

NEW OR SPECIALLY INTERESTING SHELLS OF THE POINT BARROW EXPEDITION.

By W. H. DALL.

There being a doubt as to the time of publication of the Point Barrow report as a whole, it was thought best, with the permission of Lieut. P. H. Ray, acting signal officer, to publish a note on the new or more remarkable forms, in order that the interesting results of the exertions of Lieutenant Ray and party should not grow stale or be rendered obsolete by later researches.

CEPHALOPODA.

Octopus grönlandicus (Dew.) Mörch.

A fine specimen from Point Barrow, quite distinct from the *O. punctatus*, which is abundant to the southward.

PULMONATA.

Cochlicopa lubrica (Mull.) Jeffr.

Zonites (*Conulus*) *stearnsii* Bland.

Hyalina arctica Lehnert, Science Record, June, 1884.

Zonites (*Hyalina*) *radiatula* Alder.

Hyalina pellucida Lehnert, l. c.

The above three species from moss off the tundra near Point Barrow.

MARINE GASTROPODA.

Bela harpa n. s.

Shell fusiform, moderately thin, six whorled; whorls rounded, suture distinct; sculpture consisting of (on the last whorl) 23 stout, uniform, slightly flexuous rounded ribs extending from the suture to the canal with slightly narrower interspaces; lines of increase distinct; sometimes threadlike; these are crossed by numerous close-set spiral threads, separated by narrow grooves, both faint near the suture; threads growing stronger, regularly wider, and coarser gradually toward the canal, near which they are stronger than the obsolete ends of the transverse ribs; anal fasciole (notch band) indistinct, aperture narrow, elongated with an acute posterior angle, outer lip thin, columella simple, canal rather wide; shell whitish, with a reddish tinge anteriorly, especially on the last whorl; interior of aperture reddish, of the canal pure white. Longitude of shell, 17.0; of last whorl, 12.5; of aperture, 10.0^{mm}. Latitude of shell, 8.0; of aperture, 3.5^{mm}.

First found by Dall at Nunivak Island, in 1874. One specimen dredged by the Point Barrow expedition in 13½ fathoms, 10 miles west of Point Franklin, Arctic Ocean. Museum No. 40959.

This species has been compared with the *Belas* in the chief museums and private collections of Northern Europe, and seems amply distinct from any of the species contained in them.

Bela murdochiana n. s. Plate ii, fig. 8.

Shell whitish, short, stout, with rather coarse sculpture and very short spire, whorls about five, the last much the largest; whorls inflated, suture deep, almost channeled, sculpture of numerous (on the last whorl about two to the millimeter) narrow, backwardly convex, flexuous riblets with about equal interspaces, strongest near the suture, not crossing the fasciole and obsolete near the periphery; lines of growth distinct, crossed by numerous (about six to the millimeter) rather coarse threads, of which each alternate one tends to be smaller, separated by narrow grooves and about uniformly distributed over the surface, with a tendency to a faint carina in front of the indistinct fasciole*; outer lip sharp, columella simple, white; aperture pinkish, canal short, wide; nuclear whorls eroded in the specimens; operculum light horn color, rather broad and short; soft parts pink. Longitude of shell, 11.5; of last whorl, 10.0; maximum latitude of shell, 8.5^{mm}. Museum No. 40960: •

Specimens were obtained from Cape Smythe in 2 to 5 fathoms mud and sand with young *B. tenuilirata*, from which they differ in lighter color of shell, coarser sculpture, and stouter proportions. The operculum of *B. tenuilirata* is black, narrow, and claw-shaped.

The species is dedicated to Mr. John Murdoch, naturalist to the Point Barrow party.

Admete Middendorffiana Dall.

Admete viridula, Midd. Mal. Ross. ii, plate ix, figs. 13, 14, 1849, not of Fabricius.

This form is perfectly distinct from *A. viridula*, and may prove to be a *Cancellaria*. It is one of the characteristic forms of the Pacific arctic and ranges north from Nunivak Island. The present specimen was obtained in 5 fathoms mud, in Norton Sound. Museum No. 40961.

Chrysodomus Kroyeri Moller var. *Rayana* Dall.

A specimen of *C. Kroyeri*, in the state called *eretaceus* by Reeve, was found on the beach at Cape Smythe; a very large living specimen of the

* It now being certain that the notch in the *Pleurotomida* is for the purpose of allowing the effete matters to escape from the anus without fouling the water going to the gills, the term *anal fasciole* is here proposed for the band marking the track of the notch which in *Pleurotoma* and its allies, in *Pleurotomaria*, *Scissurella*, *Rimula* and its relatives, &c., forms a conspicuous feature in the sculpture, for which, hitherto, there has been no convenient term for use in description. The *siphonal fasciole*, named by Prof. Theodore Gill, bears a somewhat similar relation to the anterior end of the canal, but is generally less distinctly marked off from the rest of the surface. For the notch itself the term *anal notch* may be used, to distinguish it from the *siphonal notch*, in description.

normal form was dredged near the same place in 5 fathoms; some with few ribs in 2½ fathoms.

This shell when fresh and perfect is of a plum color, or dull purple, with fine spiral striae, recalling those of *Buccinum tenue*, and strong transverse ribs. The dead and weathered form is nearly white. This is Reeve's *Fusus cretaceus*. The variety *Rayana* has no ribs, but is perfectly smooth except for the fine sculpture which enables its relations to be recognized. It would be taken as a distinct species at first sight. It was dredged at Cape Smythe, and is named in honor of Lieut. P. H. Ray, U. S. A., the commander of the expedition. Museum No. 40972.

Chrysodomus Martensi Krause.

This fine new species was found on the beach near the station. Museum No. 40976.

Strombella malleata n. s.

This shell, which comes nearest to *S. beringii* (Midd.) Dall, is long and slender, the young shell forming several whorls in an almost cylindrical coil before they begin to enlarge. The adult may reach 6 inches in length. The surface is covered with fine spiral striae and a thin brown epidermis. It differs from *S. beringii* in its dark purple color, its few large (generally only five) transverse ribs, between which the space is nearly flat rather than concave, and a sharp carina on the anterior periphery of the last whorl, on which the suture is laid. The nucleus is large and blunt, the canal short, the form of the mouth variable in different stages and specimens; the outer lip is thin, the aperture dark purple within; the last whorl less than half the length of the shell in most cases. It is generally rude and more or less worn, even when living, the cylindrical tip usually broken off, but the polygonal horizontal section of the whorls is very characteristic.

The writer has collected this species at Port Clarence, Cape Lisburne, Point Lay, Icy Cape, and various other localities within the Arctic basin during the last twelve years. One specimen (Museum No. 40979) was found on the beach near Point Barrow.

Trichotropis (Iphinoe) arctica (Midd.) Dall.

Cancellaria arctica Midd. Mal. Ross. ii, p. 112, plate ix, figs. 11, 12, 15, 1849.

Point Barrow, also Norton Sound. It was originally brought from Bering Strait by Wossnessensky.

Amauropsis purpurea Dall.

With *N. clausa*, but less common, all over the American coast north from Norton Sound. This is *A. helicoides* Midd., not Johnston.

Margarita vorticifera Dall.

One specimen from beach near Point Barrow. This is much farther north than the species was previously known to range.

Patella (*Helcioniscus*) *exarata* (Nutt.) Reeve.

A single specimen of this well known Hawaiian species was found on the beach near Point Barrow, having doubtless been thrown overboard by some whaler with ballast. The fact of its occurrence is interesting as illustrating accidents of distribution like Mr. Lord's living *Orthalicus undatus* from Vancouver Island.

Cylichna propinqua M. Sars.

Abundant in 2 to 5 fathoms off Cape Smythe.

ACEPHALA.

Cryptodon sericatus Cpr.

At Cape Smythe and off Point Franklin.

Astarte (*Rictocyma*) *esquimalti* (Baird) Dall.

Crassatella esquimalti Baird.

Rictocyma mirabilis Dall.

Two specimens off Cape Franklin in 13 fathoms.

This completes the list of especially interesting forms. The total number found was sixty-one species or varieties, which will be fully enumerated and reported upon in the general report upon the results of the Point Barrow expedition, under the auspices of the United States Signal Service.

JULY 8, 1884.

DESCRIPTION OF A NEW SPECIES OF HYBOPSIS (*HYBOPSIS MONTANUS*).

By **SETH E. MEEK.**

Hybopsis montanus sp. nov. (36882.)

Head, $3\frac{2}{3}$; depth, 5; dorsal rays, 8; anal, 6; scales, 4-37-4; body elongated, slender, little compressed; eye rather high up, moderate, $3\frac{3}{4}$ in head; snout blunt, rather long, $3\frac{1}{8}$ in head; margin of upper lip on level of lower margin of eye; mouth rather large, somewhat inferior, lower jaw included, much shorter than upper, end of maxillary reaching slightly past vertical from front of eye; a long barbel at its posterior extremity; length of maxillary (without barbel) 3 in head.

Origin of dorsal slightly nearer base of caudal than tip of snout, tips of anterior rays of dorsal extending past tips of posterior ones when the fin is deflected. Length of longest dorsal ray $1\frac{1}{4}$ in head, and about twice as long as base of fin. Scales in front of dorsal about 14. Origin of dorsal above origin of ventrals; tips of pectorals scarcely reaching ventrals; tips of ventrals reaching to vent. Pectorals, $1\frac{2}{5}$ in head; ventrals, $2\frac{1}{4}$ in head; longest anal ray, 2 in head; length of its base, 3 in head; caudal forked, its inner rays half the length of outer ones, lower lobe longer and narrower than upper. Teeth 4, 4, little hooked,