from each other (as was formerly supposed), but are connected throughout by fine threads or bridges of protoplasm. When the sensitive mimosa closes its graceful leaves and droops its stalk at contact, or on being shaken; when the irritable fly-trap (the dionæa) swiftly clasps its leaves together at a touch, and captures a fly; the sensation seems to be keener, the transmission of the stimulus more rapid, and the movement more energetic than in the reflex action of the stimulated bath-sponge and many other sponges.

B. *The soul of the nerveless metazoa.*—Of very special interest for comparative psychology in general, and for the phylogeny of the animal soul in particular, is the psychic activity of those lower metazoa which have tissues, and sometimes differentiated organs, but no nerves or specific organs of sense. To this category belong four different groups of the earliest cœlenterates: (*a*) the gastræads, (*b*) the platodaria, (*c*) the sponges, and (*d*) the hydropolyps, the lowest form of cnidaria.

The *gastraeads* (or animals with a primitive gut) form a small group of the lowest cœlenterates, which is of great importance as the common ancestral group of all the metazoa. The body of these little swimming animals looks like a tiny (generally oval) vesicle, which has a simple cavity with one opening—the primitive gut and the primitive mouth. The wall of the digestive cavity is formed of two simple layers of cells, or epithelium, the inner of which—the gut-layer—is responsible for the vegetal activity of nourishment, while the outer, or skin-layer, discharges the animal functions of movement and sensation. The homogeneous sensitive cells of the skin-layer bear long, slender hairs or lashes (*cilia*), by the vibration of which the