

skeleton of the Long-Island specimens, and gives measurements and details of the external characters and osteology, all of the highest importance; our only regret being that he did not, respecting some points, make fuller use of his opportunities. We wish we could speak with equal satisfaction of the historical portion of his paper, comprising one-half of his text. Besides numerous outrageous typographical errors (a part of which, however, are corrected on an *errata* slip), relating to proper names and titles of works ('Researches' and 'Reserches' for 'Recherches,' 'Seibold' for 'Siebold,' 'Van Benedin' for 'Van Beneden,' both the latter in repeated instances, and various others of like character, are among those still uncorrected), there are errors of statement of so grave a character as to require notice. It would seem, for instance, that only the merest novice in cetology could have been misled into supposing that the quotation given at p. 114, respecting a whale captured far up the St. Lawrence River in August, 1871, and reported as 'Balaena mysticetus,' was any thing but a rorqual or fin-back whale (in all probability, *Balaenoptera musculus*), much less into an attempt to explain away the evident discrepancies to make it referable to the North Atlantic right whale; yet we find our author devoting several pages to an attempt at this absurdity. Again: in the strictures passed upon Scoresby (pp. 121, 122), he informs us that "his [Scoresby's] inability to portray the subject pictorially was a misfortune," and that "he furnished to science an incorrect figure, at *second hand*," of the *B. mysticetus*, and considers it 'deplorable' that "nearly every book published to this day, having an illustration of *B. mysticetus*, shows a manifest copy of Scoresby's figure." That it was the best figure, if not quite correct in all points, of the species down to 1874, when Scammon's admirable illustration was published, has, I think, hitherto been unquestioned; and if our author has evidence that Scoresby's figure (or rather figures, for he gives two) was not original, its presentation would be undoubtedly a revelation to cetologists. That our critic of Scoresby is none too familiar with Scoresby's cetological writings is evident from his statement, that Godman (p. 129) "gives a lengthy account of the mysticetus, with an amount of anatomical and physiological knowledge of the subject quite unusual;" the fact being, that Godman's account is an uncredited compilation from Scoresby, whole pages being taken entire, and without change, from Scoresby's work, particularly in his notice of the whale-fishery. Bachstrom's figure, published by Lacépède as representing the nordcaper, and which is accepted by Dr. Holder as such, recent eminent authorities have unreservedly referred to *B. mysticetus*; yet on its interpretation as a representation of the nordcaper rests much of Dr. Holder's criticism of Scoresby. We are surprised to see no reference to the various recent original memoirs relating to the so-called *B. biscayensis*, either in the author's formal notice of the 'Right whale of Europe' or in the bibliography of the general subject given at the end of the paper. In 'the list of works referred to' the uncorrected errata are numerous; 'J. C. Gray' (four times repeated), for example, standing for 'J. E. Gray,' 'Col. Hamilton' (also on p. 129) for 'W. Jardine,' etc., while there are also inaccuracies of dates. While, as above said, Dr. Holder gives us valuable information about the external appearance and osteology of the North Atlantic right whale, his historical *résumé* is seriously defective and misleading.

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FIG-INSECTS.

FEW insects offer more remarkable structural peculiarities, or have more puzzled systematists, than the minute Hymenoptera associated with the caprification of figs. Part I. of the transactions of the London entomological society for 1883 opens with a very interesting illustrated paper by Sir Sidney S. Saunders, descriptive of fig-insects allied to *Blastophaga* from Calcutta, Australia, and Madagascar, with notes on their parasites and on the affinities of their respective races.

It is chiefly as a contribution to the discussion of the affinities of these insects that Mr. Saunders's paper possesses so great an interest. In the transactions for last year, Westwood, by certain authoritative statements, appeared to settle the place of the fig-insects (at least, for the genus *Sycophaga*) as among the Chalcididae, and not far from Callimome. He remarks, "The structure of these fig-insects, especially as shown in the females (whose character must be shown as more truly normal than that of the males), recedes so entirely from that of the Cynipidae that we cannot for a moment adopt the suggestion that the fig-insects are Cynipidae. . . . Hence M. Coquerel had no hesitation, in describing the female of one of his fig-insects, to give it the name of Chalcis? explorator; and it is impossible to compare his figure of that insect, or mine of *Sycophaga crassipes*, with a female Callimome, and not be convinced that the fig species are most closely related to Callimome (many of the species of which are parasitic upon the gall-making Cynipidae). The structure of the antennae (even to the minute articulations following the second joint), the fusion of the three terminal joints of these organs, the structure of the wings and wing-veins, and the long exerted ovipositor, sufficiently prove that these insects must be placed in the great family Chalcididae."

Mr. Saunders differs from Westwood in these conclusions, showing that the place of the whole group must not be considered in so sweeping a manner. He disposes of the relationship of the group to Callimome by the following points: 1. The minute articulations in the antennae of the female *Sycophaga* do not correspond with any in the same sex of Callimome, nor do they occur in *Blastophaga*, the antennae of which also differ in other respects from Callimome. 2. The fusion of the three terminal joints, while found in *Sycophaga*, does not occur with *Eupristina* nor with *Agaon*. 3. The wing-veins differ *inter se* among the fig-insects, and Callimome does not coincide with *Eupristina* in this respect; moreover, the wings are invariably absent in the males of the fig-insects. 4. The ovipositor of fig-insects varies in length, and always maintains an arcuate position. The argument which Westwood brought up in a later paper, of the similarity of the dentate genital claspers of *Sycophaga* to those of *Platyesopus* and other Chalcids, Saunders disposes of by saying that this character can have no tribal value, as it is found alike in *Sycophaga* and several of its parasitic associates; moreover, this character is not present in Callimome.

Mr. Saunders's final conclusion is, that this anomalous group which he calls *Sycophagides* should be placed under the Cynipidae in the following manner:—

1. *Prionastomata*. — *Blastophaga* Grav., *Agaon* Dalm., *Sycocrypta* Coquerel, *Eupristina* S. Saund., *Pleistodonta* S. Saund., *Kradibia* S. Saund.
2. *Aploastomata*. — *Sycophaga* Westw., *Apocrypta* Coq. C. V. RILEY.