

**Article VII.—AMPHIPODS COLLECTED BY THE AMERICAN
MUSEUM CONGO EXPEDITION 1909-1915¹**

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6 TEXT FIGURES

The order Amphipoda is represented in this collection by six species which are included in six genera of the families Gammaridæ, Talitridæ, and Ampithoidæ. All were obtained along the seacoast and, as would be expected from a shore or beach collection, Talitridæ contains the greatest number of genera, species, and individuals. Two species, *Elasmopus congoënsis* and *Talorchestia tricornuta*, are new to science. The types are deposited in The American Museum of Natural History.

GAMMARIDEA

Gammaridæ

***Elasmopus congoënsis*, new species**

Eleven specimens were taken at St. Paul de Loanda, Angola. Portuguese West Africa.

Male.—Head: lateral lobes truncated with upper and lower corners broadly rounded; eyes oval, narrower above than below.

Antenna 1 about two-thirds length of body; first and second joints equal in length, third over half the length of second; flagellum subequal in length to the peduncle and composed of twenty-five to thirty joints; accessory flagellum two-jointed, short, not reaching end of second joint of primary. Antenna 2, two-thirds length of antenna 1; flagellum about two-thirds length of peduncle and composed of thirteen joints.

Mouth-parts normal. Maxilliped with the inner distal end of third joint of palp produced into a blunt lobe which is covered with minute tubercles.

Side-plate 1 produced slightly forward, front margin a little concave, lower anterior corner broadly rounding. Gnathopod 1: sixth joint oval; palm and hind margin continuous, palm defined by a single spine and armed throughout with two rows of small spines. Gnathopod 2 very robust; sixth joint very long, broad as fifth joint at base and converging toward the much narrower apex; palm undefined but probably represented by a long, narrow groove into which the long, curved dactyl fits; a truncated, forward-pointing tooth upon the inner margin of this groove a little beyond the center; a low blunt tooth armed with three spines on each side just under the dactyl hinge; dactyl strong, with a low protuberance on the inner side resting between the two palmar teeth which rest against the side of dactyl when it is closed.

¹Scientific Results of The American Museum of Natural History Congo Expedition. General Invertebrate Zoology, No. 5.

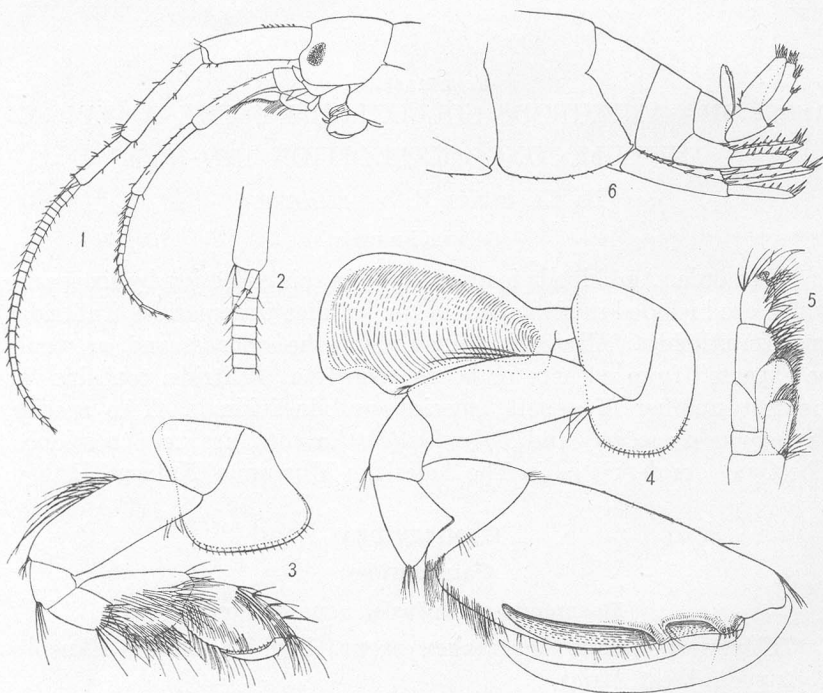


Fig. 1. *Elasmopus congoënsis*, ♂.

1.—Head and antennæ. 2.—Accessory flagellum enlarged. 3.—Gnathopod 1 ♂, left side, inside view. 4.—Gnathopod 2 ♂, left side, inside view. 5.—Maxilliped showing distal lobe of third joint of palp. 6.—Pleon, uropods, and telson.

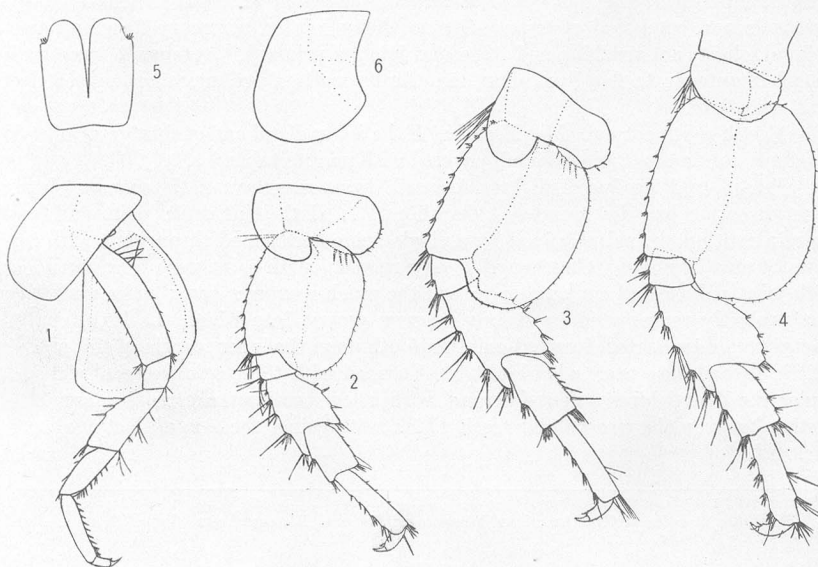


Fig. 2. *Elasmopus congoënsis*, ♂.

1.—Peraeopod 1. 2.—Peraeopod 2. 3.—Peraeopod 3. 4.—Peraeopod 4. 5.—Telson. 6.—Side-plate 4.

Peræopods 1 and 2 normal. Peræopod 3 short and stout; its side-plate bilobed, front lobe deeper than hind lobe; second joint expanded posteriorly into a broad lobe with hind margin nearly straight; fourth joint broad with lower front margin produced downward nearly to the middle of the fifth joint; dactyl strong with short spine near middle of inside edge. Peræopod 4 about like 3 but a little longer; lower front corner of fourth joint produced to only about one-third the length of the fifth joint. Peræopod 5 a little longer than 4; lower margin of side-plate evenly curved, posterior half deeper than anterior; rest of limb closely resembling peræopod 4.

Posterior margin of pleon segment 2 with small notch just above lower posterior corner; pleon segment 3 with lower half of posterior margin somewhat crenulate, slight notch just above the lower posterior corner.

Uropod 1 extending very little beyond uropod 2; inner ramus longer than outer and subequal to peduncle; rami armed at their distal ends with several long spines, and the margins of rami and peduncle armed with short spines; a long, slightly curved, backward-pointing spine on the inner distal corner of peduncle. Uropod 2 with inner ramus longer than outer and slightly longer than peduncle, outer ramus subequal to peduncle; rami armed at their distal ends with several long spines and along their edges with shorter ones. Uropod 3: rami subequal, longer than peduncle, broad and truncated, extending beyond uropods 1 and 2, truncated ends beset with long straight spines, outer edge of outer ramus armed with three groups of spines, inner edge of inner ramus with two or three small spines near base.

Telson a little longer than broad, cleft nearly to its base; apex of lobes evenly rounded; notch containing several small spines on outer margin about one-fourth the distance from the distal end.

Length.—10 mm.

Female.—In general like male. Gnathopod 1 like that of male. Gnathopod 2: sixth joint as wide as fifth and twice as long; palm very oblique, about one-half as long as joint and beset with fine spines. Peræopods about as in male, but the third, fourth, and fifth pairs are not so stout.

Length.—8 mm.

Talitridæ

***Talorchestia tricornuta*, new species**

Fifty specimens were taken at Banana, Belgian Congo, and thirty-nine specimens at St. Antonio, Angola.

Male.—Eyes black, large, circular, and nearly meeting at top of head.

Antenna 1 not quite reaching to the end of the fourth joint of peduncle of antenna 2; first joint of peduncle short, second a little longer, third about twice the length of the first; flagellum about equal to the length of the third joint of peduncle and composed of three or four joints. Antenna 2 about one-third the length of the body; flagellum equal to the length of the peduncle and composed of nineteen or twenty joints.

Maxillipeds with inner plates long and truncated, distal ends and inner margins armed with long curved spines; outer plates short and oval and provided on their ends with curved spines; palp three-jointed, second joint expanded on its inner margin into a forward-pointing lobe; inner edge of the second and the inner edge and end of

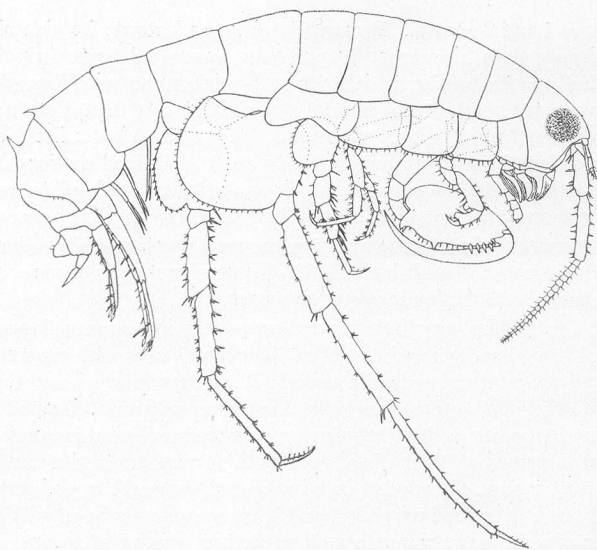


Fig. 3. *Talorchestia tricornuta*. Mature male.

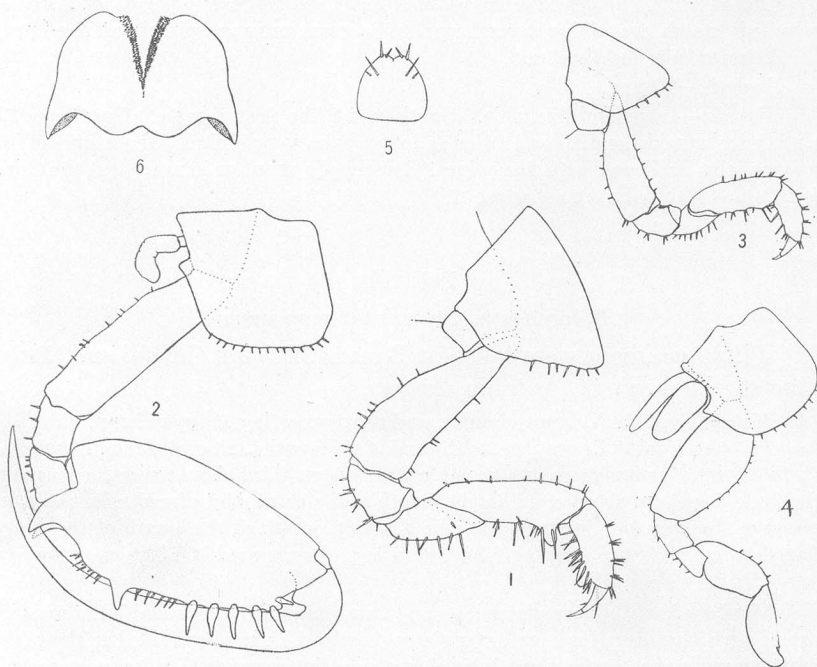


Fig. 4. *Talorchestia tricornuta*.

1.—Gnathopod 1 ♂. 2.—Gnathopod 2 ♂. 3.—Gnathopod 1 ♀. 4.—Gnathopod 2 ♀. 5.—Telson. 6.—Lower lip.

the third joints provided with stout spines. Maxilla 1 with inner plate very narrow and provided at its distal end with two stout, setose, curved spines; inner plate broad with apex rounding and provided with several serrated spines; palp very small and composed of two joints, of which the second is very short. Maxilla 2 with a large, stout, setose spine on the middle of the inner margin of the inner plate; inner margin and apex of inner plate and apex of outer plate provided with long curved spines. Mandible with molar strong and provided on its posterior edge with a long pinnate seta; at base of molar is a blunt tooth-like protuberance. Lower lip normal.

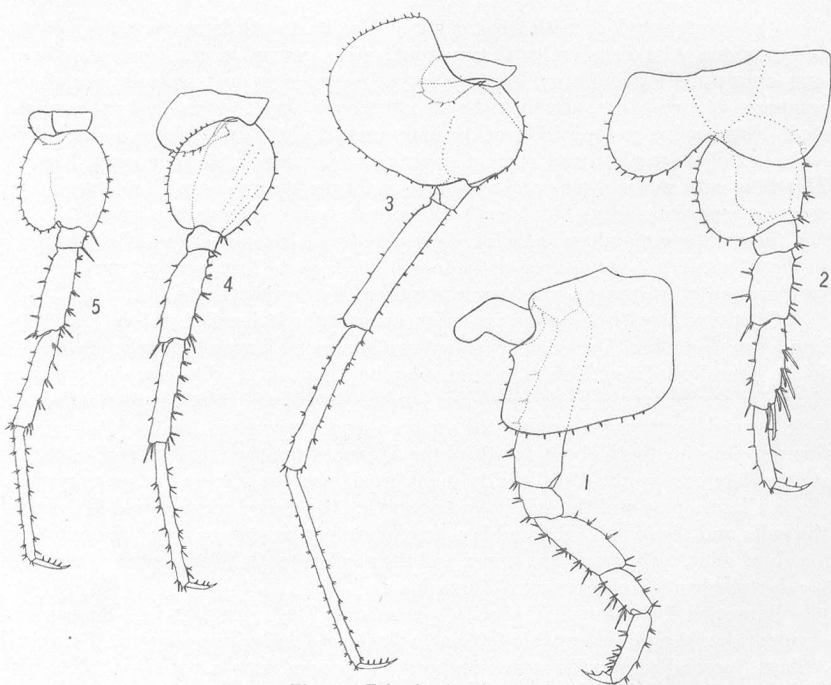
Side-plates not as deep as their body segments and becoming successively wider up to the fifth, which is not as deep as the fourth. Side-plate 1 projecting forward slightly; lower anterior corner acute; lower margin with a few short setae.

Gnathopod 1 with the lower, posterior corner of the fifth and sixth joints produced into a rounded lobe. Dactyl when closed reaching much beyond the lobe of the sixth joint. Gnathopod 2 with sixth joint large and strong; sixth joint long and oval with the palm occupying the entire posterior border; two large teeth, between which the long, curved dactyl rests, occupy the proximal end of the palm; palm with a single, forward-pointing tooth about one-third the distance from the proximal end, while five stout spines occupy the distal third; many smaller spines occupy the space between the last large spine and the two bounding teeth. The dactyl when closed fits against the palm and the fourth joint and in many specimens reaches to about the middle of the third joint. The five stout spines and the median tooth lie against the outside of the dactyl when it is closed against the palm.

Peræopod 1 slender; dactyl with two setae on its inner margin. Peræopod 2 slender; dactyl with the usual notch, and a single seta on its inner margin. Peræopod 3 short; second joint with posterior border expanded into a rounding lobe; fifth joint provided on its anterior edge with four groups of long, downward-pointing spines; dactyl provided on its inner surface with two setae. Peræopod 4 very long, about the length of the body; side-plate with posterior portion produced into a downward-projecting lobe bearing several small spines; second joint greatly expanded backwards and upwards; fourth and fifth joints subequal in length; sixth joint longer than fifth; dactyl usually bearing four or five setae on its inner edge. In the immature males peræopod 4 is not longer than peræopod 5 and the expansion of the second joint is no greater than that of the corresponding joint of peræopod 5. Peræopod 5 about two-thirds the length of 4, with second joint moderately expanded; dactyl usually with five or six setae on its inner margin.

Lower posterior corners of the second and third pleon segments slightly produced; middle of posterior border of third segment provided with several small setae; second segment provided at its posterior dorsal edge with two backward-pointing teeth, one on either side of the middle; third segment provided at the middle of its dorsal surface with a single forward-pointing tooth. These teeth are so arranged that when the pleon is straightened out the tooth of the third segment passes forward between those of the second. These teeth vary greatly in size and in the young males may be very inconspicuous or absent entirely.

Uropod 1 long and slender with rami equal in length to the peduncle; outer ramus slightly longer than inner; both peduncle and rami provided on their upper edges with spines; the outer ramus provided at its apex with two spear-shaped spines and one shorter straight spine, and the inner ramus with one spear-shaped, one long straight spine, and several short spines. Uropod 2 shorter than uropod 1;

Fig. 5. *Talorchestia tricornuta*.

1.—Pereopod 2. 2.—Pereopod 3. 3.—Pereopod 4 ♂. 4.—Pereopod 4 ♀. 5.—Pereopod 5 ♂.

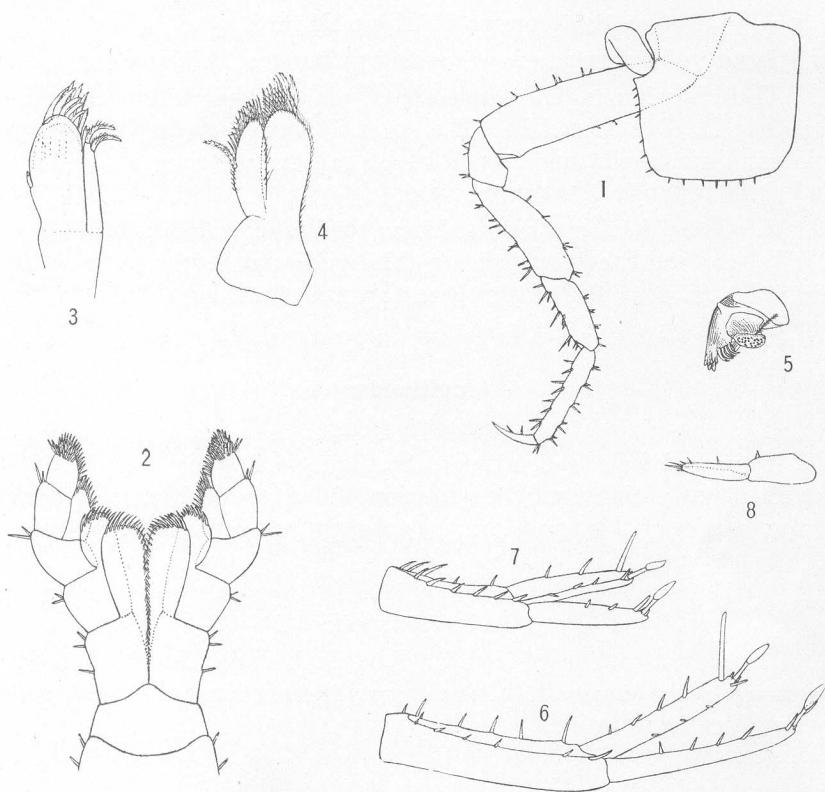
rami equal in length to the peduncle; outer ramus projecting very little beyond inner; upper edges of peduncle and rami provided with spines; outer ramus provided at its apex with one spear-shaped spine and several shorter ones; inner ramus provided at apex with one spear-shaped spine, one long straight spine and one shorter one. Uropod 3 shorter than uropod 2; ramus a little longer than peduncle and armed at its apex and along its upper edge with a few straight spines.

Telson short and tumid with sides convex and converging toward the bluntly bilobed apex; each lobe provided at its apex with one long and one short spine; one long and several shorter spines on either side of upper surface about one-third the distance from the end.

Length.—11 mm.

Female.—Like the male except as follows. Fifth and sixth joints of gnathopod 1 without lobe. Gnathopod 2 with second joint moderately expanded in front; fifth joint with lower margin expanded into a broad, tumid lobe, sixth joint expanded behind into a broad, tumid lobe which projects beyond and slightly in front of the weak dactyl which is situated on the front margin about one-fourth the distance from the distal end. Pereopod 4 similar in form and length to pereopod 5 which is similar to the corresponding appendage of the male. Second and third joints of pleon without dorsal teeth.

Length.—8 mm.

Fig. 6. *Talorchestia tricornuta*.

1.—Peraeopod 1. 2.—Maxillipeds. 3.—Maxilla 1. 4.—Maxilla 2. 5.—Mandible. 6.—Uropod 1. 7.—Uropod 2. 8.—Uropod 3.

***Orchestia platensis* Kroyer**

One specimen was taken at Banana, Belgian Congo, and five specimens are from St. Antonio, Angola.

This species has not previously been reported from the west coast of Africa but has been found in the Mediterranean, the Maldivé Archipelago, banks of the Rio de la Plata, Atlantic coast of North America, West Indies, Bermudas, Azores, and Hawaii. It will probably be found to be a cosmopolitan species.

Hyale prevostii (Milne-Edwards)

Twenty-three specimens were taken at Banana, Belgian Congo.

These specimens differ somewhat from the description given by Stebbing in 'Das Tierreich.' The antennæ have a greater number of joints in their flagella, and uropod 1 has a rather stout spine at the distal end of the peduncle between the rami.

H. nilssoni has been reported from the Maldivé Archipelago by A. O. Walker, and Stebbing believes this species to be the same as *H. prevostii*. *H. prevostii* has also been taken at the Azores, Sokotra, the Mediterranean, and Ceylon.

Ampithoidæ**Ampithoë** species

A single female was taken at St. Paul de Loanda, Angola. Its specific identification would be quite doubtful, as the characters of many of the females of this genus are very obscure and quite inadequate for such a purpose.

Grubia species

There are two females from St. Paul de Loanda, Angola, but the characters of the females in this genus, as in the preceding, are insufficient for specific identification.