

pebbles, and transported to embankments sometimes thousands of feet in thickness. The tombs of the *Cephalaspis*, *Pterichthys*, *Coccosteus*, and *Holoptychius* of the Old World, and of *Onychodus*, *Machæracanthus*, *Agassichthys*, and *Rinodus* of the New, were buried immeasurable depths beneath the rubbish of a geological revolution. These were the accumulations of the "Millstone Grit." Anon, the violence of Nature suffered a pause, and finer sediments only were transported over the areas previously strewn with sand and pebbles. Many alternations of finer and coarser deposits thus succeed each other among the lower beds reposing immediately beneath the coal.

In the course of ages the shallow sea became a marsh. Now that a foothold for terrestrial vegetation was established, the all-adaptive hand of Nature planted the soil with many kinds of herbs and trees. Simultaneously, on every side, innumerable germs spring up from the new-made sediments. Vegetation, in varied types and family alliances, starts forth at the fiat of creative energy, and the world is dressed in a garment of shining verdure. No provident hand had strewn the soil with the seeds of these unfamiliar forms. The All-commanding had summoned the tribes of plants from the shadowy realm of ideas, and they stood forth in multitudinous array, clad in the newest and brightest garments of Nature's exhaustless wardrobe—mute, unconscious existences, but yet with life and organs, beginning from the moment of their appearance to play upon the elements which Omniscience had provided for their elaboration. How carefully was the soil prepared to encourage the luxuriant growth and wide dissemination of these beautiful creatures! Lifted above the level of the sea, it maintained the humid condition most congenial to the nature of the most luxuriant growers. The internal heat of the earth, however, at this early period, warmed