

The two species of this genus described by Lucas, namely, *Platydesmus polydesmoides* and *Piestodesmus moreleti*, were sufficiently distinct to justify fully at the time this author's view as to the generic value of their structural characters, de Saussure's statement to the contrary notwithstanding. The principal difference between the types of *Platydesmus* and *Piestodesmus*, apart from the much greater width of the body in the latter, lies in the form of the first tergal plate, which in *Piestodesmus* is greatly expanded in front so as to cover the head completely, whereas in *Platydesmus* it is widely excavated, leaving the summit of the head wholly exposed. The species described and seen by de Saussure seem in no respect to lessen the value of this structural character by supplying an intermediate stage between the two forms of the tergal plate in question. So far as this structure is concerned, *Platydesmus mexicanus* is a genuine *Platydesmus*, agreeing with *polydesmoides* and differing essentially from *Piestodesmus moreleti*. Nevertheless de Saussure's union of the two is justified, and shown to be correct by the evidence furnished by the species in the Godman and Salvin Collection. Amongst the Diplopods collected at Omilteme by Mr. H. H. Smith, I find the two species of *Platydesmus* described below as *P. hirudo* and *P. mesomelas*, which, with *P. marmoreus*, serve to bridge over completely the interval between the extreme forms first named by Lucas.

I am unable to find any justification for Bollman's statement (Bull. U.S. Nat. Mus. no. 46, pp. 137 & 188, 1893) that the type of *Piestodesmus* differs from that of *Platydesmus* in having two ocelli instead of one on each side of the head. Lucas describes the species as having two—that is to say, one pair of ocelli.

Bollman also states that the genus *Brachycybe*, H. C. Wood (Proc. Acad. Phil. 1864, p. 187; Trans. Amer. Phil. Soc. 1865, p. 230), agrees in all points with *Platydesmus*, except in being eyeless; and this feature he did not consider to be of generic value. Silvestri, however, kept the two distinct on account of it; but that a specific rather than a generic importance should be attached to the presence or absence of these organs is, in my opinion, established by the discovery of *Platydesmus guatemalensis*, which seems to differ from the typical and other species of *Platydesmus* only in this particular, apart, that is to say, from other characters of admittedly specific significance. Still I hesitate to follow Bollman and Brölemann in adding *Brachycybe* to the synonymy of *Platydesmus*. Bollman's description of *P. lecontei*, the type of the genus, supplies no data justifying the separation of the two; but Brölemann's diagnosis (Mém. Soc. Zool. Fr. 1900, p. 110, t. 57. figg. 69–77) assigns to this species two characters which are not found in any of the Central-American species of *Platydesmus* available to me for examination. These are: (1) the reduction in width of the sternal areas so that even in the mid-region of the body the coxal segments of the appendages of the right and left side are mesially in contact; and (2) the presence upon the sterna of a cariniform tubercle, which projects forwards in the middle line.