

posed of the shells of these animals. As this rock is employed for building, he remarks that it is no exaggeration to say that Paris, as well as the towns and villages of some of the surrounding departments, are almost built up of Foraminifera.

The limestones of early Tertiary age of Southern Europe and Asia and of Northern Africa are largely constituted of Nummulites (*nummulus*, a small coin),—foraminiferous shells resembling money in shape, and ranging from the size of a pin-head to that of a dollar. This 'Nummulitic Limestone' attains a thickness of several thousand feet, and contributes to form those great mountain chains, the Pyrenees, Alps, Apennines, Carpathians, and the Himalayas, often including their snow-clad peaks. It extends through the Mediterranean basin, Asia Minor, and Persia, into India. In Egypt, it furnished building-stone for the great Pyramids.

The chalk of Europe, a soft limestone of an earlier time than the former, is also chiefly composed of the shells and their decomposed remains of Foraminifera. The so-called green-sands, like those of our neighboring States, New Jersey and Delaware, of the same and other periods, from the earliest to the latest times, have been largely due to Foraminifera. Prof. Bailey has further shown that a similar material to the green-sand is now in process of formation in the Gulf of Mexico, through the same agency.

The fossil-bearing rocks of earliest time present illustrations of the same character. Limestones of the Carboniferous age have been largely due to foraminiferous shells, and one kind has been specially named 'Fusulina Limestone' from the abundance of shells it contains of the foraminiferous genus *Fusulina*.

The group of organic beings designated as **Monera** (Gr. *moneres*, simple) was first definitely characterized by Prof. Haeckel, who describes it in his Monograph as follows:

Organisms without organs, which in the perfectly developed condition consist of a freely movable, naked body, composed of a completely structureless and homogeneous sarcode (protoplasm). Never differentiating nuclei within the homogeneous protoplasm. Motion occurs through contractions of the homogeneous body-substance, and through extension of variable processes (pseudopods), which either remain simple, or branch and anastomose. Nourishment occurs in various ways, mostly after the manner of Rhizopods. Reproduction takes place only in an asexual manner