

are continually falling to the bottom, where their remains accumulate as a soft ooze. On the floor of the West Indian seas, where an extraordinarily abundant fauna is supported by the plentiful supply of food brought by the great ocean currents which enter that region from the South Atlantic, a calcareous deposit is being formed out of the hard parts of the animals that live on the bottom (mollusks, echinoderms, corals, alcyonoids, annelids, crustacea, etc.), mingled with what may fall from the upper water. This deposit accumulates as a vast submarine plateau or series of broad banks, and is comparable in extent to some of the more important limestones of older geological time. Some portions of it have here and there (Barbadoes, Guadeloupe, Cuba, etc.) been elevated above the sea, so that its composition and structure can be studied. The organisms in these upraised limestones are the same as those which still live, and form a similar limestone in the surrounding seas. In Yucatan the rock is perforated with caverns, one of which is 70 fathoms deep.³⁶⁷

Here and there considerable deposits of broken shells have been produced by the accumulation of the excrement of fishes, as Verrill has pointed out on the northeastern coasts of the United States. Deposits of broken shells raised above sea-level either by breakers and winds or by subterranean movements are solidified into more or less compact shelly limestone. Extensive beds of this nature, composed mainly of species of *Arca*, *Lutraria*, *Mactra*, etc., form islands fronting the shores of Florida, and likewise underlie the soil of that State. Some of the shells still retain their colors. The whole mass is in layers 1 to 18 inches

³⁶⁷ A. Agassiz, Amer. Acad. xi. 1882, p. 111; and his "Three Cruises of the 'Blake,'"