petrologists seeking help in interpreting the variations observed in feldspars in granites, basalts, or gneisses.

The volume is clearly printed and well illustrated but although the editing has produced uniformity of style there are some unfortunate printing errors, e.g., the chemical formula of the ammonium feldspar buddingtonite is given as $Na_4AlSi_3O_8.\frac{1}{2}H_2O$, plagioclase is mis-spelt in the title of the paper by M. L. Crawford, and an extra SiO_2 appears in the system $CaO–Al_2O_3–SiO_2–H_2O(CO_2)$ on p. 645. The width of the column of type is 9 cm on a page width of 15 cm, leaving an ample 4-cm left-hand margin on which to record notes or errors.

These minor drawbacks notwithstanding, the editors are to be congratulated on assembling these important research papers from most of the authors currently active in the study of this the most important group of rock-forming minerals. For once one can add that the price seems eminently reasonable. R. A. HOWIE

RIEKE (H. H., *III*) and CHILANGARIAN (C. V.). *Compaction of argillaceous sediments* (Developments in Sedimentology, no. 16). Amsterdam, London, and New York (Elsevier), 1974. xiv+424 pp., 217 figs. Price Dfl. 85.00 ($30.90).

This book covers a wide range of topics relating to compaction of sediments from soft marine clays to stiff shales, and has therefore considerable interest not only for the geologist but also for the civil and petroleum engineer. The literature covered is enormously wide and for those familiar with one discipline the remaining fields that are opened up raise inquisitiveness to read widely from the original sources.

In itself this is excellent, but in part it is due to a lack of satisfaction in the extracts presented by the authors. Thus nearly every page quotes from three or four learned sources (there are over 800 references), which follow quickly on one another, often only tenuously connected. For example, we read for two pages about how to estimate the maximum effective pressure (defined twice) that has ever existed in an argillaceous sediment: and on the following page we read about the pre-consolidation pressure without perhaps realizing that the two are one and the same thing. It is on simple detail of this sort that the book is weakest—a more flagrant example is in Fig. 2 where Archimedes' principle has been misunderstood. The experts will not be led astray by such trivia, though the book is presumably not being written for them.

One of the most interesting chapters relates to the behaviour of the pore fluid, not only water fresh or saline, but also the squeezing out of oil and birumen from muds and shales.

This has the makings of an excellent book; were the authors to have fully assimilated all they have read and turned it into a more unified text in terminology and units, then it would be even more valuable. J. K. T. L. NASH