have there called Archispongia, arose out of the Protascus by the formation of pores through its body-wall; the primary form of Sea-nettles, which I there called Archydra, developed out of the Protascus by the formation of nettle-organs, as also by the formation of feelers or tentacles.

The main-class or branch of the *Sponges, Spongiæ,* or *Porifera,* lives in the sea, with the single exception of the green fresh-water Sponge (Spongilla). These animals were long considered as plants, later as Protista; in most Manuals they are still classed among the primæval animals, or Protozoa. But since I have demonstrated their development out of the Gastrula, and the construction of their bodies of two cellular germ-layers (as in all higher animals), their close relationship to Sea-nettles, and especially to the Hydrapolyps, seems finally to be established. The *Olynthus* especially, which I consider as the common primary form of calcareous sponges, has thrown a complete and unmistakable light upon this point.

The numerous forms comprised in the class of Spongiæ have as yet been but little examined; they may be divided into three legions and eight orders. The first legion consists of the soft, gelatinous *Mucous Sponges* (Myxospongiæ), which are characterized by the absence of any hard skeleton. Among them are, on the one hand, the long-since-extinct primary forms of the whole class, the type of which I consider to be the Archispongia; on the other hand there are the still living, gelatinous sponges, of which the *Halisarca* is best known. We can obtain a notion of the Archispongia, the most ancient primæval sponge, if we imagine the Olynthus (see Frontispiece), to be deprived of its radiating calcareous spiculæ.