phœnix, I may here note that the representation of the fine transversely arranged prickles on the extremities of the terminal rays has not been successful.

The floricomes which are attached to the tips of the dagger-shaped hypodermalia differ from those of *Euplectella aspergillum* in their somewhat greater size and stronger terminal rays, as well as in the longer claws of the terminal plates; they thus more nearly resemble those of *Euplectella suberea* (Pl. XIII. fig. 4).

Since no specimens of *Regadrella phœnix* occur among the Hexactinellida collected by the Challenger expedition, I have figured (Pl. XIII. fig. 1), from a photograph, a specimen which was kindly given to me for examination by Professor Oscar Schmidt.

The localities for this species, as at present known, are, according to Oscar Schmidt, the Barbados, in 221 and 288 fathoms of water, and Santa Cruz, in 248 fathoms, in the Gulf of Mexico.

Subfamily 2. Holascinæ (Pl. XIV. figs. 6–13; Pls. XV.–XIX.).

Euplectellidæ in which the lateral wall is solid, that is, *not* perforated by parietal gaps. The principal spicules are not fused together, and form with their longitudinal and transverse rays a quadrate network. The hypodermalia are dagger-shaped, and have a somewhat swollen distal ray beset with prongs, and frequently extended by apposed pointed diacts, but in other cases probably bearing a floricome. The hypogastralia are either simple pentacts without a proximal ray, or hexacts in which the inward projecting (proximal) ray probably can bear a floricome.

Genus 1. *Holascus*, n. gen. (Pl. XIV. figs. 6–13; Pls. XV.–XVII.).

Tubular in form, with a compact wall, the outer surface of which shows no pit-like depressions, while a lattice-work of longitudinal and transverse ledges projects internally. The upper transversely truncated extremity is provided with a thickened margin which is destitute of a spicular wreath, and is closed by a compact sieve-plate, while the inferior extremity runs out into a basal tuft. The network of strands which serves for the support of the body-wall consists of greatly prolonged, longitudinal and transverse rays of compact hexacts, pentacts or tetracts, which lie close to one another, forming a tolerably firm framework, and which are also surrounded by a coating of thin comitalia.

In the parenchyma, in addition to various other spicules, oxyhexasters occur, or instead of these in other cases fibulæ.

The sword-shaped hypodermalia bear no floricomes, but are externally extended by apposed pointed and narrow diacts.