

- B. Second and third ventral opisthosomatic somites separated by a transverse fold. Palpi long, slender, cylindrical, almost or quite unarmed; the terminal claw not simply unciform, but dilate basally, piriform. Tarsi of legs iii. and iv. with a white vesicle beneath and between the claws. . . . . PALPINIDÆ, nov.

### Fam. COSMETIDÆ.

No sterno-coxal lobe on leg ii. Palpi not longer than the body; armed with five marginal spines only, the femur being compressed; the tibiæ flattened-lamelliform, dilate and concave beneath, thus fitting over the mandibles. Terminal tarsal claw of palpus usually about half the length of the tarsus. Spiracles exposed. Second and third opisthosomatic somites fused together, without visible suture. Coxa iv. often very much enlarged, especially in the male sex. Eye-tumulus low, without coniform tubercles. Legs iii. and iv. in some cases larger than i. and ii., in others subequal; i. and ii. each with one, and iii. and iv. with two tarsal claws, those of the last two pairs sometimes pectinate.

The Cosmetidæ may be divided into the following subfamilies, of which the first (including the genera *Gryne*, *Protus*, *Discosoma*, &c.) is not at present known to be represented in Central America. They may be separated thus:—

#### SUBFAMILIES.

- A. Tarsal claws of legs iii. and iv. pectinated . . . . . [DISCOSOMINÆ, nov.]  
 B. Tarsal claws of legs iii. and iv. not pectinated . . . . . COSMETINÆ, nov.

#### Subfam. COSMETINÆ, nov.

So far as the generic groups are concerned, C. L. Koch and E. Simon have based their subdivisions chiefly on the number of segments in the tarsi, especially of leg i. Sörensen and Loman, while refraining from regarding these characters as of sufficient importance for the purpose, have not, so far as I can ascertain, proposed others any more satisfactory. It is quite true that the number of the tarsal segments varies very much in forms which otherwise are evidently closely allied; but, at the same time, so far as my experience goes, the number, at any rate in leg i., is quite constant in the same species, *e. g.* they are not liable to individual variation.

There are two courses open to us: (1) either to "lump" together all the forms here described under the subfamily Cosmetinæ, and place them under one generic heading, *Cosmetus*, Perty; or (2) carry out the subdivision based on the varying number of tarsal segments consistently throughout its minute ramifications. The latter plan is adopted here, owing to the great inconvenience of tabulating a number of species in a single generic group.

Of the genera indicated below, *Erginus* and *Cynorta* are perhaps the least satisfactory, because the relative size of legs iii. and iv., when compared with i. and ii., varies very much, and one is liable to find forms in which it is impossible to say whether they are "markedly" larger or not.