## Department of the Interior: U. S. NATIONAL MUSEUM.

—— 15 ——

## BULLETIN

OF THE

## UNITED STATES NATIONAL MUSEUM.

No. 15.

PUBLISHED UNDER THE DIRECTION OF THE SMITHSONIAN INSTITUTION

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1879.

#### ADVERTISEMENT.

This work is the fifteeenth of a series of papers intended to illustrate the collections of Natural History and Ethnology belonging to the United States, and constituting the National Museum, of which the Smithsonian Institution was placed in charge by the act of Congress of August 10, 1846.

It has been prepared at the request of the Institution, and printed by authority of the honorable Secretary of the Interior.

SPENCER F. BAIRD,

Secretary of the Smithsonian Institution.

SMITHSONIAN INSTITUTION,
Washington, April 15, 1879.

## CONTRIBUTIONS

TO THE

# NATURAL HISTORY

OF

## ARCTIC AMERICA,

MADE IN CONNECTION WITH

THE HOWGATE POLAR EXPEDITION, 1877-78,

BY

## LUDWIG KUMLIEN,

NATURALIST OF THE EXPEDITION.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1879.

### ANNELIDES.

BY A. E. VERRILL.

#### ANNELIDA.

#### Harmothoe imbricata (L.) Malmgren.

Penny Harbor, Cumberland Gulf, low-water, October 4, 1877, lot 230. Head of gulf, on gravel beach, May 28, and June 1, 1878, lots 642, 660, and 664.

#### Nereis pelagica Linné.

Penny Harbor, Cumberland Gulf, lat. 66°, low-water, October 4 and 5, 1877, lots 221, 222, 237. Head of gulf, on gravel beach, May 28, 1878, lot 642.

#### Phyllodoce Grönlandica Œrsted (?).

A specimen in bad state of preservation. Cumberland Gulf.

#### Syllis, sp.

Penny Harbor, low-water, October 4, 1877. Head of Cumberland Gulf, gravel beach, low-water, May 28, 1878.

#### Cistenides granulata (Linné) Malmgren.

Cumberland Gulf, low-water.

#### Thelepus cincinnatus (Fabr.) Verrill.

Amphitrite cincinnata FABR., Fauna Grönl., p. 286, 1780.

Thelepus circinnatus Malmgren, Nordiska Hafs-Annulater, in Öfversigt af Kongl. Vet.-Akad. Forhandl. 1865, p. 387, pl. xxii, fig. 58 (specific name incorrectly spelled).

Lumara flava STIMPSON, Invert. of Grand Manan, p. 30, 1853.

Cumberland Gulf. Common on the American coast south to Cape Cod, and in deeper water as far as Long Island Sound.

Malmgren and several other recent writers have erroneously written the name of this species "circinnatus."

141

Spirorbis lucidus (Mont.) Mörch.

Very common in Cumberland Gulf, on ascidians, algæ, polyzoa, etc., low-water to 9 fathoms; Penny Harbor, October 4; Annanactook Harbor, May 20, 1878; head of the Gulf, May 28, 1878.

Spirorbis quadrangularis Stimpson.

Cumberland, Gulf, low-water. One specimen.

#### GEPHYREA.

Phascolosoma margaritaceum (Sars) Kor. & Dan. (?).

Phascolosoma murgaritaceum Koren and Danielssen, Fauna Litt. Norveg. iii, p. 135, pl. 15, figs. 43, 44, 1877.

A large specimen, about 6 inches long, from the stomach of a *Cottus*, in Cumberland Sound, September 6, 1878 (lot 1685), probably belongs to this species.

Total length 150<sup>min</sup>; diameter of body, 18<sup>min</sup>; length of proboscis from anal opening to end, 112mm. Body large, round, abruptly rounded posteriorly, with a slight mammilla at the tip; anteriorly it tapers gradually into the proboseis, which is long and becomes slender toward the end. The surface appears nearly smooth to the eye, except that there are more or less irregular transverse wrinkles and slightly raised folds. Under a lens it is seen to be everywhere finely transversely wrinkled and striated, and in many parts reticulated with longitudinal wrinkles, while small, depressed, sucker-like organs are scattered over the surface of the body and base of the proboscis; at the posterior end of the body the longitudinal wrinkles become distinct grooves, converging to the tip, with rows of suckers between them, and the circular wrinkles, crossing the interspaces, are conspicuous. The proboscis is destitute of papillæ and hooks, and is smoother than the body, with faint indications of transverse lighter and darker bands of color. Tentacles numerous. slender. Internally the two dorsal retractors arise only a short distance behind the anal opening, their bases being wide apart toward the sides. The ventral retractors, arising near the middle of the body, are large and stout, with their thick bases close together, barely leaving space for the nervous cord to pass between them. Segmental organs large, thick, cylindrical, obtuse, dark brown, about 25mm long and 3mm in diameter; their openings somewhat in advance of the origin of the dorsal retractors and lower down on the sides. Intestine very long, forming a double coil of numerous turns, filling the posterior part of the body to the end. Generative organ voluminous, surrounding the intestine. A slender

transverse muscle passes from the rectum to the opposite side of the body, and the rectum is attached to the adjacent wall by a large bundle of muscular fibers. Muscles of the body-wall form a continuous layer, without distinct fascicles.

#### NEMERTINA.

#### Amphiporus Stimpsoni Verrill.

Ommatoplea Stimpsoni Girard, in Stimpson, Invert. of Grand Manan, p. 28, fig. 18, 1853.

Gravel beach, low-water, Cumberland Gulf, June 1, 1878, lot 663. "Color, deep purplish brown above, lilac beneath." Also from reef in Penny Harbor, October 5, 1877, lot 222.

#### Amphiporus, sp.

Body thick, depressed, somewhat tapered to both ends, 25<sup>mm</sup> to 35<sup>mm</sup> long, as contracted in alcohol. Head with a small roundish cluster of minute occili on the pale antero-lateral margins. Neck with a slightly marked transverse groove, converging backward in form of a V, on the dorsal surface. Color, in alcohol, dark bluish green; the under surface and margins of head yellowish white. In life, "bright pea-green."

Penny Harbor, Cumberland Gulf, lat. 66°, October 4, 1877, lot 225. Arctic Island, low-water, September 13, 1877, lot 66.