200 lbs. So one can easily see that the compaction force exerted on the fossils in the sediment would be very great when the water level fell below that of the sediment mass, unless the sediments first became cemented. Without the required long periods of time for cementation as the sediment mass was being built up, the skeletons of most of the kinds of marine animals found in the Redwall Formation would have been completely crushed.

In summing up, we find that the nature of limestone, and of the various formations of limestone and dolostone in the earth, is extremely valuable as an indicator of long periods of time. Most of the natural processes which form such rock layers are now being observed on numerous sea coasts and sediment banks. So there is no longer any place for vague speculations as to the nature and origin of the great deposits of limestone and dolostone. God has enabled man to discover these dynamic formation processes and to use the knowledge of them in understanding the ancient bodies of these kinds of rock. The understanding of them has, in turn, enabled oil prospectors to more accurately predict the location and amounts of stored oil, thus saving the companies many needless "dry holes." Therefore, the new knowledge of the nature and origin of limestone has proven valuable both for the petroleum geologist and for the Bible student who is interested in past events.

## FOOTNOTES

- 1. J. E. Sanders and G. M. Friedman, "Origin and Occurrence of Limestones," in <u>Developments in Sedimentology no. 9A</u>, <u>Carbonate</u> Rocks, 1967, p. 193.
- 2. B. B. Hanshaw, "Inorganic Geochemistry of Carbonate Shelf Rocks," American Association of Petroleum Geologists Bulletin (abstract), v. 53 (1969), p. 720.
- 3. This is easily determined by examining a "basement map" of the United States, such as is obtainable from the American Association of Petroleum Geologists.
  - 4. F. J. Pettijohn, Sedimentary Rocks, 1957, p. 8.
  - 5. Blatt, et al., Origin of Sedimentary Rocks, p. 470.
  - 6. Bathurst, Developments in Sedimentology no. 12, p. 439-441.
  - 7. Ibid., p. 371, 375, 395-401.
  - 8. Ibid., p. 399-401.
- Chilingar, et al., <u>Developments in Sedimentology no. 9A</u>,
  234-236.
  - 10. P. H. Heckel and J. M. Cocke, "Phylloid Algal-Mound Complexes