

the terminal openings of tubes, disposed in a radiating manner, and ramifying through the mass. The beautiful markings observable in many pebbles, collected on the shores at Brighton and Bognor, are derived from the silicification of the internal structure of this zoophyte;* the horizontal sections display a central disk, from whence the tubes diverge to the circumference—the vertical exhibit an elongated conical space, probably the cavity of the stomach; in some examples this organ appears to have been furnished with lateral *cæca*, or pouches; and in all, small tubes are seen to permeate the mass. Ramose sponges form the nuclei of most of the irregular branched flints; and zoophytes related to other genera of poriferæ are equally abundant. A small species of caryophyllia (Tab. 50, fig. 3) occurs in the chalk of Sussex, and a turbinolia (Tab. 50, figs. 1, 2) in the gault.

33. ZOOPHYTES OF THE SHANKLIN SAND.—In the arenaceous strata of the chalk formation, the Shanklin sand, immense numbers of zoophytes, particularly of the poriferæ, prevail in some localities. The gravel-pits in the immediate neighbourhood of Faringdon, in Berkshire, are extremely prolific in these remains. The beds consist of an aggregation of sand impregnated with iron, with water-worn and pulverized shells and corals, and contain

* See Geology of the South-East of England, p. 106. "THOUGHTS ON A PEBBLE;" the frontispiece of this little work represents a pebble with a choanite inclosed.