given. The book is excellently produced, and electron micrographs and X-ray powder photographs show detail adequately, despite the fact that art paper is not used. The binding is, however, hardly up to the standard of the remainder of the book, and it is doubtful if it would stand up to much handling.

Dr. Konta is to be congratulated for his energy and for the tremendous amount of work which he must have undertaken to produce such an excellent survey, and one can only feel disappointed that no comparable book is available for other countries: it is, in a more limited field, comparable with Heddle's classical and monumental 'Mineralogy of Scotland'. Despite the fact that the book is written in Czech, and that workers in other countries may not have great interest in the actual deposits described, there is such a wealth of detail on individual minerals that all clay mineralogists will find much to interest them.

R. C. MACKENZIE

SWINEFORD (A.), editor. *Clays and Clay Minerals.* Proceedings of the Fifth National Conference on clays and clay minerals, University of Illinois, 1956. Washington (National Academy of Sciences—National Research Council, Publication 566), 1958, vii+360 pp., 156 text-figs. and pls., 58 tables. Price $4.50.

The National Clay Committee of the National Academy of Sciences (U.S.A.) was formed some seven years ago and has since then held seven annual meetings at various centres in the U.S.A., publishing the papers presented at these meetings in a yearly volume entitled 'Clays and Clay Minerals'; the one under review is the fifth of the series. Since the National Clay Committee has deliberately attempted to interest not only clay mineralogists, chemists, and physicists, but also all interested in clay from any angle, practical or theoretical, the twenty-eight papers included in this book cover a very wide range and defy a simple classification into sections. Nevertheless, they are all of great interest to clay

mineralogists. Thus, in one paper it is suggested that halloysite is not tubular in nature but that the tubes are artifacts formed on drying, in another that pure montmorillonite may contain two distinct entities differing in charge, and in another that the clay minerals found in deposits depict the source conditions rather than the deposition conditions. Such physical subjects as the surface charge on montmorillonite and the density of montmorillonite pastes, as well as such practical aspects as the stratigraphical associations of clay minerals and the alteration of clay minerals in sea water, are also treated. The volume clearly reflects the vast amount and the wide scope of current American investigations on clays. Each paper is provided with a concise summary that truly indicates the scope of the paper and the conclusions reached —a very refreshing change from the type of summary so often presented. The electron micrographs reproduced are in general excellent, although a few seem to be hardly up to the previous high standard of this series. One misses any account of discussion on the various papers, but the general quality of the book more than makes up for this deficiency; a brief but adequate index is provided. The volume is excellently produced and is, indeed, a pleasure to handle. The Editor is to be congratulated on the high standard obtained, and the Committee on providing a book no clay mineralogist can afford to be without.

R. C. MACKENZIE

KRAUS (Edward Henry), HUNT (Walter Fred), & RANSDELL (Lewis Stephen). *Mineralogy. An Introduction to the Study of Minerals and Crystals.* London (McGraw-Hill Book Co., Inc.), 5th edn, 1959, x+686 pp. Price 70*s*.

The general arrangement, chapter headings, and much of the subject matter and illustrations of this very well produced text-book are the same as in the third edition [1936; M.A. **6**–289], but the text has been reset with many minor alterations and some of the less satisfactory figures have been dropped. The book well deserves its continued popularity.

M. H. H.

HINTZE (Carl) [1851–1916]. *Handbuch der Mineralogie.* CHUDOBA (Karl F.). *Ergänzungsband II: Neue Mineralien und neue Mineralnamen (mit Nachträgen, Richtigstellungen und Ergänzungen).* Berlin (Walter de Gruyter & Co.), 1955–9, Lief. 6–9, pp. 401–728. Price, Lief. 6 & 7 DM. 22 each, Lief. 8 DM. 28, Lief. 9 DM. 26.

In the sixth part the alphabetical review of new minerals, new mineral