mollissimum; the first and third joints are short, the second is a little longer, the fourth longest of all and much thicker; the fifth joint is only a little shorter than the fourth, but considerably more slender; the sixth again is a little shorter than the fifth, and swollen at the distal extremity. The last four joints are short and nearly of equal length. The hairs on these last joints are not so long, but more regularly spread over the surface, than is the case in *Phoxichilidium mollissimum*. The tenth joint, however, shows nearly the same row of spines and the same short hairs as in the foregoing species.

The legs are very long. The relative length of the joints is the same as in *Phoxichilidium mollissimum*. The seventh joint is short; the eighth joint is a little curved. Both these joints are slender; together they are nearly equal in length to the second joint of the leg. The claw is very long, and furnished with two small auxiliary claws. That side of the eighth joint which faces the claw shows a row of stronger spines, the last of which is considerably longer than the others. Besides distinct rows of stouter hairs at the extremity of the joints, the number of hairs on the surface of the joints considerably increases from the fourth joint downwards, the greatest number being found on the distal part of the sixth joint.

The only specimen is probably a male. Its genital openings are small, and are placed ventrally on the second joint of every leg.

Habitat.—This beautiful deep-sea species was found at

Station 70. June 26, 1873. Lat. 38° 25' N., long. 35° 80' W. Depth of the sea, 1675 fathoms. Sea bottom, globigerina ooze.

Observations.—This species is nearly allied to the foregoing (*Phoxichilidium mollissimum*, Hoek), and also to the following species (*Phoxichilidium pilosum*, Hoek). It may, however, be easily distinguished from these species by the form of the proboscis and of the cephalothoracic segment, and by its extremely long legs.

Phoxichilidium pilosum, n. sp. (Pl. XIII. fig. 10-13).

Diagnosis.—Body not very robust, lateral processes widely separated. Mandibles distinctly three-jointed, with small straight pincers. Ovigerous legs ten-jointed, without claws, present in both sexes. Auxiliary claws present. Palpi represented by rounded protuberances. Proboscis cylindrical, tapering towards the extremity. Body (dorsally) and legs covered with extremely long and thin hairs.

Description.

| Length of the proboscis, .           |     |   |   |   | 5  | mm. |
|--------------------------------------|-----|---|---|---|----|-----|
| Length of the abdomen, .             | •   |   |   | • | 5  | ,,  |
| Total length of the body, .          | 1.0 | • |   | • | 15 | ,,  |
| Length of the ovigerous leg, .       | •   |   | • | • | 8  | ,,  |
| Length of the leg of the third pair, |     | • | • | • | 44 | "   |

Of this species three specimens were collected during the cruise of H.M.S. Challenger;