phosphate of lime in them increases. I have made many analyses of them for the estimation of phosphoric acid, and find this law to be universal. So that, other things being equal, the shells increase in value as they approach the ocean.

Shell banks are another source from which lime is supplied to soils. These shell banks are deposits by the aborigines of the country, and frequently cover an extent of from 1 to 40 acres, to the depth of from 6 inches to as many feet. As those who have never seen these social relics of the "poor Indian" have questioned the mode of their deposition, I will state the reasons for the belief of their Indian origin: 1. They are always found near the water's edge, on the slope of a hill, with a southern exposure, sheltered from the north and north-west winds. This is a position which the Indians would naturally select to enjoy their repast on the delicious article of food which the shells contained. 2. The bones of many animals, such as deer, bears, and numerous small game, are found intermixed with the shells, not in a state of integrity, but *broken*, showing that they came there not by the death of the animals in a natural manner, but were brought for the purpose of being consumed as food. 3. There are found, also, with those shells numerous small pebbles, evidently used to break off the edge of the oyster, in order to open them with greater facility. 4. There are also found with the shells Indian arrow heads, battle axes, pipes and various domestic implements that had been left by the tribes after feasting. Another and most conclusive reason against the opinion that these shell banks are mere oyster beds, left exposed by the retreating of the waters, is, that the shells are all separated, and no two lying together will fit each other; a large shell overlies one which is very small, and no one seems to be the fellow of its neighbor. These shells, moreover, lie frequently in heaps surrounding a cavity, showing as if a particular family sat together, consumed their food and threw the shells around them. The use to which the remains of the food of the Aborigines are applied is a striking proof of the benefits conferred on the human race by civilization. The refuse matter of their feasts is applied to the growth of food by another and a strange nation, who have extinguished their council fires, exterminated their race, and only remember their names amongst the traditions of the past.

From long exposure to atmospheric influence, and other causes, the shells become disintegrated, and readily crumble on free exposure to the air. Again, after the lapse of a considerable period, they become very much disorganized by another process. At first a little moss forms on the surface of the shells; this takes up enough lime that has been dissolved by the carbonic acid of the atmosphere to give support to a higher order of vegetation. This vegetation, by its decay, furnishes food for a succeeding generation of plants, and by an increased supply of carbonic acid dis-