

of sponges. Certainly it is widely remote from being a true natural system, but the same must be said of all other attempts at classification of sponges up to the most recent times. All spongiologists who will judge critically, and compare the divisions not dogmatically (like Poléjaeff), will agree with this my view.

*Artificial Classification of Sponges founded on the Skeletal Structure.*

First Class. MALTHOSPONGIÆ (or MALTHOSA).

Porifera which possess no true mineral skeleton (composed of calcareous or siliceous spicules), with or without spongin-skeleton, with or without pseudo-skeleton (composed of xenophya).

Order I. MYXOSPONGIÆ.—Without spongin-skeleton and without pseudo-skeleton (Halisarcidæ, Chondrosidæ).

Order II. PSAMMOSPONGIÆ.—Without spongin-skeleton, but with a pseudo-skeleton composed of xenophya (Ammonoconidæ, Psamminidæ).

Order III. CERASPONGIÆ.—With a true spongin-skeleton, with or without xenophya (Spongelidæ, Stannomidæ, Darwinellidæ, Euspongidæ, Aplysinidæ).

Second Class. SILICISPONGIÆ (or SILICOSA).

Porifera which produce a true siliceous skeleton, composed of siliceous spicules secreted by the sponge itself, with or without spongin-skeleton.

Order IV. DEMOSPONGIÆ (Monaxonidæ and Tetractinellidæ).—With simple (monaxial) or four-rayed (tetraxial) siliceous spicules, with or without spongin-skeleton.

Order V. HYALOSPONGIÆ (Hexactinellidæ).—With six-rayed and triaxial spicules, without spongin-skeleton.

Third Class. CALCISPONGIÆ (or CALCAROSA).

Porifera which produce a true calcareous skeleton, composed of calcareous spicules secreted by the sponge itself, with or without spongin-skeleton.

Order VI. ASCOSPONGIÆ (Asconidæ or Homocœlæ).—Calcisponges without spongin-skeleton, with tubular canal-system.