

northern edge of the Gulf Stream, which he erroneously regarded as identical with *Taonius hyperboreus*, Steenstrup. Another species, *Desmoteuthis tenera*, Verrill, which is almost certainly identical with the real *Taonius hyperboreus*,¹ has since been added to the genus.

The most striking character in the generic diagnosis of *Desmoteuthis* is "Anterior edge of the mantle united directly to the head, on the dorsal side, by a commissure, so that there is no free edge medially; . . . two additional muscular commissures unite the lateral inner surfaces of the mantle to the sides of the siphon." This may be compared with the first sentence translated above from Steenstrup, and with d'Orbigny's description of his genus *Loligopsis*,² in which occur the following words: "Appareil de résistance consistant en trois larges brides, ou attaches fixes, placés au bord même du corps, qui le lient intimement à la tête, l'une cervicale ou dorsale à l'extrémité de la saillie médiane de la coquille. Les deux autres latérales inférieures au lieu ou est ordinairement l'appareil inférieur mobile." It seems almost impossible to resist the conclusion that he means hereby to describe a precisely similar structure; furthermore, in the drawing of his *Loligopsis pavo*,³ the dorsal margin of the mantle is shown, extending on to the head behind the eye. The remainder of the definition of *Desmoteuthis* sounds almost like a translation of that of *Loligopsis*, and nowhere are they in contradiction, as any one may see who reads them side by side.

These quotations would probably suffice to show that *Desmoteuthis* must be regarded as a synonym of *Taonius*, but in addition I have recently had the opportunity of examining the following specimens belonging to this genus:—The type specimens of *Taonius pavo* and of *Taonius cymoctypus* in the Paris Museum, that of *Taonius hyperboreus* in the Copenhagen Museum, a somewhat mutilated specimen of the same species in the Challenger collection, and two from the "Porcupine" Expedition; a specimen of an unpublished species which Professor Steenstrup proposes to call *Taonius elongatus*⁴ (Pl. XXVIII. fig. 13); and two specimens of *Taonius suhmi*, from the Challenger collection; and on the basis of this material the above description of the genus has been drawn up, which will, I think, leave no doubt as to its identity with *Desmoteuthis*. Not only is this the case, however, but it seems also most likely that the specimen which Verrill obtained from the northern edge of the Gulf Stream, and which he believed to be identical with *Taonius hyperboreus*, was none other than *Taonius pavo*.

That it differs from the former of these may be seen by a most cursory examination of the type specimen, or of Pl. XXXIII. fig. 1, and may be also seen by a careful comparison of Verrill's figures with Steenstrup's description.⁵ *Taonius hyperboreus* is there defined

¹ *Op. cit.*, p. 412.

² Céph. acét., p. 320; Moll. viv., p. 368.

³ Céph. acét. pl. iv. fig. 1; Moll. viv., pl. xxiii. fig. 6.

⁴ *Taonius elongatus*, Stp., MS., is characterised by its elongated form, by the *body* being broadest anteriorly and tapering backwards at first rather suddenly, then more gradually. The *fin* is cordate and pointed behind like that of *Taonius suhmi* but much larger, and the *eyes* are comparatively small.

⁵ Overblik, p. 84.