

ABSTRACT

Many marine invertebrates which are recognizable as free, whole specimens become unfamiliar to the observer when only portions of their skeletons are seen in thin section. A variety of shapes are produced by random cuts through a single geometric pattern, and shapes can be duplicated in such cuts by different designs. Also, characteristic features may be obscured and others may become apparent when only fragments of the skeleton are exposed in one plane.

In this volume of The International Sedimentary Petrographical Series, general descriptions and illustrative diagrams of skeletal morphology, mineralogy, and microstructure are given for some of the major animal phyla. The petrography of the skeletal material is illustrated by photomicrographs of Recent and fossil examples. Although it is not recommended that the contents be used to identify organic particles positively at family or lower levels, they should enable petrographers and others who examine sample material of this type to make tentative classification of large numbers of skeletons now described as "shell fragments" or similar designations.