

NEW OR IMPERFECTLY KNOWN

ISOPODA,

DESCRIBED BY

CARL BOVALLIUS.

PART II.

WITH 2 PLATES.

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STOCKHOLM, 1886.

KONGL. BOKTRYCKERIET.
P. A. NORSTEDT & SÖNER.

1. *Aega Lovéni*. N. sp.

Deriv. The name in honor of Professor SVEN LOVÉN.

Diagn. *Corpus* ovatum plus duplo longius quam latius.

Caput quater latius quam longius, acumen frontis procumbens, articulum primum antennarum primi paris totum discernens.

Oculi mediocres, sexta parte latitudinis capitis distantes.

Antennæ primi paris marginem anteriorem segmenti secundi pereii paulo superantes; flagellum XVII-articulatum.

Antennæ secundi paris dimidium segmenti quarti pereii æquantes, flagello XVIII-articulato instructæ.

Segmentum quartum *pereii* longissimum.

Epimera lata, fere rectangularia, angulis posticis acutis, sed non productis.

Segmentum primum *plei* maximam partem obtectum.

Urus lingulatus, lateribus rotundatis, acuminatus, crenulatus, supra manifesto carinatus.

Ramus interior *pedum uri* in latere exteriori leviter emarginatus.

The *body* is ovate, twice as long as broad.

The *head* is four times broader than long; the middle of the front projects anteriorly between the basal joints of the first pair of antennæ, totally separating them.

The *eyes* are tolerably large, distant by a sixth of the breadth of the head.

The *first pair of antennæ* reach a little beyond the anterior margin of the second pereional segment. They are provided with a 17-jointed flagellum.

The *second pair of antennæ* reach over half the fourth pereional segment. The flagellum is 18-jointed.

The fourth segment of the *pereion* is a little longer than the others.

The *epimerals* are broad, almost rectangular, the posterior corners are sharp, but not projecting.

The first segment of the *pleon* is mostly concealed by the last pereional segment.

The *urus* is broadly tongue-shaped, with the margins rounded, serrated; pointed at the end; on the upper side it is distinctly keeled.

The inner ramus of the *uropoda* is slightly emarginated at the exterior margin.

In habitus *Aega Lovéni* comes nearest to *Aega ventrosa*, SCHIOEDTE et MEINERT (non M. SARS), but is distinguished by the length of the fourth pereional segment, the longer second pair of antennæ, the first pleonal segment and the length of the posterior pairs of pereiopoda.

Adult male.

(Pl. I. fig. 1—10).

The front margin of the *head* is evenly rounded, the hind margin is almost straight; the fourth pereional segment is more than twice broader than the head (29:13).

The *eyes* are oblong, a little broader at the posterior end, the ocelli are arranged in 7 rows.

The *first pair of antennæ* (Pl. I, fig. 3) reach over the head and the first pereional segment. The first joint of the peduncle is broad and stout, twice as long as the second, the third is slender, linear, as long as the two preceding together. The flagellum is scarcely longer than the peduncle (20:19), composed of 17 articuli, the basal one is the longest, the last ten articles carry short hairs.

The *second pair of antennæ* (Pl. I, fig. 3) are nearly twice as long as the first pair (13:7), the basal joint of the peduncle is very short, the second longer, the third short, the fourth and fifth much longer, equal; the two last ones carry bundles of fine hairs. The flagellum is longer than the peduncle, it consists of 18 articles, all carrying short fine hairs.

The first segment of the *pereion* is longer than the head, and equal to the second, the third is a little longer, the fourth is the longest, the fifth, scarcely shorter than the fourth, the sixth and seventh decreasing, the seventh still longer than the first. The fifth segment is the broadest.

The *epimerals* (Pl. I. fig. 2) of the second and third segments are the smallest, equal, the ones of the fourth segment are longer, the epimerals of the three last segments longer, nearly equal, all almost rectangular with the lower anterior corner rounded and the posterior sharp-pointed, but not projecting. They occupy all the whole length of the corresponding segments. They are totally smooth without ridges or excavations.

The first pair of *pereiopoda* (Pl. I. fig. 4). The femur is comparatively narrow with some few ciliated bristles. The genu is as long as the tibia, unarmed, the tibia carries some short spines at the inner margin, the carpus is shorter than the tibia, the metacarpus is nearly twice as long as the carpus, totally unarmed. The dactylus is stout, strongly curved, longer than the two preceding joints, it impinges against the anterior corner of the tibia. The dactylus is carinated. The second and third pairs are as usual similar to the first. The four posterior pairs are long, slender, spinigerous. From the fourth to the sixth pair they increase in length, the seventh is equal to the sixth. The femora are elongate, linear, not very broad, the following joints are nearly equal in length, carrying short spines along the inner margin and longer ones around the lower margins. The dactyli are short, feebly curved. (Pl. I. fig. 5 and 6).

The *pleon* is nearly twice as broad as long (23:13); the first segment is almost totally covered by the last pereionial segment, only a little of the lateral parts being visible. The second, third and fourth segments are equal in length, the third the broadest; the fifth is a third longer than the preceding. The lower parts of the four first segments form on the underside a frame with sharp-pointed corners (Pl. I. fig. 7). The pleon is a little longer than the two last pereionial segments together (12:11).

The second pair of *pleopoda* (Pl. I, fig. 8) carry an uncommonly long, styliform process, without hairs.

The *urus* is tongue-shaped, broader at the base than long (5:4), the sides are rounded, the posterior end not very sharply pointed. The margin is serrated (Pl. I. fig. 9), the teeth again serrated and separated from each other by stout, strong, obtuse spines, the margins are fringed with long, plumose hairs, fixed at the underside of the pleon a little behind the edge

of the margin. The urus is a little shorter than the pleon (11:12). The urus and pleon together are much shorter than the pereion without the head (23:38), but equal exactly the length of the four last pereional segments. On its upper side it is smooth, in the middle marked by a broad obtuse keel.

The *uropoda* (Pl. I. fig. 10) reach beyond the end of the urus. The projection at the inner side of the peduncle is short but sharp. The rami are equal in length, longer than the peduncle. The inner one is broader than the outer (4:3), slightly emarginated in the outer margin. They are both armed and fringed in the same manner as the margins of the urus.

Colour. Yellow.

Length. 18 mm.

Hab. The west coast of Sweden (C. B.).

Only one ¹⁾ specimen known taken by the author at the Koster-isles, Bahusia, at a depth of 80 fathoms.

2. *Aega ventrosa*. SCHIOEDTE et MEINERT ²⁾ (non M. SARS).

When comparing the description of *Aega ventrosa* given by M. SARS ³⁾ with that given by SCHIOEDTE and MEINERT ⁴⁾ I have been induced to think, that two very different species must have been types for the two descriptions, as the latter description scarcely agrees with the original in any essential point. As the honorable authors of the last description among other specimens, obtained from Norway cite: »M. SARS, specimen typicum, Mus. Christian.», they are certainly right in using the name of *Aega ventrosa*, SARS. But I am inclined

¹⁾ If it not will be proved that *Aega ventrosa*, SCHIOEDTE and MEINERT, is identical with it.

²⁾ Professor MAX WEBER mentions an *Aega* from BARENTS Sea, which he supposes to be a young *Aega ventrosa*, SCHIOEDTE and MEINERT; but it shows considerable differences. In: »Onderzoekingstochten van DE WILLEM BARENTS, 1:te Gedeelte, II. Die Isopoden», p. 6. Bijdragen tot de Dierkunde, uitgegeven door het Genotschap Natura artis magistra, te Amsterdam. 10:e Aflevering. Amsterdam 1884. 4:o.

³⁾ »Oversigt over de i den norsk-arctiske Region forekommende Krebsdyr» in Forhandlinger i Videnskabsselskabet. Aar 1858. Christiania. 1859, p. 154.

⁴⁾ »Symbolæ ad monographiam Cymothoarum» in Naturhistorisk tidskrift. 1879, p. 375. Copenhagen.

to believe, that when the animal first time was labelled, some unvoluntary change must have taken place and that the original specimen of M. SARS never was in the hands of the danish authors. The following parallel will show how impossible it is to conciliate the two descriptions:

M. SARS.	SCHIOEDTE et MEINERT.
Aega ventrosa dignoscitur	Aega ventrosa
»Oculis permagnis fere contingentibus, attamen sejunctis»	»Oculi minuti, producte ovati, sexta parte latitudinis capitis distantes»
»Segmentis thoracis tribus ultimis repente latioribus, quinto etiam precedenti duplo longiore»	»Segmenta pereii tria ultima non latiora, quintum precedens tertia circiter parte longitudinis superans ¹⁾).
»Laminis pedum spuriorum ultimorum æqualibus, apice acuminatis, interna externa paulo latiore, margine interiore arcuato, exteriori fere recto.»	»Pedes anales longiusculi; remus interior quam exterior vix longior, ac paulo latior, post attenuatus, in latere exteriori leviter sinuatus.

When I first read the diagnose of M. SARS, it struck me at once that *Aega ventrosa*, M. SARS was, if not identical with, very closely allied to a new *Aega* described by me last year under the name *Aegiochus Nordenskiöldii*²⁾. After a more attentive examination I am fully convinced that they are the nearest relatives among the *Aegidæ*, but ought to be distinguished as separate species. The most important characteristics for establishing a new species were, according to SARS (l. c. p. 155) the *abruptly broader segments of the pereion* and the *unusual length of the fifth pereional segment, being twice as long as the fourth*. These characteristics, in my opinion, have generic value and therefor I will retain the genus *Aegiochus*. None of all these characteristics on the other hand agree with the type of SCHIOEDTE and MEINERT, it must therefor be something quite different from *Aega ventrosa* and ought to have another name. Whenever it may be identical with the above described *Aega Lovéni* or not, I am yet unable to decide. They are no doubt closely allied. I give here a diagnose of *Aega ventrosa*, M. SARS.

¹⁾ The cursivated quotations are taken from examination of the drawings of SCHIOEDTE and MEINERT.

²⁾ »A new Isopod from the Swedisch arctic expedition of 1883», in Bih. till K. Vetensk.-Handl. Bd. 10. N:o 9, p. 5. Sthm. 1885.

3. *Aegiochus ventrosus*. M. SARS.

Syn. 1859. *Aega ventrosa*. M. SARS. »Oversigt over de i den norsk-arctiske Region forekommende Krebsdyr», in Forhandlinger i Videnskabselskabet i Christiania. Aar 1858. Christiania p. 156.

Diag. *Corpus* colore flavo nitidum, non tuberculatum, duplo longius quam latius.

Caput oculis pergmagnis, fere contingentibus, attamen sejunctis.

Antennæ primi paris marginem anteriorem segmenti secundi pereii attingentes, flagello XII- vel XIII-articulato instructæ.

Antennæ secundi paris marginem anteriorem segmenti quarti pereii attingentes, flagello XVIII-articulato instructæ.

Epimera quadrangularia, angulis posticis trium parium posteriorum productis. *Epimera* segmenti quinti epimeris segmenti quarti duplo longiora.

Segmentum primum *plei* non obtectum, segmento ultimo pereii brevius: Segmenta quattuor priora *plei* subæqualia, segmento quinto longiora.

Urus triangularis, acuminatus, supra indistincte carinatus, marginibus posticis quinque-dentatis.

Pedes uri non emarginati.

The *body* is twice as long as broad, broadly ovate, smooth; of a yellow colour.

The *head* is smooth on the upper side. The eyes are very large, broader behind, three times as long as broad, close together with the anterior ends, although separated by a very narrow strip of the front.

The *first pair of antennæ* reach to the anterior margin of the second pereional segment. The second joint of the peduncle is a little shorter than the first, both are narrower than usual, the third joint is twice as long as the second, the flagellum is composed of 12 to 13 articuli, it is as long or a little longer than the peduncle.

The *second pair of antennæ* are a third longer than the first, they reach to the anterior margin of the fourth pereional segment. The first three joints of the peduncle are very short, the fourth as long as all the preceding together, the fifth as long as the fourth. The flagellum is much longer than the peduncle and consists of 18 articuli.

The *pereion*. The three last pereional segments are abruptly much broader than the preceding, the sixth segment

is almost as broad as the fifth, the seventh is a little narrower. The fifth segment is twice as long as the fourth, the sixth shorter than the fifth, the seventh shorter than the sixth.

The *epimerals* are nearly rectangular, the hinder corners of the three last pairs are produced backwards, pointed. The epimerals of the fifth segment are twice as long as the ones of the fourth, occupying the whole length of the segment.

The first segment of the *pleon* is not obstructed by the seventh pereional segment, but is a little shorter than the same. The second, third and fourth segments equal each the first in length and are but little narrower. The fifth segment is shorter than the next preceding. All are pointed at the hinder corners.

The *urus* is triangular, very large, acuminate at the end; the anterior lateral margins are crenulated, the posterior denticulated, on each side carrying 5 large teeth, each of them again crenulated, and fringed with plumose hairs. On the upper side it shows a feebly marked, median keel.

The rami of the *uropoda* equal in length, elongate-elliptical, acuminate, not reaching beyond the end of the *urus*. They are crenulated and fringed with plumose hairs. The inner ramus is a little broader than the outer, arcuated at the inner margin and almost straight at the outer.

Colour. Yellow.

Length. 13 mm.

Hab. »Öxfjord», Northern Norway, at a depth of 100 fathoms.

Aegiochus ventrosus is to be distinguished from *Aegiochus Nordenskiöldii* by the quadrangular form of the epimerals, the length of the epimerals of the fifth segment, the free first pleonal segment, the short, last pleonal segment the longer and more closely situated eyes.

4. *Rocinela Dumerilii.* LUCAS.

Syn. 1845. *Acherusia Dumerilii.* LUCAS. Exploration scient. de l'Algérie. Zoologie. tome I. p. 7. Atl. des Crustacés. pl. 8 fig. 3.

1864. *Acherusia complanata.* GRUBE. Die Insel Lussin und ihre Meeres-fauna. I. p. 76.

Syn. 1879. *Rocinela Dumerilii*. LUCAS. SCHIOEDTE et MEINERT. »Symb. ad monogr. Cymothoarum», in Naturhist. Tidskr. 3 R. v. 12, p. 391, pl. 12, fig. 4—9.

Diagn. *Corpus* elongato-ovatum.

Caput ter circiter latius quam longius, fronte plus minusve producta.

Oculi grandes, quinta parte latitudinis capitis distantes.

Antennæ primi paris marginem anteriorem segmenti primi pereii attigentes vel paulo superantes, flagello V- vel VI- articulado instructæ.

Antennæ secundi paris longissimæ, flagello XIV- vel XV- articulado instructæ.

Epimerum ultimum segmentum primum plei æquans.

Segmentum primum *plei* maximam partem obtectum.

Urus lingulatus.

Pedes uri crenulati, ramus interior quam exterior longior ac paulo latior.

The *body* is oblong-ovate.

The *head* is about three times broader than long, the middle of the front more or less produced.

The *eyes* are large, distant by a fifth of the breadth of the head.

The *first pair of antennæ* reach to the anterior margin of the first pereional segment or a little further. The flagellum is 5- to 6-articulated.

The *second pair of antennæ* are long. The flagellum is composed of 14 or 15 articuli.

The last pair of *epimerals* reach to the hinder corners of the first pleonal segment.

The first segment of *pleon* is concealed by the last pereional segment.

The *urus* is tongue-shaped.

The *uropoda* are crenulate. The inner ramus is longer and a little broader than the outer.

The adult male.

(Pl. II. fig. 11—19).

The hind margin of the *head*, between the eyes, is straight, the front shows an obtuse projection, shorter than in the ovigerous female but longer than in the virgo.

The *eyes* are distant by a fifth of the breadth of the head, they are broader at the posterior end, rounded, straight at the frontal end, the ocelli are large, placed in nine rows, 13 in the median row.

The first pair of *antennæ* (Pl. II. fig. 13) reach to the anterior margin of the first pereional segment. The flagellum is composed of 5 to 6 articuli.

The second pair of *antennæ* (Pl. II. fig. 13) reach over the anterior margin of the third pereional segment. The flagellum consists of 14 articuli carrying very minute hairs.

The first segment of the *pereiion* is as long as the head, the second a little shorter, the third as long as the second, the fourth to the sixth subequal, longer, the seventh is the shortest of all.

The *epimerals* (Pl. II. fig. 12) are very narrow, the four last ones posteriorly produced into acute points. The epimerals of the second to sixth segments occupy the whole length of the segments, the ones of the seventh exceed the segment and reach nearly to the posterior point of the first pleonal segment.

The *pereiopoda*. The three first pairs are short; the femur broad with three or four plumose bristles, the genu long, without hairs or spines, the tibia stout, with three strong, obtuse spines along the inner margin and some long bristles at the outer, lower corner, the carpus short with a short spine at the inner, lower corner, the metacarpus with the inner edge produced, carrying four strong, short spines, the dactylus longer than the metacarpus, strong (Pl. II. fig. 14). The four last pairs of *pereiopoda* increasing in length to the sixth pair, the seventh a little shorter than the sixth; the femur is oblong ovate (Pl. II. fig. 15), the genu long, with four fine, short spines along the inner margin, and some bristles at the lower corners, the three following joints are shorter, subequal, armed in the same manner, the dactylus is half as long as the metacarpus.

The *pleon* is short, as long as the two preceding segments together. The first segment is totally covered by the seventh pereional, the three following equal in length and breadth, the hinder corners pointed, even as in the first segment. The fifth segment is longer than the preceding and much narrower.

The second pair of *pleopoda* (Pl. II. fig. 16) carry an unusual short, styliform process. The outer laminae of the pleopoda are bordered with a frame of equal, quadrangular scales, between the corners of these scales originate long plumose hairs (Pl. II. fig. 17).

The *urus* is almost as long as broad, broadly tongue-shaped. The posterior margin rounded, fringed with long, plumose hairs and between them short, obtuse spines. (Pl. II. fig. 18).

The *uropoda* (Pl. II. fig. 19) reach exactly to the end of the *urus*; the acuminate projection from the peduncle is more than twice as long as the peduncle itself (11:5) and nearly as long as the outer ramus (11:12), fringed with long, plumose hairs. The inner ramus is longer than the outer (5:4) and a little broader. Both are oblong, serrated at the outer margins and provided with short spines; around the margins they are fringed with long, plumose hairs.

Colour. From the specimen preserved in alcohol it seems to have been yellowish-brown.

Length. 20 mm.

Hab. The Mediterranean (Z. M.)

Only one specimen. I got it among a collection of crustacea from the naturalist-merchant CARL WESSEL in Hamburg.

5. *Slabberina gracilis*. N. sp.

(Pl. II. fig. 20—26).

Diagn. *Corpus* elongatum, gracile, ter fere longius quam latius.

Caput magnum, duplo latius quam longius.

Oculi grandes, reticulati, ocellis magnis.

Antennae primi paris capite longiores, flagello IV-articulato instructæ; articulus primus flagelli articulo ultimo pedunculi brevior.

Antennae secundi paris marginem anteriorem segmenti sexti pereii attingentes, flagello XIV-articulato instructæ.

Segmentum quintum *pereii* segmenta duo priora longitudine æquans.

Pedes pereii parium trium priorum breves, metacarpi eorum aculeo cultriformi instructi. *Pedes pereii* parium quattuor ultimorum longi, illi tamen septimi paris præcedentibus multo breviores.

Epimera distincta.

Segmenta *plei* subæqualia, primum non obtectum.

Urus semicircularis.

The *body* is nearly three times as long as broad.

The *head* is large, twice as broad as long.

The *eyes* are large, granular, with very large ocelli.

The *first pair of antennæ* are longer than the head, the flagellum four-jointed; the first article of the flagellum is shorter than the last of the peduncle.

The *second pair of antennæ* reach to the anterior margin of the sixth pereional segment; the flagellum consists of fourteen articles.

The fifth segment of the *pereion* is as long as the two first together. The three first pairs of pereiopoda are short, their metacarpi are armed with a knife-shaped spine. The four last pairs are long, the seventh pair however are much shorter than the preceding.

The *epimerals* are distinct.

The segments of the *pleon* are subequal in length. The first is totally free not obtected.

The *urus* is semicircular.

The genus *Slabberina* was founded 1861 by P. J. VAN BENEDEN¹⁾, some years later SPENCE BATE and WESTWOOD²⁾ pretended the new genus to be indetical with the genus *Eurydice* of LEACH, an opinion, which I must contradict, since the characteristics quoted by LEACH³⁾, »Oculi non granulati, antennæ inferiores corporis longitudine», does not agree with the animal in question. The specimen described here has »oculi granulati» just as an *Aega* or a *Rocinela*. VAN BENEDEN states l. c. pag 91 that the eyes are granular, which also is easily to be seen on the accompanying figure l. c. pl. 15 fig. 3. The British authors on the other hand declare expressively, after a very careful examination of their type, that »the eyes under a strong lens are not faceted», l. c. p. 308. Thus the both

1) Recherches sur la faune littorale de Belgique. Crustacés. p. 88. Bruxelles 1861. 4:to.

2) A History of the British Sessile-eyed Crustacea, vol. 2. p. 307. London 1868. 8:o.

3) »A tabular View of the external Characters of Four Classes of Animals which Linné arranged under Insecta; with the Distribution of the Genera composing Three of these Classes into Orders etc.» in Trans. Linn. Soc. Lond. vol. 11, part. 2, p. 370. London, 1815. And »Cymothoadées», in Dictionnaire des Sciences naturelles. Tome 12:me p. 347. Strassburg and Paris 1818.

types must be different animals. Of this reason it seems fit to keep up the generic name proposed by VAN BENEDEN, allowing that in other respects the both genera are closely allied. G. O. SARS described in 1866¹⁾ a new species of *Slabberina* from the coast of Norway, *S. agilis*, which differs from the original species *S. agata*, VAN BENEDEN, in some points, as the proportion of the pereion and the hinder part of the body, the length of the second pair of antennæ, the distribution of the colour, a. o. I 1874 J. RIZEMA BOS²⁾ gives a detailed description of *S. agata* under the name of *Eurydice pulchra*, LEACH; he corrects some of the errors in the description of VAN BENEDEN, but places *Slabberina* synonymous to *Eurydice*, although he mentions the contradictions in the diagnoses of VAN BENEDEN and LEACH. My specimen comes very near *S. agilis* in many respects and I should not hesitate to unite them, if not the statement of SARS that the four posterior pairs of pereiopoda are increasing in length would be opposite to the fact that the seventh pair of pereipoda in my specimen are much shorter than the sixth pair, which are longer than the preceding pairs. From the other species, *S. agata*, the new one is to be distinguished by the same characteristics, and by the length of the second pair of antennæ, the number of articles of the flagellum, the unequal length of the pereional segments the distribution of the colour, and the armature of the metacarpi of the three first pairs of pereiopoda. *Slabberina* is a true member of the family *Cirolanidæ*.

The *head* is comparatively large, the anterior margin is semicircular, not truncated. Between the eyes are two pairs of spots of black pigment in radiating lines. The space between the eyes is a fourth of the breadth of the head.

The *eyes* are large, very black, distinctly faceted, the ocelli placed in six rows, ten ocelli in the median row.

The *first pair of antennæ* (Pl. II. fig. 22) are longer than the head. The peduncle consists of three joints, the first very

¹⁾ »Beretning om en i Sommeren 1865 foretagen zoologisk Reise ved Kysterne af Cristianias og Christiansands Stifter», i *Nyt Magazin for Naturvidenskaberne*. Bd. 15, p. 117. Ckristiania, 1866.

²⁾ *Bijdrage tot de kennis van de Crustacea Hedriophthalmata van Nederland en zijne Kusten*. Akademisch Proefschrift, etc. Groeningen. 1874. 8:o.

short, the second more than twice longer, the third as long as the the two preceding together. The flagellum is more slender, four-jointed, the first joint it shorter than the last one of the peduncle (7 : 11), the second shorter than half the first, the second, third and fourth subequal in length, tapering toward the end. All joints of the flagellum carry short hairs, especially along the hinder and lower side.

The second *pair of antennæ* (Pl. II. fig. 22) are as long as the head and the five first pereional segments together. The peduncle is stouter and longer than the peduncle of the first pair, it surpasses the hinder margin of the first pereional segment, and consists of only four joints, the original two first being probably fused together. The first joint it short but very thick, the second twice longer than the second and the fourth the longest, the three last ones are provided with short hairs. The flagellum reaches to the anterior margin of the sixth pereional segment, when the animal is stretched out; it consists of fourteen long articles, each carrying a bundle of very minute hairs at the outer distal corner. The last of the articles carries at the the tip a bundle af long fine hairs.

The fifth segment of the *pereion* is the longest, the seventh the shortest. All are marked on the dorsal side with dots composed of black, more or less regularly radiating lines, but not so symmetrically situated as in *Slabberina agata*, according to the description and figure of VAN BENEDEEN (l. c.) The fourth and fifth segments are the broadest, but narrower than twice the breadth of the head (18 : 11).

The *epimerals* (Pl. II. fig. 21) are well developed. The ones of the second and third segments are small, not very sharply pointed backwards. The epimerals of the fifth segment are the largest. The three last ones are a little produced at the lower hinder corner, forming sharp points. The epimerals of the seventh segment are the shortest.

The *pereiopoda*. The three first pairs are subequal, short, not half as long as the fourth pair (Pl. II. fig. 23). The femur is long, narrow, linear, with a bundle of long hairs at the lower, inner corner; the genu is long, longer than the tibia, the carpus is very small, almost concealed in the fore-part of the tibia. Both are armed with short, strong spines at the lower inner corner. The metacarpus is long, scarcely shorter than the three preceding joints together, armed along the

inner margin with three spines and at the lower corner provided with a very strong, broad, knife-like spine, against which the dactylus impinges, thus forming a kind of scissors or pincers (Pl. II. fig. 24). At the lower end the metacarpus shows a well developed apparatus for the articulation with the dactylus, exactly like that described from most of the Aegæ. The dactylus is longer than half the metacarpus, not very strongly curved. The four last pairs of pereopoda are unequal in length, the sixth being much the longest, the seventh the shortest. The femur is not dilated, linear, with some hairs at the lower, inner corner. The genu is long, feebly denticulated along the inner margin, provided with spines along the lower margin and with hairs along the outer. The tibia is a little more than half as long as the genu, provided with strong bristles along the inner and lower margins and hairs along the outer. The carpus is longer than the tibia, armed in the same manner. The metacarpus is longer and narrower, feebly tapering downwards, where it shows the same apparatus for articulation as in the three first pairs, but not so strongly developed. The dactylus is strong, indistinctly pedunculated. (Pl. II. fig. 25).

The *pleon* consists of five fully free segments subequal in length and feebly decreasing in breadth backwards. The hinder lateral corners of the segments are sharp-pointed. All the segments are prettily signed on the dorsal side, a little different from and not so symmetrically as in *Slabberina agata*.

The *pleopoda* are fringed with very long simple hairs, especially along the hinder margins.

The *urus* is broader than long, semicircular, with two median and two lateral black spots on the dorsal side, the margins are crenulated, provided with short spines and fringed with long ciliated hairs.

The *uropoda* (Pl. II. fig. 26). The peduncle is shorter than the rami, at the outer margin fringed with ciliated hairs, the hinder, projecting corner carries a long, strong, ciliated bristle. The inner ramus is longer and broader than the outer, obliquely truncated at the hinder end. The outer one is ovate. Both are fringed around the hinder margins with long, ciliated hairs.

Colour. Yellowish-white with black dots.

Length. 3—4 mm.

Hab. South Norway; »Christianiafjord». At about 100 fathoms, clay-bottom. (U. M.)

Taken by Professor W. LILLJEBORG, 1874, June 25. Only two specimens, both females.

6. *Syscenus Lilljeborgii*. BOVALLIUS.

Syn. 1885. *Rocinela Lilljeborgii*. C. BOVALLIUS. »A new Isopod from the Coast of Sweden» in Bihang till K. Svenska Vet.-Akad. Handlingar. Band 10. N:o 10, p. 4.

When I wrote the description of *Rocinela Lilljeborgii*, I had seen HARGER'S ¹⁾ diagnose of *Syscenus*, but not a figure of the animal. Although I thought his new genus allied in some way to my specimen, the characteristic »pleopoda naked», expressively quoted by the author, did not allow me to suppose them to be so closely related as they are. Some months ago MR. HARGER kindly sent me his »Report on the Isopoda» of the »Blake-expedition» ²⁾, which before had escaped my attention; there I found instantly that *Rocinela Lilljeborgii* was a true *Syscenus*, differing from the typical species in less important features than might be expected from the very distant localities. However they are specifically distinct.

It is much probable that *Harponyx pranizoides*, G. O. SARS ³⁾, is a *Syscenus*, but a very young one.

¹⁾ »Report on the marine Isopoda of New England and adjacent waters», in Report of the U. S. Commissioner of Fish and Fisheries. Part 6, for 1878, p. 387. 1880.

²⁾ »Report on the Isopoda», in Reports on the Results of Dredging — — — — by the U. S. Coast Survey Steamer Blake. (Bull. of the Mus. of comp. Zoology, at Harvard College. Vol. 11, N:o 4, p. 100). 1883.

³⁾ »Oversigt af Norges Crustaceer med foreløbige Bemærkninger over de nye eller mindre bekjendte Arter. I», in Christiania Videnskabselskabs Forhandlinger. 1882. N:o 18, p. 15 and 60.

Syscenus Lilljeborgii is to be distinguished from *S. infelix*: by the three first pairs of pereopoda being smooth, not armed with spines on the palmar margins of the tibia, carpus and metacarpus; by the large quadrangular epimerals of the second and third segments, being much longer than those of the two following segments; by the linear pleon, not increasing in breadth backwards; by the long urus, being much longer than broad (20:14). Also in the form of the head and in the antennæ there are some differences.

Explanation of the plates:

Plate I.

Aega Lovéni, n. sp. ♂.

- Fig. 1. The animal from above. ($\frac{7}{2}$).
 » 2. » » » the side. ($\frac{7}{2}$).
 » 3. The antennæ. ($\frac{8}{1}$).
 » 4. One of the second pair of the pereopoda. ($\frac{14}{1}$).
 » 5. » » » sixth » » » ($\frac{14}{1}$).
 » 6. » » » seventh » » » ($\frac{14}{1}$).
 » 7. The under-side of the pleon and urus. ($\frac{4}{1}$).
 » 8. One of the second pair of the pleopoda. ($\frac{12}{1}$).
 » 9. The end of the urus from beneath. ($\frac{44}{1}$).
 » 10. The left one of the uropoda. ($\frac{8}{1}$).

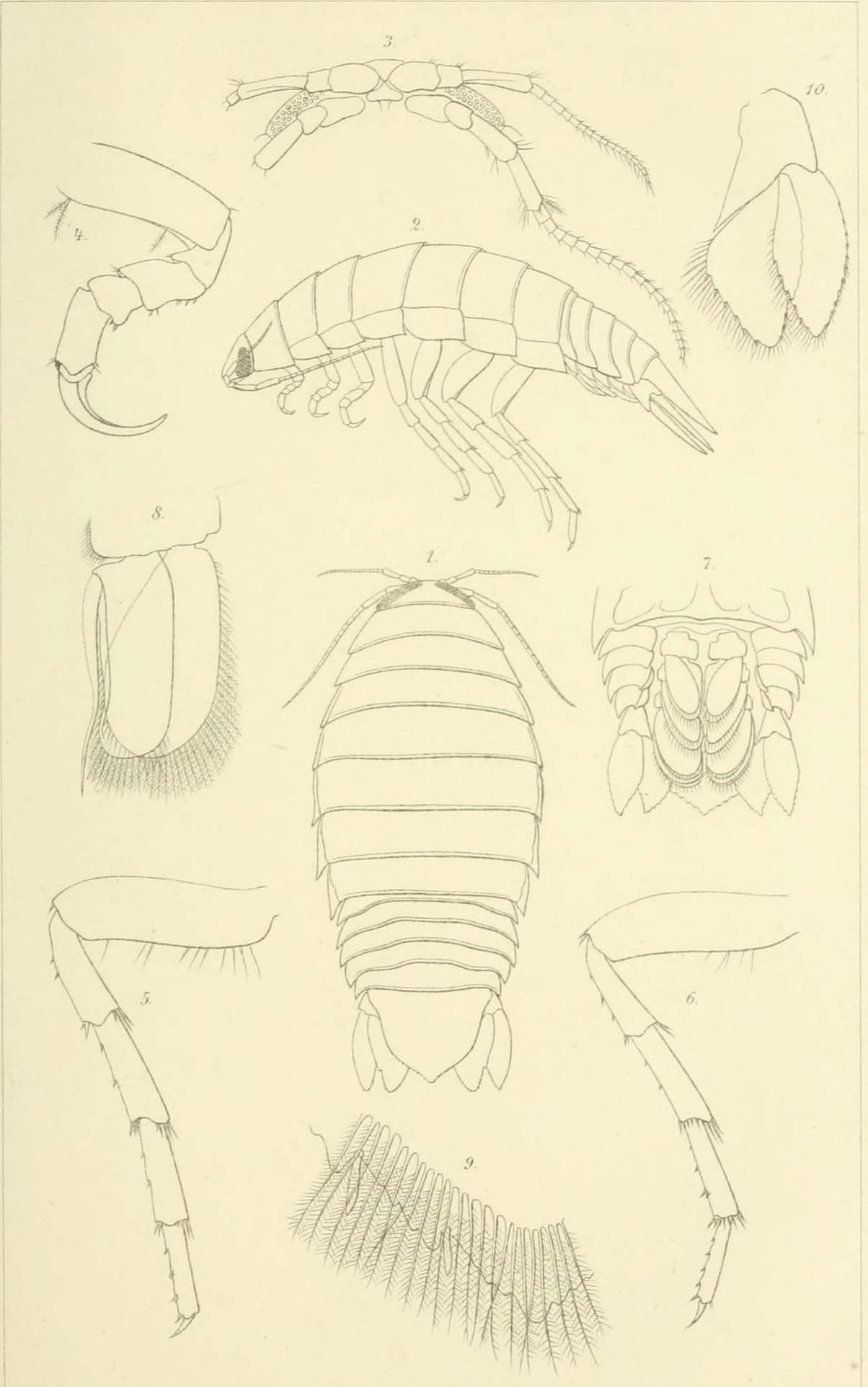
Plate II.

Rocinela Dumerilii. LUCAS. ♂.

- » 11. The animal from above. ($\frac{7}{2}$).
 » 12. » » » the side. ($\frac{7}{2}$).
 » 13. The antennæ. ($\frac{4}{1}$).
 » 14. One of the first pair of the pereopoda. ($\frac{20}{1}$).
 » 15. » » » seventh » » » ($\frac{10}{1}$).
 » 16. » » » second » » » pleopoda. ($\frac{12}{1}$).
 » 17. A piece of the margin of the outer lamina of the preceding. ($\frac{44}{1}$).
 » 18. A piece of the posterior margin of the urus. ($\frac{44}{1}$).
 » 19. The left one of the uropoda. ($\frac{10}{1}$).

Slabberina gracilis, n. sp. ♀.

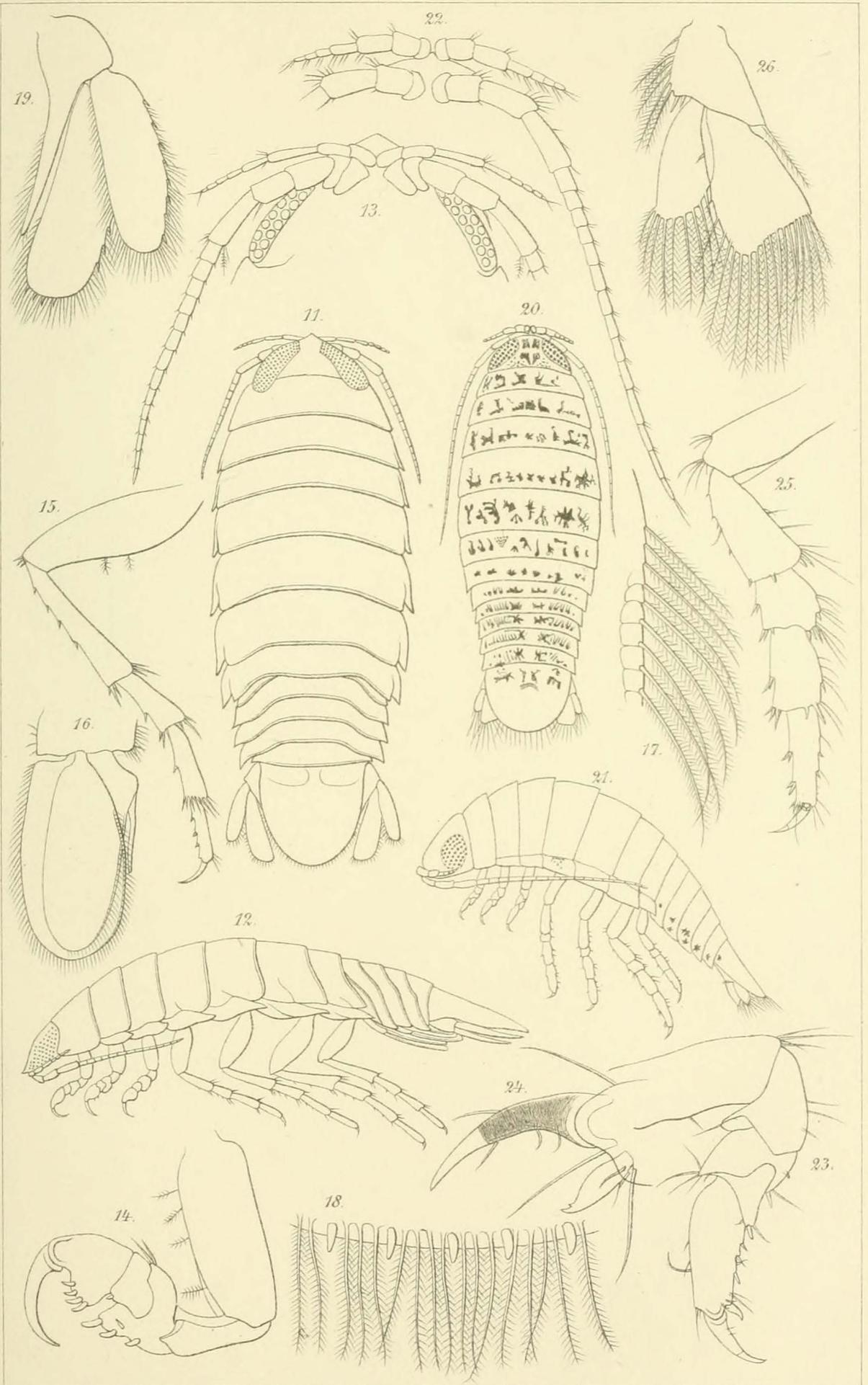
- » 20. The animal seen from above. ($\frac{14}{1}$).
 » 21. » » » » the side. ($\frac{14}{1}$).
 » 22. The antennæ. ($\frac{42}{1}$).
 » 23. One of the first pair of the pereopoda. ($\frac{84}{1}$).
 » 24. The end of the metacarpus and, the dactylus of the same pair. ($\frac{170}{1}$).
 » 25. One of the sixth pair of the pereopoda. ($\frac{42}{1}$).
 » 26. One of the uropoda. ($\frac{70}{1}$).



A. M. Westergren del.

Lith W. Schlachter, Stockholm.

Fig. 1-10. *Aega Loveni* n. sp. ♂.



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Lith. W. Schlachter, Stockholm.

Fig. 11-19. *Rocinela Dumerilii*. Lucas. ♂. Fig. 20-26. *Slabberina gracilis*. n. sp. ♀.