

follows the general plane of the sides of the abdomen." Under the heading *Harpe* we find the following: "The interior surface of each valve, which, as I have said, is hollow, is the seat of a peculiar organ, which appears to take a very prominent part in the prehensile function.

Within the hollow lies a plate of what I presume to be pure chitine, usually as transparent as glass, but tinged with a yellow-brown hue, thickening at various parts, especially at its margins and irregular ridges. . . . The parts thus thickened are also elevated, not merely in the bounding walls and ridges that I have mentioned, but in general by the separating of a portion of the organ from the cavity-floor; so that this particular part shall be elevated and projected freely into the inclosed space between the valves. And these projected portions either take the forms of curved acute spines, or, more frequently still, are notched into sharp teeth standing in serried rows. . . . Whatever the form, the base is always expanded, often with ridges, spreading over the basal edge of the valve. I have no hesitation in assigning a distinctive epithet to the organ in question; and it is known throughout this memoir by the term *Harpe*."

In a footnote, the correctness of which we will comment upon later, Gosse says: "Dr. White has used the term *harpago* for the organ which, in the other Rhopalocera appears to represent the *valve* and *harpe* united. But in the Papilionidæ, where these are separate, it is desirable that they should receive separate designations. The terms *harpago* and *harpe* are sufficiently distinct; while they bear a relation to each other not unlike that of the things designated."

The term *Uncus* is used for the hook-like tip at the dorsal extremity of the abdomen, the *tegumen* of Buchanan-White being restricted to the broad basal portion. We further meet with the term *Scaphium* for the first time, this being applied to a "mass of shining white tissue, apparently in organic union with the lower surface of the uncus near its origin," and shaped like a lower jaw or the keel of a boat. Following this various articles by Cholodkowsky, Hoffman, Jackson, Backer, Escherich, Peytoureau, Stichel, Klinkhardt and Poljanec have appeared from time to time. Backer first applied the term *Saccus* to the chitinous process projecting into the abdomen from the anterior margin of the xii segment, a process already observed by Cholodkowsky. Most of these authors deal largely with the ontogenetic development of the genital organs, attempting to bring the results of their investigations in this branch of the