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HYDROIDS OF THE WESTERN CANADIAN ARCTIC REGION, 1935-1937[1]

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The hydroids here reported upon were obtained by Sergeant H. A. Larsen of the Royal Canadian Mounted Police vessel *St. Roch* in July and August, 1936 and 1937*. While the vessel was stuck in the ice, Sergeant Larsen made a dredge which was lowered to the bottom and pulled along by the drift of the ice. The material was preserved and later deposited with the Pacific Biological Station, where it was sorted by Dr. Josephine F. L. Hart.

Although this material was not very extensive, it proved to be as interesting as any yet obtained from the Canadian Arctic. Of the five species in the collection, two appear to be new and one of these belongs to a genus quite different to anything previously described.

In Dease Strait, 68° 58′ N, 106° 20′ W, in 40 fathoms, the four species *Calycella syringa* (Linnaeus), *Thuiaria similis* (Clark), *Thuiaria tenera* (Sars), and a new species of *Bonneviella*, were obtained, and off Cape Bexley, Dolphin and Union Straits, 68° 59′ N, 115° 40′ W, in 9 fathoms, the new genus *Meganema* with the new species *M. claviformis*.

Description of Genus and Species

Genus *Bonneviella*

Bonneviella gracilis new species. Fig. 1, a, b, c.

Trophosome. Zooids growing singly from a slender stolon that winds about on colonies of *Thuiaria similis*. Pedicels slender, varying in length, the longest 2.5 mm., without annulations except the one at the base of the hydrotheca. Hydrotheca slender with length varying from 2 to 2.5 times the width, greatest

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* *During the time that the Royal Canadian Mounted Police vessel "St. Roch" was on patrol duty in the Canadian Arctic from 1935 to 1937, Sergeant H. A. Larsen, in charge, took a number of hydrographic observations with instruments supplied by the Pacific Biological Station, and also made some collections of biological material. The data and collections have been deposited with the Station, where they are being examined in part, while certain groups are being submitted to specialists for study. A series of reports will be prepared for publication.*

To the Royal Canadian Mounted Police and to Sergeant Larsen, the Fisheries Research Board of Canada is greatly indebted for these collections, which will contribute to the biology and hydrography of Arctic waters.

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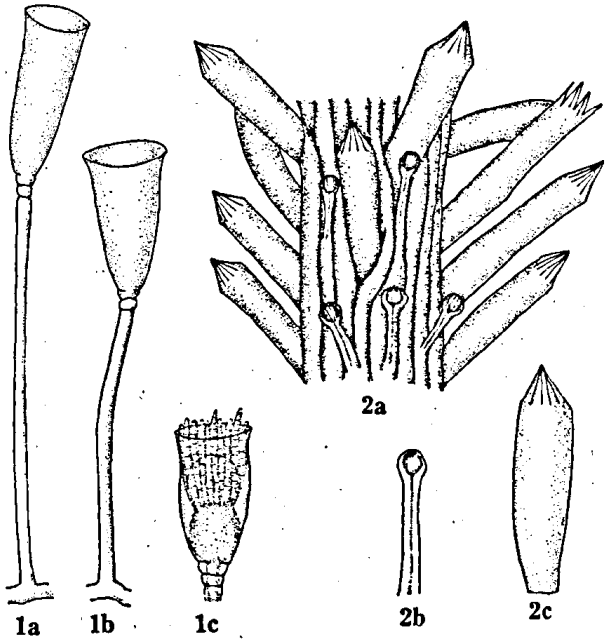
length 1.0 mm., tapering very gradually from base to margin and sometimes slightly urceolate. Margin slightly flaring, entire. Hydranth with about 20 tentacles. These have rings of nematocysts almost like those on the tentacles of *Gonionemus*, although they are not so pronounced.



FIGS. 1 AND 2. *Magnification* ×*20.* FIG. 1. *Bonneviella gracilis.* **a** *and* **b**, *hydrotheca and pedicels.* **c**, *hydrotheca with hydranth.* FIG. 2. *Meganema claviformis.* **a**, *portion of fascicled stem to show hydrothecae and tentacular organs;* **b**, *a single tentacular organ;* **c**, *a single hydrotheca.*

NOTE: Apart from its generic characters this species bears little resemblance to other species of the genus. The relatively small size of the hydrotheca, which is campanulate rather than tubular, with an entire, even, flaring margin, sets it distinctly apart from all other species.

Gonosome. Not observed.

FAMILY CAMPANULINIDAE

Genus *Meganema* new genus

Trophosome. Colony fascicled, with sessile hydrothecae of the *Campanulina* type, arising from the central or axial tubes. These axial tubes are covered by more slender peripheral tubes from which extend long stalked nematophores or tentacular organs.

Gonosome. Unknown.

Meganema claviformis new species. Fig 2, a, b. c.

Trophosome. Colony stout, of much the same size throughout, up to 4 cm. in length, without branches, attached to sponges, barnacle shells, etc. The

peripheral tubes are about half the diameter of the axial tubes. Hydrothecae irregularly arranged, coming out from the axial tubes between the peripheral tubes; they are almost regularly tubular, varying more in length (maximum 1.25 mm.) than in width (0.3 mm.). There is no definite margin at the base of the opercular segments, which are ten in number, narrowing uniformly to a point from all sides as in *Campanulina*. The nematophores, or tentacular organs, are numerous, presenting a striking feature of the species; they come off the peripheral tubes, with long pedicels, 0.6 to 0.8 mm., less than 0.1 mm. in width. The terminal bulb is somewhat larger than, but not twice as large as, the diameter of the pedicel.

Gonosome. Not observed.

Acknowledgments

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