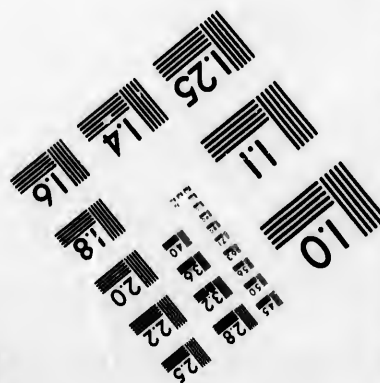
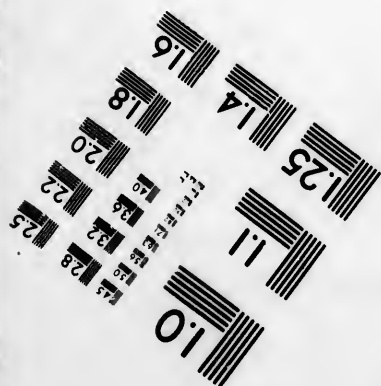
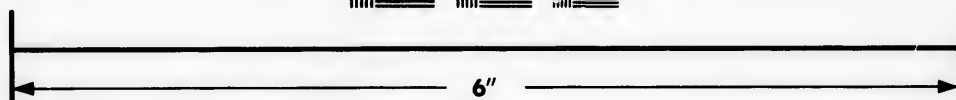
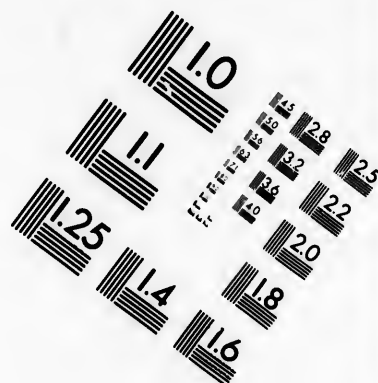




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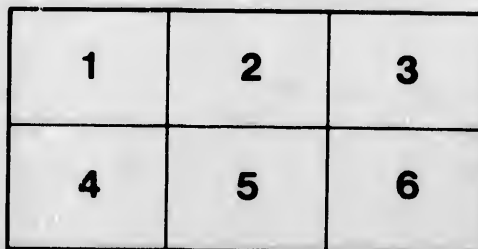
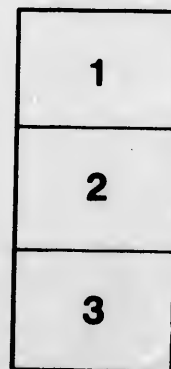
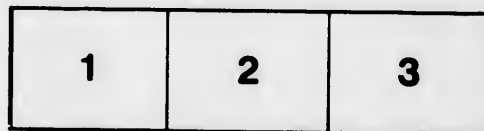
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Catalogue of Shells from Bering Strait and the adjacent portions of the Arctic Ocean, with descriptions of three new species.*

BY W. H. DALL, U. S. COAST SURVEY.

Having had occasion to examine several collections of shells brought down by whalers from the Arctic Ocean in the autumn of 1873, I was struck by the fact that there does not appear to be any catalogue of the species of that vicinity. Indeed, the region has been visited by but few collectors, and the species have been commonly described among a crowd of others from all sorts of localities. The collectors upon whose localities dependence can be placed are rare, and mostly of modern date. I have therefore prepared this catalogue as a kind of preliminary basis for a better one. The authorities are chiefly as follows: Gray and Sowerby in the voyage of the *Blossom*, Captain F. Beechey; Gould on the shells collected by the late Dr. Wm. Stimpson of the North Pa-

*Published in advance, February 26th, 1874.

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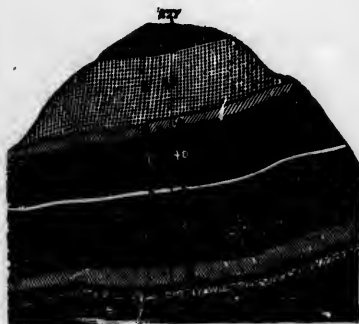
*Figure 1.**Figure 2.**Figure 3.*

FIGURE 1.—The beach at Gold Bluff, looking south. ^a

FIGURE 2.—Section of the Bluff. A, loam, ten feet; B, yellow clay, twenty feet; C, yellow gravel, ten feet; D, brownish sandstone, ten feet; E, red and yellow gravel, forty feet; F, blue sandstone, five feet, containing numerous fragments of wood, partially transformed into lignite; G, coarse red and yellow gravel, fifty-five feet; H, very fine blue gravel, five feet; I, indurated sand, fifteen feet; J, gravel, stained red with oxide of iron, ten feet; K, blue sandstone with lignite, five feet; L, sandstone without lignite, five feet; M, gravelly beach, seven feet to low water mark. Total, about 227 feet.

FIGURE 3.—View of the mine, where the black sand is collected on the beach and transported to the works on the backs of mules.

These figures are from drawings by Mr. Chase.

cific Exploring Expedition under Captain (now Admiral) John Rodgers; Dr. P. P. Carpenter's Reports to the British Association; my own collections from Plover Bay, and Norton Sound, and southerly, from 1865 to 1873; collections from Cape Espenberg and Grantley Harbor by Captain E. E. Smith, and from Icy Cape by Captain T. W. Williams, in 1873. A few other species known to be found in that region have been added from various sources. Synonymy, in general, has been waived, except for the purpose of referring to a figure. The region is probably a rich one, especially in forms of the *Buccinoid* and *Chrysodomoid* types, and it is to be hoped that it may be more thoroughly explored before long. The large collections of species made by Dr. Stimpson in this region were lost in the Chicago fire, and contained many unpublished forms. It is, therefore, particularly desirable that more material should be obtained, and no one is better able to contribute to our knowledge in this respect than our hardy whalers. Doubtfully identified species and those which may be synonymous with others, are marked with an asterisk. Those species which may have been erroneously attributed to the region referred to, have in general been omitted. St.—Stimpson; W.—Williams; B.—Beechey; S.—Smith; D.—Dall; collectors.

MOLLUSCOIDEA.

Class TUNICATA.

1. *Chelysoma Muehlenyanum*, Brod.; Arctic Ocean; B.
2. *Cynthia pyriformis*, Lin.; Plover Bay; Avatcha Bay; south to the Aleutians; D.
3. *Boltenia Beringi*, Dall; Bering Sea; Pribiloff Islands; D. There are also a large number of species of tunicates in my own collection not yet identified.

Class BRACHIOPODA.

4. *Rhynchonella psittacea*, Lin. (var. ?); Seniavine Str., St.; Plover Bay; Norton Sound, D.; south to Sitka, D.
5. *Terebratella frontalis*, Midd.; Ochotsk Sea; Attu Id. Aleutians, D. (Probably an arctic species).

MOLLUSCA VERA.

Class ACEPHALA.

6. *Saxicava pholis*, Lin.; Plover Bay; Norton Sound; universal in colder water; D.
7. *Mya praeisa*, Gld.; Plover Bay; Avatcha Bay; Norton Sound; south to Sitka; D.
8. *Mya truncata*, Lin.; Cape Espenberg, S.; Plover Bay; Norton Sound; south to Sitka, D.

9. *Cyrtodaria siliqua*, Blainv.; Plover Bay; Norton Sound; south to Aleutians; D.
10. *Corbula gibbosa*, Brod.; Icy Cape (?); B.
11. *Lyonsia norvegica*, Chemn.; Arctic Ocean; S.
12. *Lyonsia flabellata*, * Gld.; Arctic Ocean; S.
13. *Siliqua media*, Dall ex Gray; Cape Espenberg, S.; Norton Sound, D. (*S. borealis*, Conr.; and *costata*, Midd. non Say, pars.).
14. *Tellina alternidentata*, Brod.; Icy Cape, B.; Cape Espenberg, S. Avatcha Bay; Aleutians, D.; south to Sakalin Id., Schrenck. (*T. utea*; Gray; *Gulfordia*, Gray; *venulosa*, Schr.).
15. *Macoma nasuta*, Conr.; Plover Bay, D.; south to Monterey, Cal.; D.
16. *Macoma edentula*, Brod.; Bering Strait, B.; Aleutians, D.; south to Oregon, D.
17. *Macoma inconspicua*, Brod.; Icy Cape, W. B.; Grantley Harbor, S.; Plover Bay; Norton Sound; Aleutians, D.
18. *Macoma proxima*, Brown; Arctic Ocean, B.; Norton Sound; Aleutians, D.
19. *Standella falcata*, Gld.; Cape Espenberg, S.; Aleutians; and south to California; D.
20. *Liocyma fluctuosa*, Dall ex Gld.; Ochotsk Sea, Midd.; Aleutians, D.
21. *Liocyma Beckii*, Dall; Plover Bay, D.
22. *Liocyma viridis*, Dall; Arctic Ocean, St.
23. *Liocyma arctica*, Rve.; Arctic Ocean (ubi ?).
24. *Astarte semisulcata*, Leach (teste Stm.); Plover Bay; Norton Sound; Aleutians; Avatcha Bay, D.; Cape Espenberg, S.; Icy Cape, B.; (*A. lactea*, Brod.; *crassidens*, Brod., Voy. Blas.).
25. *Astarte Banksii*, Gray; Norton Sound; Plover Bay; Aleutians, D.; Arctic Ocean, B.
26. *Astarte striata*, Gray; Arctic Ocean, B.
27. *Venericardia borealis*, Conr.; Plover Bay; Norton Sound; Aleutians, D.; Arctic Ocean, St.; south to Catalina Island, Cal., Cooper.
28. *Cardium islandicum*, Chemn.; Cape Espenberg, S.; Norton Sound; Aleutians; south to Sitka, D.
29. *Cardium boreale*, * Brod.; Icy Cape, B.
30. *Serripes grönlandicum*, Chemn.; Icy Cape, B. W.; Cape Espenberg; Grantley Harbor, S.; Plover Bay; Norton Sound; Aleutians; south to Oregon, D.
31. *Serripes Laperoustii*, Desh.; Plover Bay; Avatcha Bay; Aleutians; Kadiak; Sitka, D.
32. *Lucina borealis*, Lin.; Aleutians; Sitka; Catalina Id., D.; probably arctic also.
33. *Turtonia occidentalis*, Dall; Plover Bay, D.
34. *Mytilus edulis*, Lin.; Cape Espenberg, S.; mouth of the Mackenzie River; McFarlane (whole Arctic Ocean probably).
35. *Modiola modiolus*, Lin.; Plover Bay; Aleutians; south to Monterey, Cal.; D.

36. *Modiolaria laevigata*, Gray; Plover Bay; Norton Sound; Aleutians, D.; south to Oregon.
37. *Modiolaria n. rrmorata*, * Forbes; Arctic Ocean.
38. *Modiolaria nigra*, * Gray; Arctic Ocean, St.
39. *Modiolaria corrugata*, Seniavine Strait, St.
40. *Yoldia myalis*, Couth.; Seniavine Strait, St.
41. *Yoldia limatula*, J. Sby.; Arctic Ocean, St.
42. *Yoldia truncata* (Cpr.); Norton Sound, D.
43. *Yoldia siltqua* (Cpr.), Norton Sound, D.
44. *Yoldia intermedia* (Cpr.), Norton Sound, D.
45. *Leda arctica*, Brod.; Seniavine Strait, St. (*L. lanceolata*, J. Sby.).
46. *Leda minuta* (Gld.); Bering Strait; Seniavine Strait, St.
47. *Nucula tenuis*, Mont.; Seniavine Strait, St.; Plover Bay; Norton Sound; Aleutians; ? south to Sitka, D.
48. *Nucula expansa*, Rve.; Plover Bay; Aleutians; Sitka, D.
49. *Pecten islandicus*, * Chemn.; Arctic Ocean, St.

Class GASTROPODA.

50. *Cylichna triticea*, Couth.; Seniavine Strait, St.
51. *Chiton vestitus*, Sby.; Seniavine Strait, St.
52. *Chiton albus*, Lba.; Seniavine Strait, St.; Plover Bay; Norton Sound; Aleutians; Sitka; Catalina Id., D.
53. *Chiton lineatus*, Wood; Plover Bay; Norton Sound; Pribiloff Isds.; Aleutians; Kadiak; Sitka; Monterey, D.
54. *Collisella testudinalis*, Müll.; Plover Bay; Norton Sound; in deep water south to Sitka, D.
55. *Cryptobranchia concentrica*, Dall ex Midd.; Bering Sea, D.
56. *Cryptobranchia alba*, Dall; Plover Bay, D.; Seniavine Strait, St.
57. *Margarita umbilicalis*, * Brod. "Northern Ocean." (ubi?)
58. *Margarita striata*, Leach; Seniavine Strait, St.
59. *Margarita argentata*, Gld.; Seniavine Strait, St.
60. *Margarita ianthina*, * Gld.; Arctic Ocean, St.
61. *Margarita albula*, * Gld.; Arctic Ocean, St.
62. *Margarita helicina*, Mont.; Plover Bay; Norton Sound; Aleutians; Sitka, D.
63. *Margarita obscura*, Couth.; Cape Espenberg, S.; Aleutians; Norton Sound; Sitka, D.
64. *Crepidula grandis*, Midd.; Plover Bay; Norton Sound; Aleutians, D. (not *princeps* of Conr. fossil).
65. *Mesalia polaris*, Beck; Cape Espenberg, S.; Plover Bay, D.
66. *Mesalia lactea*, Möll.; Plover Bay, D.
67. *Mesalia reticulata*, * Mlgh.; Seniavine Strait, St.
68. *Litorina tenebrosa*, var.? Plover Bay; Norton Sound; Aleutians, D.
69. *Litorina squalida*, * Gray; Icy Cape, B.

70. *Lacuna vineta*, Mont.; Plover Bay; Norton Sound; Aleutians; Sitka, D.
71. *Admete viridula*, Couth; Seniavine Strait; St. Aleutians; D.
72. *Admete arctica*, * Midd.; Arctic Ocean; Seniavine Strait; St.
73. *Trichotropis cancellatus*, Hinds; Norton Sound; Aleutians; Sitka; D.
74. *Trichotropis insignis*, Midd.; Seniavine Strait; St. Plover Bay; Norton Sound; Aleutians; D.
75. *Trichotropis borealis*, Lin.; Melville Ids.; Icy Cape; B.; Plover Bay; Aleutians; D.
76. *Trichotropis bicarinatus*, Sby.; Cape Lisburne; Icy Cape; B.; Plover Bay; D.
77. *Trichotropis bicarinatus*, var. *alta*, Lall; Plover Bay; D.
78. *Trichotropis bicarinatus*, var. *spectabilis*, Dall; Seniavine Strait; St.
79. *Iphinoë coronata*, Gld.; Seniavine Strait; St.
80. *Bela lævigata*, Dall; Norton Sound; D.
81. *Bela tenuilirata*, Dall, Norton Sound; Aleutians; D.
82. *Bela turricula*, Mont.; Seniavine Strait; St.
83. *Bela rufa*, Mont.; Seniavine Strait; St.
84. *Bela decussata*, Couth; Seniavine Strait; Avatcha Bay; St.
85. *Bela harpularia*, Couth; Seniavine Strait; St.
86. *Olostomia Beringi*, Dall; Norton Sound; D.
87. *Scalaria grönlandica*, Chemn.; Cape Espenberg; S.; Seniavine Strait; St.
88. *Natica clausa*, Brod.; Plover Bay; Aleutians; D.
89. *Natica russa*, Gld.; Plover Bay; Norton Sound; Aleutians; De.; Arctic Ocean; St.
90. *Lunatia septentrionalis*, * Beck.; Seniavine Strait; St.
91. *Lunatia pallida*, Brod. & Sby.; Cape Espenberg; S.; Icy Cape; B.; Plover Bay; Norton Sound; Aleutians; D.
92. *Amauropsis purpurea*, Dall; Grantley Harbor; S.; Icy Cape; W.; Norton Sound; Plover Bay; D.
93. *Velutina haliotoidea*, Fabr.; Plover Bay; Norton Sound; Aleutians; Sitka; Monterey, Cal.; D.; Seniavine Strait, St.; Catalina Id., Cal.; Cooper.
94. *Velutina zonata*, Gld.; Seniavine Strait; St.
95. *Velutina cryptospira*, Midd.; Norton Sound; Pribilof Ids.; Aleutians; Sitka; D.
96. *Velutina coriacea*, Pall.; Cape Lisburne Bay; B.
97. *Purpura canaliculata*, Ducl.; Plover Bay; Norton Sound; Aleutians; Sitka; D.
98. *Buccinum ciliatum*; Icy Cape, W.; Cape Espenberg; S.
99. *Buccinum tortuosum*, Rve.; Seniavine Strait; St.
100. *Buccinum polare*, Gray; Icy Cape; B.; Plover Bay; Norton Sound; D.
101. *Buccinum tenue*, Gray; Icy Cape; B.; Plover Bay; D.
102. *Buccinum angulorum*, * Gray; Icy Cape; B. (*Stimpsoni*, Gld.; Bering Strait; St.)

103. ** *Buccinum glaciale*, Stm.; Icy Cape; W.; Seniavine Strait; St.; Plover Bay; Norton Sound; Aleutians; Kadiak; D.

104. *Buccinum tenebrosus*, Hancock; Arctic Ocean; B. (*borealis*, B. & S.; same locality).

105. *Buccinum Fischerianum*, Dall; Pribiloff Ids.; D. (probably also Arctic).

106. *Buccinum Marchianum*, Dall ex Fischer; Norton Sound; Aleutians; Sitka; Kadiak; D.; B. *cyaneum*, Hanc. var.

107. *Buccinopsis canaliculata*, Dall, n. s.; Cape Espenberg; S.

108. *Volutoharpa ampullacea*, Midd.; Seniavine Strait; St.; Plover Bay; Aleutians; Kadiak; Sitka; D.

109. *Chrysodomus liratus*, Mart., var. *tornatus*, Gld.; Cape Espenberg; S.

110. *Chrysodomus fornicatus*, Gmel.; Icy Cape; W. B.; Seniavine Strait; St.; Cape Espenberg; S.; Mouth of the Mackenzie River; McFarlane; Plover Bay; Norton Sound; D. (*deforme*, Bve.)

111. *Chrysodomus glacialis*, * Gray; "Arctic Ocean."

112. *Chrysodomus Schantzianus*, * Midd.; Seniavine Strait; St.; Ochotsk Sea; Midd.

113. *Chrysodomus islandicus*, Chemn.; Seniavine Strait; St.

114. *Chrysodomus terebralis*, Gld.; Icy Cape; W.; Cape Espenberg; S.; Aleutians; D.

115. *Heliotropis harpa*, Dall, ex Mørch; Icy Cape; W.; Shumagins; Unalashka; D.

116. *Volutopsis Beringi*, Midd.; Icy Cape; W.; Aleutians; D. (Captain William's specimens were very strongly shouldered, short apired, heavy, and large).

117. *Volutopsis attenuata*, Dall, n. s.; Cape Espenberg; S.; Cook's Inlet; D.

118. *Trophon clathratus*, Lin.; Seniavine Strait; St.

119. *Trophon multicostratus*, Esch.; Norton Sound; Plover Bay; Aleutians; Sitka; D. (*lamellosus*, Gray?).

120. *Trophon lamellosus*, * Gray; Icy Cape; B.

121. *Trophon Orpheus*, Gld.; Plover Bay; D.

Buccinopsis canaliculata, n. s.

Shell solid, livid white, covered with a strong, dark brown pilose epidermis; whorls moderately rounded; suture deeply channelled; surface of the whorls covered with fine, spiral thread-like ridges, with still finer ones intervening between them, lightly decussated by the fine, but distinct lines of growth, to which the epidermis especially adheres; the coarser ridges are about seven in number, between the posterior end of the aperture and the edge of the suture

** This species is exceedingly variable in every respect. *B. angulosum*, Gray, is probably an extreme variety of it; *B. Rodgersi*, of Gld., *Stimpsoni*, Gld., *carinatum*, *Marchianum* and *Rombergi*, of Dunker, and *angulosum* and *rutulum*, of Mørch, besides some of Middendorf's species which I cannot now specify, are all forms of this protean species.

behind it. Whorls $5\frac{1}{4}$, aperture half as long as the shell; internally polished; outer edge somewhat thickened; inner lip callous; collumella strongly twisted; canal short, rather wide. Lon. 1.33 inches, lat. 0.75 inches; defl. 55° . This species is much less inflated, and proportionally longer than *B. Dalei*, Sby., which is nearly smooth, and has not the deeply channelled suture. *S. striata*, Jeffreys, (if this be a true *Buccinopsis*, which I doubt) has a straight columella, and proportionally larger body whorl; the present species is a neater and more fusiform shell, with much finer sculpture.

Captain Smith obtained but one tolerably fresh adult specimen, of this interesting shell, on the beach at Cape Espenberg.

Volutopsis attenuata, n. s.

Shell solid, pinkish white, much attenuated before and behind; spire one-quarter shorter than the aperture. Whorls six, apex mammillated. Posterior surface of the whorls flattened toward the suture, where they are somewhat wrinkled and appressed. Surface of the whorls completely covered with fine, even, spiral lines. Aperture long and narrow, a thickened callus on the inner lip, and the outer lip slightly reflected. Canal long, nearly straight, rather narrow. Lon. shell, 2.33 inches, of aperture 1.4 inches, lat. shell 1.0, of aperture 0.5 inches; defl. 40° .

This very interesting species is at once distinguished from any of the described species, by the spiral sculpture, and otherwise by its elongated and slender form. *V. regularis*, Dall, from the Aleutians, is a much more robust shell, and of the same color, but quite smooth. One specimen, in good order, was all that Captain Smith obtained. It has also been obtained at Cook's Inlet.

85a. *Pleurotoma vinosa*, n. s.

This shell is closely allied to *P. (Surcula) perversa*, of Gabb, from the Straits of Fuca and Catalina Island, but differs in the following particulars: *P. perversa* has a light olivaceous epidermis, which gives a livid appearance to the light reddish brown of the whorls outside; and a broad, white band, with ill-defined edges, passes round the periphery of the shell, just covered by the suture in the upper whorls. The columella, end of the canal, and tip of the shell, are also white. The present form is of a uniform deep winebrown, or claret color; is shorter and much less slender, with a shorter canal and proportionately much larger aperture. Both shells are reversed, and covered with fine, somewhat irregular spiral lines, not mentioned by Gabb in his diagnosis. My specimens were obtained in Kyska Harbor, Great Kyska Island, Aleutians. My largest shell has nine whorls, and is a quarter of an inch shorter, and one-fifth of an inch broader, than a specimen of *P. perversa* of exactly the same number of whorls. It probably belongs to the Aleutian fauna, but may go northward to the Straits.

On New Parasitic Crustacea, from the N. W. Coast of America.*

BY W. H. DALL, U. S. COAST SURVEY.

More than a year ago, I submitted to the Academy descriptions of three new species of Cyami, from as many species of Pacific Cetacea. On examination of a small collection of parasites, in the collection of the Academy, (presented by Captain C. M. Scammon, and reported to have been procured from a Pacific Right Whale, near the Island of Kodiak, Alaska, in 1873) I find that it contains two species, both apparently undescribed. It is to be presumed that each species of whale has parasites peculiar to itself, and those who have the opportunity of collecting these interesting animals should lose no opportunity of examining the rarer cetacea, and should preserve the parasites of each species carefully by themselves. As there are many species from which no parasites have yet been collected, there are doubtless as many kinds of Cyami which are still unknown.

The species described on pp. 281-3, Vol. IV of the Academy's Proceedings, have been well figured on plate X of Captain Scammon's Marine Mammals of the N. W. Coast of America, and, in default of a figure of the present species, I have preferred to give a comparative diagnosis, by which they may be more readily distinguished from the figured and other described species.

Cyamus tentator, n. s.

Species in size and general form resembling *C. Scammoni* Dall, (Scammon, loc. cit. pl. X, figure 2) of a pale, waxy yellow, with the tips of the branchiæ purplish. It differs from *C. Scammoni* in the following particulars: Head proportionately smaller, not constricted behind the eyes, terminating in a point in the median line behind, which point overlaps a median channel in the body segment. Second pair of antennæ proportionately much longer, equalling twice the length of the head. Second pair of hands, with two sharp, spike-like tubercles in place of the two rather short and blunt tubercles of *C. Scammoni*. Hands otherwise very similar. Second segment with a broad channel in the median line, widening backward from the head, and rather shallow. Third segment not rounded at its outer ends, but furnished with very prominent knobs, at the anterior and posterior corners on each side. The outer edges of the fourth segment are also knobbed before and behind, but the anterior knobs are less prominent. The branchiæ are not spirally twisted, but are straight, laterally extended cylinders, nearly as long as the width of the segment to which they are attached. There are two pairs on each side of the third and fourth segments in the male. The upper pair on each side are not of equal length, as in *C. Scammoni*, but the inferior branchia of this pair is much shorter than the other; both are straight or slightly curved upward and forward. The lower pair exist only in the males, they are very slender, and filiform, and quite short.

*Published in advance, March 2d, 1874.

In the female they seem to be changed into pouches for the development of the ova. Posterior part of the body as in *C. Scammoni*, but there are no serrations on the anterior edge of the seventh segment. Length of largest specimen, 0.8 inches. Described on *Balaena Sieboldii*, Gray; North Pacific Ocean.

This is readily distinguished from *C. mysticeti* Dall, by its spiked "hands" and knobby branchial segments; and from *C. Scammoni* by its straight unequal branchiae, long antennae, knobs, and the shape of the head.

Cyamus gracilis, n. s.

This species is of a pale, waxen yellow, of elongated and slender form, and small and slender limbs. It more nearly resembles *C. suffusus* Dall, (Scammon loc. cit. pl. X, figure 3) than any of the other described species. It differs from that species in the following particulars: It is smaller, the largest specimen measuring only 0.5 of an inch in length. It wants the purple color, and is more compact and solid. The second pair of antennae are much shorter, being only equal to the first segment and half of the next segment of the corresponding members in *C. suffusus*. The branchiae, though similar, are proportionally one-third shorter. The posterior limbs are shorter and much more weak and slender than in *C. suffusus*. The first pair of "hands" are slenderly pyriform, instead of quadrate. The second pair are simple, without the tubercles between the articulation of the limb and the "finger;" or, at most, in the largest specimens, the termination of the hand under the articulation of the hook, or finger, is slightly produced into a point. The head is shorter, sub-triangular instead of elongated. Lastly, the segments of the body are more or less closely appressed against each other before and behind, instead of being laterally attenuated, and separated as in *suffusus*. They are also proportionately less wide from side to side than in *suffusus*. Habitat, with the last.

The prominent features of this species are its slender and compact form, short antennae, and weak and inconspicuous posterior limbs.

Captain T. W. Williams brought down from the Arctic Ocean, in 1873, some parasites from the walrus, which he presented to the Academy. These parasites are of a very dark brown color, almost perfectly round in shape, with an indistinctly segmented abdomen, somewhat roughened with short hairs; three pairs of short, bristly legs, a distinct but small throat, and very small and short head. There is one pair of short, stout antennae, with four joints; the mouth is suctorial. There are no other appendages to the abdomen or head. The want of books of reference prevents my being able to refer these creatures to their proper generic position; and it would be, in any case, inadvisable to describe them as new, as parasites from the walrus of the North Sea have been recently described by a Swedish naturalist, and they may be identical with the present form.

Mr. Stearns, reporting for the Publication Committee, spoke of the large amount of work accomplished by the Committee during the past year, and stated that the Proceedings of the Academy, for 1873, would be ready for distribution at the next meeting.

On motion of Mr. Dall, a vote of thanks to Mr. Stearns was adopted, in consideration of the large amount of labor and time which he had personally devoted to the publications, during the year.

The President announced the following appointments, made by the Board of Trustees at their last meeting:

CURATORS.

General Zoölogy.....	GEORGE HEWSTON, M. D.
Ichthyology.....	W. H. DALL
Conchology.....	W. G. W. HARFORD
Ornithology.....	WILLIAM BLUNT
Entomology.....	HENRY EDWARDS
Paleontology.....	W. A. GOODYEAR
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EMILE DURAND.	J. M. SMYTHE.

The President also stated that the Academy, having effected a lease of the church on the corner of California and Dupont Streets, would hold their next meeting in their new quarters.

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