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[commentary in square brackets]

27. Platygastriidae. This family was, until now, composed of three genera: *Iphitrachelus*, *Inostemma*, and *Platygaster*. A fourth genus, *Epimeces* Westwood, was synonymized again with *Platygaster* by Walker [1835]. There is no doubt, however, that the great wealth of species in the genus *Platygaster* could probably endure further treatment and [this] has already become a necessity. Luckily, the formation of new genera here is not only possible, but even much easier than in the genus *Pteromalus*. Whether the attempt I am making here will be recognized, I do not know, but I dare say that it will, as I myself have found the greatest relief in determining the species.

The conspectus of the genera is as follows:

- a. Submarginal vein terminating in a small knob.
  - b. Tarsi four-segmented... *Iphitrachelus* Haliday
  - bb. Tarsi five-segmented.
    - c. Antenna nine-segmented, in male serrate... *Allotropia* m.<sup>1</sup>
    - cc. Antenna ten-segmented, in male not serrate.
      - d. Wing with basal and middle vein
        - e. Three apical flagellomeres much bigger than the previous, forming a club... *Metaclisis* m.<sup>2</sup>
        - ee. Only the last segment bigger than the previous... *Monocrita* m.<sup>3</sup>
      - dd. Wing without basal and middle vein
        - f. Lateral ocelli closer to the median ocellus than to the compound eye... *Isostasius* m.<sup>4</sup>
        - ff. Lateral ocelli closer to the compound eye than to the median ocellus
          - g. Female with a horn on the first metasomal segment... *Inostemma* Haliday

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<sup>1</sup> *Allotropia* from ἀλλότροπος [*allotropos*], different, variable. The name refers to the male antennae, which show a divergent formation due to their serrated shape.

<sup>2</sup> *Metaclisis* from μετάκλισις [*metaklisis*], curving, bending back. The name alludes to the main wing vein, which bends back, as it were, from the lower marginal vein.

<sup>3</sup> *Monocrita* from μόνος [*monos*], one, alone, and κριτός [*kritos*], separated, divorced. Indicative of the antennal flagellum, in which only one segment is detached as a clava.

<sup>4</sup> *Isostasius* from ἰσοστάσιος [*isostasios*], equivalent, generally equal.

- gg. Female without a horn on the first metasomal segment... *Acerota m.*<sup>5</sup>
- aa. Submarginal vein not terminating in a small knob.
- h. Mesoscutellum more or less elongate, not semicircular, or if shortened, then always laterally compressed, with an awl- or wart-shaped spine
- i. Mesosoma conspicuously compressed from the side... *Catillus m.*<sup>6</sup> [replaced by *Piestopleura*<sup>7</sup>]
- ii. Mesosoma not compressed from the side
- k. Mesoscutellum elongate, without thorn-, awl, or wart-shaped spine
- l. Notauli deep, parallel towards the end; female clava not abrupt, the last two antennomeres separated... *Xestonotus m.*<sup>8</sup>
- ll. Notauli completely indistinct or absent; female clava with four segments, the last two segments closely connected... *Amblyaspis m.*<sup>9</sup>
- kk. Mesoscutellum elongate, with thorn-, awl-, or wart-shaped spine
- m. Mesoscutellum with a more or less robust thorn-shaped spine.
- n. Lateral ocelli closer to compound eye than to median ocellus [OOL < LOL]; four clavomeres... *Leptacis m.*<sup>10</sup>
- nn. Lateral ocelli not closer to compound eye than to median ocellus; three clavomeres; head diamond-shaped in frontal view... *Isorhombus m.*<sup>11</sup>
- mm. Mesoscutellum with awl- or wart-shaped spine, somewhat shortened and laterally compressed.
- o. Metasoma very elongate... *Ectadius m.*<sup>12</sup>  
[*Polymecus*<sup>13</sup> invalid replacement name]
- oo. Metasoma not especially elongate.

<sup>5</sup> *Acerota* from ἀκέρωτος [*akerotos*], unhorned, without horn.

<sup>6</sup> *Catillus* nom. pr. Because Walker gave this name to a species of *Platygaster*, so have I established the same here as a generic name.

<sup>7</sup> *Piestopleura* from πιεστός [*piestos*], depressed and πλευρά [*pleura*], side.

<sup>8</sup> *Xestonotus* from ξεστός [*xestos*], smoothed, polished and νῶτος [*notos*], back. Not only is the mesonotum, but also the mesoscutellum here totally smooth, entirely without sculpture, which this naming indicates.

<sup>9</sup> *Amblyaspis* from ἀμβλύς [*amblys*], blunt and ἀσπίς [*aspis*], shield.

<sup>10</sup> *Leptacis* from λεπτός [*leptos*], thin and ἀκίς [*akis*], spike. Denoting the thin sharp spine of the mesoscutellum.

<sup>11</sup> *Isorhombus* from ἴσος [*isos*], equal and ῥόμβος [*rhombos*], rhombus. Because of the high vertex, the head appears very definitely diamond-shaped when viewed from the front.

<sup>12</sup> *Ectadius* from ἐκτάδιος [*ektadios*], elongated, outstretched.

<sup>13</sup> *Polymecus* from πολὺς [*polys*], many and μήκος [*mekos*], length.

- p. T2 in female strongly compressed and sac-like... *Sactogaster m.*<sup>14</sup>
- pp. T2 in female not sac-like... *Synopeas m.*<sup>15</sup>
- hh. Mesoscutellum not elongate, but rather semicircular; either flat, convex, or cushion-shaped.
- q. Mesoscutellum completely flat... *Anopedias m.*<sup>16</sup>
- qq. Mesoscutellum not flat.
- r. Head cubical... *Isocybus m.*<sup>17</sup>
- rr. Head not cubical.
- s. Mesoscutellum with tuft of setae at the tip... *Trichacis m.*<sup>18</sup>
- ss. Mesoscutellum without tuft of setae at the tip.
- t. Edge of the metasoma very widely turned... *Hypocampsis m.*<sup>19</sup>
- tt. Edge of the metasoma not widely turned.
- u. Mesoscutellum completely cushion-shaped, separated from the mesonotum by a deep groove at the base; temples very wide... *Polygnotus m.*<sup>20</sup>
- uu. Mesoscutellum not separated from mesonotum by deep groove, temples not very wide... *Platygaster* Latreille

One can divide the platygastriids into two natural tribes in two ways, either by counting the number of tarsal segments, or by considering the development and shape of the submarginal vein. I prefer the latter classification, because the tarsi only allow the separation of one monotypic genus from the whole family, but several genera and a larger number of species can be separated based on the submarginal vein. Depending on whether the submarginal vein terminates in a small knob or not, we get two divisions.

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<sup>14</sup> *Sactogaster* from σακτός [*saktos*], filled, stuffed, and γαστήρ [*gaster*], belly. The second metasomal segment of the female is thick, saclike, as if it were filled with a special content.

<sup>15</sup> *Synopeas* from σύν [*syn*], with and ὄπεις [*opeas*], awl. Because the mesoscutellum usually has an awl-shaped spine, so the generic name includes an allusion to this organ.

<sup>16</sup> *Anopedias* from ἄνω [*ano*], over and πεδιάς [*pedias*], flat. So refers to the totally flat mesoscutellum.

<sup>17</sup> *Isocybus* from ἴσος [*isos*] and κύβος [*kybos*], cube. Denoting the cubical head.

<sup>18</sup> *Trichacis* from θρίξ [*thrix*], hair and ἀκίς [*akis*], spike. Denoting the thin, sharp spine of the mesoscutellum.

<sup>19</sup> *Hypocampsis* from ὑποκάμπω [*hypokampto*], bend over and intransitively to bend over oneself. This name refers to the strongly and broadly curved edges of the metasoma.

<sup>20</sup> *Polygnotus* from πολὺς [*polys*], many and γνωτός [*gnotos*], known, related. So named because of the great affinity with *Isocybus*.

From the first tribe, with a knobbed submarginal vein, four tarsal segments distinguish the genus *Iphitrachelus*, one of the most beautiful discoveries of the famous Irish entomologist, who is so often called Haliday. The male has ten-segmented antennae with whorl-haired serrate segments, roughly as in *Eurytoma*; the female has only eight-segmented antennae, the last segment [of which] resembles a strong but not clearly ringed knob. The notauli are very distinct. What particularly distinguishes this genus, however, is the dorsal metathorax, which has membranous stripes that form three pits, as it were. The first abdominal segment is short and covered with a [hairy] pelt, the second is very large and covers almost the entire back. In the local area [Aachen, Germany], I discovered the female of this rare genus, which previously had only been found in Ireland.

The following genera of this tribe are distinguished from *Iphitrachelus* by the five-segmented tarsi. Of these, the genus *Allotropa* is separated from the others not only by the nine-segmented male antenna, but also in that the flagellum shows the same formation as in *Iphitrachelus*. The notauli are barely visible. The male is only known from one species, *Allotropa mecrida* (Walker) (= *Inostemma Mecrida*), of which I have an original exemplar before my eyes.

On *Inostemma areolata* Haliday, of which I have received an original exemplar from Haliday himself, I have founded the genus *Metaclisis*, which by ten-segmented antennae in both sexes, and by non-serrate male antennae, is separated from the preceding genus *Allotropa*, [and is separated] as well as by the appearance of a basal wing vein from *Isostasius* and *Inostemma*. In the female we have a three-segmented clava, in which the three apical segments of the flagellum are distinctly larger than the preceding ones. The mesoscutellum is flat. ♂♀. The female obtained from Haliday exhibited a faint, conical protrusion at the base of the second [metasomal] segment.

*Monocrita* is distinguished from *Metaclisis* mainly by the one-segmented clava, barely visible notauli, and a convex tubercular mesoscutellum, while it only resembles this genus alone through the presence of the basal [fore wing] vein. Also, in this genus the female is known from only one species, which Walker described under the name *Inostemma Atinas*.

Nees von Esenbeck has written on two species of *Platygaster* which have a submarginal vein terminating in a small knob, namely *Platygaster boscii* and *Platygaster punctiger*. Each constitutes, respectively, a particular genus: *Platygaster boscii* belongs to the genus *Inostemma* Haliday and *Platygaster punctiger* [forms] a new genus, which I call *Isostasius*. The character of this genus is outstanding in many respects, and a separation from *Inostemma* is absolutely necessary. First it must be noted, that the lateral ocelli are closer to the median ocellus than to the inner margin of the compound eye, whereas in *Inostemma* it is just the opposite. The male antenna is almost club-shaped, slightly hairy, ten-segmented; the first segment of the flagellum very small, rounded, the following two thicker but of the same rounded shape, short, the fourth somewhat larger than the third, wider than long, the three following similar to each other, thicker than the fourth segment, but also somewhat wider than long, the tenth segment conical and as long as the previous two. The notauli are very distinct, the mesoscutellum convex. The first [metasomal] segment is short, the second very large, occupying almost the entire dorsal metasoma; the two following segments and the upper anal covering very short, and together barely as long as the first segment. The sutures of the last segment are very indistinct and barely visible. In the female the antennae are also

ten-segmented, with a strong four-segmented clava, of which the first segment is much smaller than the gradually enlarged following segments. The apical segment of the clava is the largest, quite wide and very bluntly rounded. The metasoma of the female consists of three segments; the second is so large that it completely encloses the third dorsally, [and] one can only see the third segment ventrally. On the dorsal side we find a faint indentation just before the tip, which could easily be interpreted as an incision in a segment. Walker appears to have fallen into this error. Namely, his *Inostemma scrutator*, as I confidently believe, is a synonym of *Isostasius punctiger*; he thinks he sees smaller and shorter segments behind the second very large segment of this kind. If he saw correctly, he would not only have had a different species before him, but a completely different genus. Our *Isostasius punctiger* has recently proved to be a very useful little animal, for it is the destructive parasite of the very much feared and damaging *Cecidomyia tritici* Latr. [probably *Contarinia tritici* (Kirby)], on which M.C. Bazin gives such beautiful and interesting observations.

Haliday founded his genus *Inostemma* on *Platygaster boscii* Jurine, which in the female sex is outstanding in one beautiful character, that is the horn on the first metasomal segment, which extends over the thorax to the head. The male differs from *Isostasius* not only in the different placement of the lateral ocelli, but even more in the metasoma. The second segment here takes up no more than half the entire dorsum, so the following segments stand out very distinctly and clearly. The genus *Acerota* can be easily and simply distinguished from *Inostemma* by the lack of a horn on the first metasomal segment.

The genus *Platygaster* Latreille, which, so numerous in species, already presents insurmountable difficulties in identifying individual species, will hopefully be more accessible through a firm justification of the new genera presented here, and thereby some of the inconveniences will be remedied to some extent. As much as possible in this multiform genus, as in *Inostemma*, I have followed the sections already established by Walker, but based on our own investigations and observations over several years, and having at my disposal material that I could hardly master, I allowed myself numerous deviations, as far as seemed absolutely necessary. Above all, it seemed necessary to establish guiding principles which had to be decisive in justification. In that regard, the mesoscutellum presented a good character, by which to divide the new genera into two little tribes, for this is sometimes elongated, either drawn out into a long thorn, or presenting as a wart- or awl-shaped tip, sometimes ending bluntly. Sometimes it is rounded in a semicircle, and then usually more or less convex, very rarely quite flat. Furthermore, the shape of the head offered a not insignificant feature, as in one genus it shows a cubic shape, in another, seen from the front, a diamond shape. The way in which the head and neck are separated or merge into one another, the position of the lateral ocelli in relation to the margin of the compound eyes, should also not be ignored, but the characters derived from them were only used with caution. On the mesosoma, the division of the mesonotum by furrows [notauli] seemed not insignificant; even the course of these, namely whether they converge towards the mesoscutellum or run parallel, can possibly be included as a generic character. The sculpture, in all cases a subordinate character, is only peculiar to a few genera on the head and then is to be considered more [important]. The abdomen is so variable in form that one must ensure, through many precise observations, which characteristics are stable enough to be included in the generic diagnosis. The peculiar formation of the second metasomal segment in

*Sactogaster*, the very wide unbroken margin [laterotergite] in *Hypocampsis*, form such steadfast generic characters. The strong elongation of all metasomal segments, on the other hand, may only be regarded as a generic feature in *Ectadius* [*Polymecus*], where the mesoscutellum also has an awl-shaped tip. In *Platygaster*, however, the greatly elongated metasomal segments of many species (on which Westwood based his genus *Epimeces*) do not have this significance, because transitions appear which gradually lead the metasoma back to the usual proportions of length. Wings and legs exhibit absolutely no generic characters.

After these clarifications, we can now be more succinct when considering the genera. The genus *Catillus* [*Piestopleura*] includes the one species, which Walker named *Platygaster catillus*. Here I have used this species name as a genus name. Walker knew only the female, while I have also discovered the male in the local area [Aachen]. Both sexes are distinguished by the very strongly compressed mesosoma, the back of which appears arched as a result. The lateral ocelli are close to the inner margin of the compound eye. The female antenna has a loose four-segmented clava; in the male the first and third flagellomeres are of moderate size, about the same as the pedicel, the second is, on the other hand, longer than the two preceding combined, spindle-shaped, not especially strongly thickened, the five last antennomeres are elongate, separated by a small bridge, long-haired. Mesonotum with faint traces of notauli: mesoscutellum terminating in a short straight spine. Male metasoma seven-segmented, in the female with six segments. I now [re]name *Platygaster catillus* as *Catillus walkeri* [*Piestopleura catilla* (Walker)].

To more easily identify the genus *Xestonotus*, one must turn one's attention to the course of the notauli in the direction of the mesoscutellum. As these notauli do not converge in the specified direction, but rather are almost perfectly parallel, so we already get the first solid clue to the determination of this genus. Furthermore, we find the lateral ocelli clearly placed nearer to the inner margin of the compound eye than to the median ocellus. In the male the first flagellomere is very small, the second relatively very large, the third of the same length and width as the pedicel, the five following rounded and connected by a small bridge. The apical antennomere is rather bluntly pointed. The setation of the flagellum is not particularly long. In the female all flagellomeres are elongate, gradually thickening towards the tip, without, however, forming a distinct club. The first flagellomere here is also very small, round and closely adjoins the second. The two last antennomeres are very clearly separated, which makes the difference from *Amblyaspis* immediately obvious. Head, mesonotum, and mesoscutellum are in both sexes fully smooth, highly reflective, as if polished. The mesoscutellum is outstanding in its special form. It is flatly arched, not rounded in a semicircle at the end, but rather uniformly blunt, moderately elongate. The male metasoma is no longer than that of the female, broadly rounded at the tip, the second segment very large, the following very small. In the female it is much narrower, long ovate, the third and sixth segments rather wide, together measuring about two-thirds the length of the second [segment].

For the genus *Amblyaspis*, we have in the shape of the mesoscutellum a good and steadfast character. It is, as it were, conically elongated and so intimately joined with the mesonotum, that it is only separated from it by a very fine, sometimes indistinct seam. The head is anteroposteriorly shortened, the lateral ocelli are at least as distant from the compound eye as they are from the median ocellus. The vertex is separated from the neck by

a fissure. The antennae in both sexes are ten-segmented, in the female the two first flagellomeres are elongate, the two following small, the four last forming a clearly abrupt clava, in which the ninth and tenth segments are closely connected with each other. This connection appears to be characteristic of the genus *Amblyaspis*. In the male the first flagellomere is somewhat smaller than the second, this one appearing rather thick, the following all rounded. The mesonotum has no or very indistinct notauli. This genus includes the Section XIV of Walker.

The genus *Leptacis* is very easily distinguished by the short or long mesoscutellar spine, which is only comparable to that of *Isorhombus*. One may add, however, the position of the lateral ocelli, which here stand closer to the compound eye than to the median ocellus, also the more or less fine fissure which separates the vertex and neck, and the four-segmented clava of the female, then we may consider this genus as sufficiently justified. Our genus corresponds to Section II of Walker, which includes four species: *Tipulae* Kirby, *Nydia*, *Laodice*, and *Nice* Walker.

At first, tempted by the mesoscutellar spine, one could confuse the genus *Isorhombus* with *Leptacis*, but the formation of the head is so characteristic and different that this is a consistently distinguishing feature. In frontal view, the vertex appears in the middle quite unusually raised and if one draws straight lines from the center of the vertex to the lateral margin of the compound eyes and from there to the mouth, one obtains a nearly perfect diamond shape. Additionally, in the position of the lateral ocelli, the difference from *Leptacis* is unmistakable. The sharp divide between the neck and crown is also missing. Another equally decisive difference lies in the formation of the clava in the female, because this is definitely only three-segmented, while in *Leptacis* it is four-segmented.

Among the genera whose mesoscutellum is seen with an awl-shaped spine, *Ectadius* [*Polymecus*] is characterized by the very strongly elongate metasoma. The lateral ocelli stand just as close to the median ocellus as to the margin of the compound eye. Vertex and neck are separated by a sharp divide. On the antennae, the first and second flagellomere are elongate, cylindrical, the two following rather shortened, not narrower than the preceding, almost round, the four last form a strongly abrupt club. The mesonotum has rather distinct furrows. *Ectadius* comprises Walker's section V, and includes only one species, *Ectadius Craterus* Walker.

One of the most outstanding forms among the platygastroids is undoubtedly the genus *Sactogaster*, due to the strange shape of the metasoma of the female. Namely, the second segment is not broad when seen from above, but from the side so strongly compressed, that it is like a sack hanging below; the following segments are all very small and together form a tail. Walker [1836] recorded only two species of this beautiful genus in his section III, *ventralis* Westwood and *osaces* Walker, both only known from the female sex. I have these species from the local area, and also four new ones, one of which has been reared in both sexes by Mr. Winnertz of Krefeld from larvae of *Cecidomyia pisi* [*Contarinia pisi*]. The male is characteristic in that the first flagellomere is very small and is closely fused with the second, also the flagellum really appears to have only seven segments under the sharpest loupe. In the female of this genus, the first, second, and third flagellomeres are very small, the second twice as long as the previous one, the four last forming a thick distinct club. In both sexes the mesoscutellum has an awl-shaped spine.

Because this genus arouses great interest due to its peculiar form, I want to briefly explain here the species that are known to me:

- a. The third and the following [metasomal] segments strongly shortened and together not much longer than the second..... *osaces* Walker
- aa. The third and the following segments [together] much longer than the second.
  - b. The third to sixth segment strongly curved..... *curvicauda*
  - bb. The third to sixth segment almost straight.
    - c. The crown of the head separated from the neck by a sharp fissure.
      - d. The fifth segment slightly shorter than the sixth... *subaequalis*
      - dd. The fifth segment about a third shorter than the sixth... *pisi*
    - cc. The crown of the head gradually merging into the neck.
      - e. The second segment almost disc-like, round when viewed from the side..... *longicauda*
      - ee. The second segment not appearing round from the side... ..  
.....*ventralis* Westwood

From *Leptacis* and *Isorhombus*, our genus *Synopeas* is distinguished very clearly by the mesoscutellum. This is very broad at the base and slightly rounded towards the tip, so that it looks almost semicircular. The tip itself can take [one of] three forms, because it either does not stand out very clearly, or is stretched out in the shape of an awl, more or less elongate, or sometimes directed upwards like a tubercle (pyramidal!). The hind margin of the mesonotum shows, hard at the base, a rounded, more or less protruding, smooth callus, which stands out particularly clearly when it is colored reddish-brown. Sometimes it is black, covered with fine hair, little or not very clearly visible. The abdomen is in most species strongly convex. Sometimes a seventh segment appears clearly on the hindquarters. *Synopeas* is separated from the genus *Ectadius* by the poor development of the abdomen, an obvious and easy distinguishing character. The species of *Synopeas* seem to belong to the seventh to thirteenth sections of Walker's. To break these sections down into special genera did not seem feasible to me, for lack of firm and substantial distinguishing characteristics.

*Anopedias* is a characteristic genus because of the very flat, blunt mesoscutellum, which does not rise in the slightest above the surface of the metanotum. The lateral ocelli stand far from the inner edge of the compound eye. The male flagellum is very small in the first segment, but the two following segments are about the same thickness, the four following barrel-shaped, a little longer than wide, the last almost twice as long as the penultimate. All flagellomeres are covered with short prominent hairs. The female antenna differs a little from that of the male: the first flagellomere is small and rounded, the second and third somewhat thicker, barrel-shaped, only a little longer than wide, the following somewhat thicker, longer and cup-shaped, the last four forming a club. The setation hardly falls into the compound eyes. The mesonotum is posteriorly flattened in both sexes and without traces of furrows: the metasoma barely longer than the mesosoma, six-segmented, in the male broadly rounded at the tip, in the female ovate and coming to a point.

I founded the genus *Isocybus* on the sixteenth Section [of] Walker's, which contains *Platygaster ruficornis* Latr., *Erato*, *Matuta* and *Cotta* Walk. This genus is characterized by

the following features: head more or less cubical; lateral ocelli removed from the inner edge of the compound eye; the male antennae have the first flagellomere small, crooked, truncate, the second large, weakly curved, the six following cylindrical; in the case of the female the first two flagellomeres are also cylindrical. Vertex gradually and imperceptibly merging into the nape of the neck, without fissure. Mesonotum with furrows. Mesoscutellum rounded at the tip, convex and depressed on both sides, depression with dense but short hair. Abdomen in the female six-segmented, in the male seven-segmented. Distinguished from all other genera also by more respectable size.

*Trichacis* is easily distinguished from the preceding genus by the non-cubical head, in which, moreover, the vertex and neck are separated by a more or less sharp fissure. The lateral ocelli stand at least as close to the median ocellus as to the inner margin of the compound eye, and a faint groove runs between them to the margin of the compound eye. The female antenna has a rather distinct five-segmented clava, in the male antenna the first flagellomere is somewhat smaller than the third, the second somewhat thickened, bent askew, the following cylindrical, connected by a short bridge, short-haired. Mesonotum with distinct notauli. The mesoscutellum shows an especially beautiful character, namely, a short, somewhat erect, dense tuft of hair at the tip. Metasoma barely longer than mesosoma, in the male bluntly rounded, in the female broadly ovate at the tip. This genus forms the fifteenth section of Walker's and includes three species: *Pisis*, *Remulus*, and *Didas* Walker.

From most genera of this family, *Hypocampsis* can be distinguished at first glance by the wide and very flat abdomen, the edges of which are very broadly turned. With the female, the antenna is not club-shaped but thread-shaped; all the segments of the flagellum are elongate. The first [flagellomere?] hardly half as long as the second, but closely connected with it; the lateral ocelli are closer to the median ocellus than to the compound eye. The mesonotum has distinct, converging furrows. The abdomen is almost elliptical, but somewhat narrower towards the tip than towards the base; the last four segments wide and together almost as long as the second; the folded lateral edge so wide that it covers the greater part of the abdominal segments. The male differs in the shape of the antenna, in that the first flagellomere is short, cup-shaped, and fairly closely connected to the second, which is difficult to see. The last six segments are cylindrical, short-haired, almost the same length, the last slightly longer than the penultimate and bluntly pointed. The abdomen is widened towards the tip and broadly rounded. Herr von Heyden near Frankfurt, Herr Stollwerk near Uerdingen and I myself near Aachen raised both sexes from *Abies* cones; here they live parasitically in the larvae of *Cecidomyia strobi* Kalt. [Possibly *Kaltenbachiola strobi* on *Picea abies*.]

For the genus *Polygnotus* there is something characteristic in the rather thick head with its broad temples, and in the uniform, dense and strong sculpture, which is immediately reminiscent of the genus *Isocybus*. The vertex and neck are not separated. The lateral ocelli are just as far from the median ocellus as from the inner edge of the compound eye. The furrows of the mesonotum are completely continuous, very deep, and the parapsida themselves sometimes show such longitudinal furrows. The mesoscutellum is semicircular, at the base separated from the mesonotum by a deeply incising groove, so that it can rise freely from all sides in the shape of a cushion. Seen from the side, the separation from the mesonotum is very clear, as if by a fissure, and the tip of the shield of the mesonotum appears

to protrude like a tooth. The abdomen does not appear much longer than the mesosoma, the third to sixth segments are distinct and fairly wide. In the form of the antennae, *Polygnotus* resembles *Hypocampus*, but the individual antennomeres are not so strongly stretched. *Platygaster striolatus* Nees can be seen as a type.

The genus *Platygaster*, despite the separation of all the genera listed here, remains so numerous in species and so varied in form that the difficulties caused by the division can indeed be reduced, but not yet regarded as entirely [resolved]. Only by breeding these little animals will we be able to put together the sexes, which differ in many ways, since it would be almost impossible in any other way to match to the female, with a greatly elongated abdomen, to the male, who has a short abdomen (usually the length of the mid-body). Size and color are quite unreliable guides; the sculpture of the head and mid-body is usually not sharp enough and so there is almost nothing left to draw further conclusions on analogies. The sexes must be kept clearly separate and as much as possible, must be precisely described.