segment widely extended laterally; distal segment short but very stout, biramous; the inferior branch broad, sinuously curved, with rounded spatulate apex, bearing inferiorly a short membranous process which is probably the seminal style; a long, thinner subsidiary branch projecting upwards and forwards.

Length 27 millim., width 9.5.

_Hab._ Mexico, San Andres Tuxtla in Vera Cruz.

Although from the same locality as the preceding, and presenting the same colour and much the same shape of keels, this species differs essentially from it in its secondary sexual characters, as shown by the structure of the anterior legs of the male, of the phallopods, and of the rim of the socket in which the phallopods are lodged. These organs show that although the females might be difficult to distinguish, the males are widely divergent.

3. _Sphæriodesmus prehensor_, sp. n. (Tab. VIII. figs. 9, 9 a.)

In the shape of the body, the form of the segments and of the keels, very similar to _S. robustus_ from San Andres Tuxtla, but much smaller and of a uniform whitish-grey colour. The lateral portions of the fourth and fifth segments are subequal in width, and on the fifth the marginal groove is continued along the inferior edge and upcurled at the posterior angle.

First leg of male but little modified, the femur (third segment) without tubercle and not excavated inferiorly. _Sterna_ of fifth and sixth of about the same relative width as in _S. ovisca_; but the rim of the socket of the phallopods a little raised laterally carrying up the spiniform tubercle, the elevated edge gradually subsiding just in front of the ovoid segment of the posterior legs of this segment of the body, which are separated by a sternal area about equal in width to the length of their second segment. _Phallopods_ with basal segments stout, widely separated proximally but converging distally, with a tubercle on their anterior face; the distal (tibio-femoral) segment short and stout, biramous, the principal branch spatulate and bearing two short slender processes at the apex, the inner or inferior of these the larger of the two and hooked; the smaller or accessory branch rising from the lower side on the inner edge of the segment and blade-like and polliciform.

Length 15 millim., width 5.

_Hab._ Mexico, Omitlame in Guerrero 8000 feet (H. H. Smith).

4. _Sphæriodesmus angustus_, sp. n. (Tab. IX. figs. 1–1 g.)

3. Colour (in alcohol) pale olivaceous. _Body_ noticeably narrowed posteriorly and gradually sloping downwards from about the sixteenth segment, not abruptly sloped quite at the posterior end. _Segments_ smooth, shining. _Keels_ of fourth segment with pronounced sigmoid curve, the anterior border strongly convex, the posterior correspondingly concave; keels of fifth slightly wider except at the extremity than those of the fourth. The posterior borders of the majority of the keels lightly convex and marked off from the dorsal portion of the segments by a slight notch, which becomes more distinct towards the posterior end of the body. The posterior angles of the keels from the sixth to the tenth segments rounded, from the eleventh to the fourteenth rectangular, from the fourteenth to the nineteenth becoming gradually more and more acute; posterior border of keel of eighteenth segment forming a decided angle with the posterior border of the dorsal portion of the segment. _Anal tergal plate_ nearly as long as wide.

First leg of male a little modified, the femur hollowed on its inferior edge, with a low basal anguliform prominence. _Sterna_ of fifth and sixth segments noticeably narrower than the length of the second segment of the legs. Socket of phallopods extending laterally almost to the spiniform tubercle, where its rim is a little raised and thickened, the rim not raised posteriorly. _Sternal area_ between the legs of the posterior pair of the seventh segment narrow, about equal in width to the length of the second segment of the legs. _Phallopods_ with basal segments not strongly convergent, distal segments stout,