

like masses of seaweed and then suddenly sink down in a uniform layer. (To suppose that deposition of sediments occurred in such a manner violates the physical laws which God created.)

Thus, no method is known to mankind by which even a small fraction of the existing limestone strata could have been deposited by either precipitation or rapid transport of shell materials. During the last three decades, the worldwide, extensive research of carbonate sedimentology has provided us with abundant evidence that most of the limestone strata of the earth are of biogenic origin, and were formed by natural processes in the environments where the lime-secreting organisms were growing. Petrographic studies of limestone have revealed much regarding the components of which it is made up and the conditions under which the cement crystals which bind the granules together were precipitated. Carbonate sedimentologists have carried out many extensive research projects of observing the rock-forming processes in action in continental-shelf areas, in coral reefs, and in some other parts of the world. Also, the presence of large quantities of both calcareous and silicious microfossils in limestone strata has contributed to our understanding of the biogenic origin of limestones.³ M. E. Tucker summarizes an immense amount of carbonate research when he says, "Biological and biochemical processes are dominant in the formation of carbonate sediments; with few notable exceptions inorganic precipitation of CaCO_3 from seawater can rarely be demonstrated" [except later, in the formation of cement crystals] (Tucker, 1981, p. 96; see also Wilson, 1975, p. 4-12).

In recognizing these discoveries we need to realize that the great development and expansion of research in the field of carbonate sedimentology during the past three decades has been almost entirely a project of petroleum research, and not at all an effort to confirm or demonstrate evolutionary theory. The realization of petroleum geologists that a large proportion of the world's oil reserves is held in porous limestone formations caused them to concentrate on understanding how and where the various kinds of limestone were formed--so that they can better predict the amounts and locations of petroleum occurrence.

Some Special Characteristics of the World's Limestones

As this sedimentological research has continued, an immense amount of data regarding in situ biological growth structures in limestone strata and formations has been published. These growth structures include stromatolites and algal mats (both formed by marine algae which either collect or secrete calcium carbonate), small bioherms, large organic banks, and coral-algal reefs. Obviously, any limestone formation which contains such structures could not have been formed by rapid precipitation or by transport of calcareous shell material from elsewhere