

theoretical point of view, it is of the utmost importance to know that an isolated genus may constitute a distinct family, because such a fact shows how futile and artificial the efforts of those naturalists must be, who aim at establishing the utmost equality between groups of the same kind. Here we have a natural family, not only with a single genus, but perhaps with a single species, or, at the utmost, numbering two or three species, while there are other families, in which the genera may be counted by tens, and the species by hundreds.

The form of the Sphargididæ may be compared to a flattened cone with angular sides, to which are appended in front a large head with a pair of larger naked paddles, and behind, a smaller pair of very broad rudders.

The body is broadest about the arch of the second pair of ribs, where the carapace and plastron first unite, and narrows gradually from thence backwards to near the arch of the seventh pair of ribs, where the union of the carapace and plastron ends. The portion of the vertebral column which is fixed descends gently from the neck to the sacrum. Thus, that part of the body which is entirely encircled by the shield forms a truncated cone with its base turned forward. This cone is the more symmetrical, because the body is deep below the plane of its outer edge and not so extensively flattened as in most Turtles, but tapering downward, so that the median horizontal flat surface of the plastron is quite small. The shield fits close to the body above and below, and assumes the same conical form. The carapace, after passing over the thoracic and abdominal regions and separating from the plastron, suddenly grows narrow much faster, leaving the hind legs almost entirely exposed, but covering the sacrum with a narrow arch, and coming to a point over the tail. In front also, from its union with the plastron forward, the carapace narrows fast, but its front end is truncated; the margin of the sides and end of this narrowed part, which is turned rather sharply downward, are deeply concave, leaving the shoulders and neck much exposed. The plastron narrows constantly from where it first unites with the carapace to where it again separates from it, then narrowing still faster it comes to a point under the pelvis, leaving the hind legs and tail entirely exposed from below. It reaches forward, between the front limbs, but a short distance, and is there much narrowed; the front end of this narrowed part is nearly straight, but the sides are concave. Thus, the hard dermal shield<sup>1</sup>

a sub-family under the name of SPHARGIDINA (Saggio An. Vert. 1831.) The name of Sphargide having the priority as a family name, though it is now rejected by its own author, there arises an interesting question of nomenclature in this case, respecting the

authority under which it shall be quoted henceforth. My opinion is, that, in spite of Gray himself, it should be referred to as SPHARGIDIDÆ, Gray; notwithstanding even the alteration in the spelling.

<sup>1</sup> See Chap. I, Sect. 5, p. 263.