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APPENDIX

TO

CATALOGUE

MR OSCAR DICKSON'S

SWEDISH COLLECTION

EDINBURGH 1882





INTERNATIONAL FISHERIES EXHIBITION. EDINBURGH. 1882.

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APPENDIX

TO

CATALOGUE

OF

MR OSCAR DICKSON'S  
SWEDISH COLLECTION.

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*STOCKHOLM*

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1882.



## COLLECTIONS FROM THE VEGA EXPEDITION, EXHIBITED BY PROFESSOR, BARON A. E. NORDENSKIÖLD.

### A. THE MOST COMMON OR CHARACTERISTIC INVERTEBRATED ANIMALS OF THE ARCTIC SEA OF SIBERIA.

(COLLECTED BY DR. A. STUNBERG OF THE VEGA EXPEDITION).

#### Crustacea.

1. *Chionoecetes epilio* KR.  $62^{\circ} 39' N$ ,  $177^{\circ} 5' W$ , 55 f., clay,  $\frac{5}{8}$ , 79.
2. *Hyas aranea* (LIN.).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 10—18 f., sand & stones, 1879.
3. *Hyas aranea* (LIN.).  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 12 f., sand & stones,  $\frac{15}{7}$ , 79.
4. *Pagurus pubescens* KR.  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 12 f., sand & stones,  $\frac{15}{7}$ , 79.
5. *Hippolyte Gaimardi* M.-EDW.  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 15 f., stones & clay,  $\frac{17}{8}$ , 79.
6. *Mysis oculata* (FABR.).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 4—5 f., sand,  $\frac{17}{7}$ , 79.
7. *Diastylis Rathkei* (KR.).  $68^{\circ} 55' N$ ,  $180^{\circ} 35' E$ , 3—6 f., stones,  $\frac{15}{9}$ , 78.
8. *Diastylis picta* STBRG.  $66^{\circ} 10' N$ ,  $169^{\circ} 45' W$ , 24 f., sand,  $\frac{20}{7}$ , 79.
9. *Munnopsis typica* M. SARS.  $76^{\circ} 52' N$ ,  $116^{\circ} E$ , 36 f., mud,  $\frac{22}{4}$ , 78.
10. *Idothea entomon* (LIN.).  $73^{\circ} 53' N$ ,  $134^{\circ} 25' E$ , 9 f., clay,  $\frac{25}{7}$ , 78.
11. *Idothea entomon* (LIN.).  $73^{\circ} 2' N$ ,  $142^{\circ} 36' E$ , 9 f., mud,  $\frac{31}{7}$ , 78.
12. *Idothea entomon* (LIN.).  $70^{\circ} 14' N$ ,  $170^{\circ} 17' E$ , 12 f., clay,  $\frac{28-9}{9}$ , 78.
13. *Idothea entomon* (LIN.).  $68^{\circ} 55' N$ ,  $180^{\circ} 35' E$ , 3—6 f., stones,  $\frac{14}{9}$ , 78.
14. *Idothea bicuspidata* OWEN. Yugor char, 5—8 f., mud & stones,  $\frac{31}{7}$ , 78.
15. *Idothea nodulosa* KR. Yugor char, 5—8 f., clay & stones,  $\frac{31}{7}$ , 78.
16. *Anonyx lagena* KR.  $69^{\circ} 22' N$ ,  $177^{\circ} 28' E$ , 12 f., sand,  $\frac{1-7}{9}$ , 78.
17. *Onesimus litoralis* KR.  $77^{\circ} 36' N$ ,  $103^{\circ} 25' E$ , 5—10 f., clay & stones,  $\frac{20}{4}$ , 78.
18. *Acanthostephia Malmgreni* (GOESL.).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 12 f., stones & sand,  $\frac{25}{8}$ , 79.
19. *Atylus carinatus* (FABR.).  $73^{\circ} 2' N$ ,  $142^{\circ} 36' E$ , 9 f., mud,  $\frac{31}{7}$ , 78.
20. *Atylus Smitti* (GOESL.).  $66^{\circ} 25' N$ ,  $170^{\circ} 35' E$ , 25 f., sand,  $\frac{19}{7}$ , 79.
21. *Gammaracanthus loricatus* (SAB.).  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5—10 f., stones & algæ,  $\frac{15}{4}$ , 78.
22. *Gammarus locusta* (LIN.).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 0—1 f., sand, June 79.
23. *Acanthozone cuspidata* (LEPECH.).  $76^{\circ} 52' N$ ,  $116^{\circ} E$ , 6 f., mud,  $\frac{22}{4}$ , 78.
24. *Tritopsis aculeata* (LEPECH.).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 10—14 f., sand & stones,  $\frac{9}{7}$ , 79.
25. *Stegocephalus ampulla* (PIHPPS).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 10—14 f., sand & stones,  $\frac{9}{7}$ , 79.
26. *Stegocephalus Kessleri* STBRG.  $66^{\circ} 58' N$ ,  $171^{\circ} 35' W$ , 21 f., sand,  $\frac{19}{7}$ , 79.
27. *Aegina echinata* BK.  $75^{\circ} N$ ,  $113^{\circ} 30' E$ , 15 f., stones & clay,  $\frac{24}{4}$ , 78.
28. *Balanus* sp. Bering Island, 5—10 f., stones & algæ,  $\frac{19}{4}$ , 79.
29. *Balanus* sp.  $68^{\circ} 55' N$ ,  $180^{\circ} 35' E$ , 3—6 f., stones,  $\frac{12}{9}$ , 78.

## Pycnogonida.

30. (————).  $76^{\circ} 52' N, 116^{\circ} E, 36 f., clay, \frac{22}{8}, 78.$   
 31. (————).  $75^{\circ} N, 113^{\circ} 30' E, 15 f., clay \& stones, \frac{21}{8}, 78.$   
 32. (————).  $71^{\circ} 3' N, 63^{\circ} 46' E, 70 f., clay, \frac{3}{8}, 78.$   
 33. (————).  $75^{\circ} N, 113^{\circ} 30' E, 15 f., clay \& stones, \frac{21}{8}, 78.$   
 34. (————).  $76^{\circ} 18' N, 92^{\circ} 20' E, 40 f., clay \& stones, \frac{13}{8}, 78.$   
 35. (————).  $71^{\circ} 21' N, 64^{\circ} 53' E, 60 f., mud, \frac{2}{8}, 78.$   
 36. (————).  $77^{\circ} 40' N, 105^{\circ} 10' E, 70 f., clay, \frac{20}{8}, 78.$   
 37. *Colossendeis proboscidea?* (SAB.).  $76^{\circ} 18' N, 92^{\circ} 20' E, 40 f., clay \& stones, \frac{13}{8}, 78.$   
 38. (————).  $76^{\circ} 18' N, 95^{\circ} 30' E, 5-10 f., stones, \frac{13}{8}, 78.$   
 39. (————). Yugor char, 5-8 f., mud & stones,  $\frac{31}{8}, 78.$   
 40. (————).  $76^{\circ} 52' N, 116^{\circ} E, 36 f., clay, \frac{22}{8}, 78.$   
 41. (————).  $77^{\circ} 15' N, 111^{\circ} 45' E, 22 f., clay, \frac{21}{8}, 78.$   
 42. (————).  $76^{\circ} 18' N, 95^{\circ} 30' E, 5-10 f., stones, \frac{13}{8}, 78.$

## Annelida and Gephyrea.

43. (Annelid).  $69^{\circ} 32' N, 177^{\circ} 41' E, 12 f., sand \& clay, \frac{8}{8}, 78.$   
 44. (Annelid). Bering Island, 0-1 f., rock,  $\frac{16}{8}, 79.$   
 45. (Gephyrean).  $76^{\circ} 40' N, 115^{\circ} 30' E, 35 f., clay, \frac{23}{8}, 78.$   
 46. (Gephyrean).  $76^{\circ} 40' N, 115^{\circ} 30' E, 35 f., clay, \frac{23}{8}, 78.$   
 47. (Gephyrean).  $76^{\circ} 40' N, 115^{\circ} 30' E, 35 f., clay, \frac{23}{8}, 78.$   
 48. (Gephyrean).  $75^{\circ} N, 113^{\circ} 30' E, 15 f., stones \& clay, \frac{21}{8}, 78.$

## Bryozoa.

49. (————).  $64^{\circ} 52' N, 172^{\circ} 3' W, 18 f., clay, \frac{22}{8}, 79.$   
 50. *Aleyonidium* sp.  $73^{\circ} 25' N, 144^{\circ} 20' E, 8 f., mud, \frac{31}{8}, 78.$   
 51. *Aleyonidium disciforme* SMITT.  $67^{\circ} 53' N, 176^{\circ} 6' W, 5 f., sand, \frac{24}{8}, 78.$   
 52. *Aleyonidium* sp.  $75^{\circ} N, 113^{\circ} 30' E, 15 f., stones \& clay, \frac{21}{8}, 78.$   
 53. *Aleyonidium* sp.  $65^{\circ} 34' N, 168^{\circ} 37' W, 30 f., sand, \frac{22}{8}, 79.$   
 54. (————).  $73^{\circ} 5' N, 144^{\circ} 20' E, 8 f., mud, \frac{31}{8}, 78.$   
 55. *Flustra* sp.  $75^{\circ} N, 113^{\circ} 30' E, 15 f., stones \& clay, \frac{21}{8}, 78.$   
 56. *Flustra* sp.  $75^{\circ} N, 113^{\circ} 30' E, 15 f., stones \& clay, \frac{21}{8}, 78.$   
 57. *Flustra* sp.  $75^{\circ} N, 113^{\circ} 30' E, 15 f., stones \& clay, \frac{21}{8}, 78.$   
 58. *Flustra* sp.  $65^{\circ} 34' N, 168^{\circ} 37' W, 30 f., sand, \frac{22}{8}, 79.$   
 59. *Flustra* sp.  $65^{\circ} 34' N, 168^{\circ} 37' W, 30 f., sand, \frac{22}{8}, 79.$   
 60. *Flustra* sp.  $72^{\circ} 5' N, 66^{\circ} 10' E, 85 f., mud, \frac{2}{8}, 78.$   
 61. (————). St Lawrence Island, 1-4 f., sand,  $\frac{2}{8}, 79.$   
 62. (————).  $69^{\circ} 32' N, 177^{\circ} 41' E, 12 f., sand \& clay, \frac{8}{8}, 78.$   
 63. (————).  $65^{\circ} 34' N, 168^{\circ} 37' W, 30 f., sand, \frac{22}{8}, 79.$   
 64. (————).  $69^{\circ} 32' N, 177^{\circ} 41' E, 12 f., sand \& clay, \frac{8}{8}, 78.$

## Tunicata.

65. (————).  $64^{\circ} 52' N, 172^{\circ} 3' W, 18$  f., clay,  $\frac{27}{7}$ , 79.  
 66. (————).  $66^{\circ} 10' N, 169^{\circ} 45' W, 24$  f., sand,  $\frac{29}{7}$ , 79.  
 67. (————).  $65^{\circ} 10' N, 169^{\circ} 50' W, 25$  f., mud,  $\frac{27}{7}$ , 79.  
 68. (————).  $68^{\circ} 12' N, 176^{\circ} 32' W, 6$  f., sand,  $\frac{29}{9}$ , 78.  
 69. (————).  $68^{\circ} 55' N, 180^{\circ} 35' E, 3-6$  f., stones,  $\frac{12}{9}$ , 78.  
 70. (————).  $67^{\circ} 53' N, 176^{\circ} 6' W, 5$  f., sand,  $\frac{21}{9}$ , 78.  
 71. (————).  $67^{\circ} 7' N, 173^{\circ} 24' W, 12$  f., sand & stones,  $\frac{16}{7}$ , 79.  
 72. (————).  $74^{\circ} 52' N, 85^{\circ} 8' E, 24$  f., sand,  $\frac{11}{7}$ , 78.  
 73. (————).  $73^{\circ} 30' N, 80^{\circ} 58' E, 4-5$  f., mud,  $\frac{9}{7}$ , 78.  
 74. (————).  $74^{\circ} 52' N, 85^{\circ} 8' E, 24$  f., sand,  $\frac{11}{7}$ , 78.  
 75. (————).  $67^{\circ} 53' N, 176^{\circ} 6' W, 5$  f., sand,  $\frac{21}{9}$ , 78.  
 76. (————).  $69^{\circ} 26' N, 177^{\circ} 30' E, 10$  f., sand & stones,  $\frac{10}{9}$ , 78.  
 77. Chelyosoma sp.  $68^{\circ} 55' N, 180^{\circ} 35' E, 3-6$  f., stones,  $\frac{12}{9}$ , 78.  
 78. Chelyosoma sp.  $67^{\circ} 7' N, 173^{\circ} 24' W, 10-14$  f., sand & stones,  $\frac{9}{7}$ , 79.  
 79. Chelyosoma sp.  $67^{\circ} 7' N, 173^{\circ} 24' W, 15$  f., stones & clay,  $\frac{16}{9}$ , 79.

## Mollusca.

80. a. (Cephalopod).  $75^{\circ} N, 113^{\circ} 30' E, 15$  f., stones & clay,  $\frac{21}{7}$ , 78.  
 80. b. (Cephalopod).  $75^{\circ} N, 113^{\circ} 30' E, 15$  f., stones & clay,  $\frac{21}{7}$ , 78.  
 81. Fusus sp.  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 81. Fusus sp.  $66^{\circ} 58' N, 171^{\circ} 35' W, 21$  f., sand,  $\frac{15}{7}$ , 79.  
 82. Fusus sp. with affixed Hydroids.  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 83. (————). Port Clarence, 4-6 f., stones & sand,  $\frac{22}{7}$ , 79.  
 84. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 85. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 86. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 87. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 88. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 89. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 90. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 91. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 92. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 93. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 78.  
 94. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 95. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 96. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 97. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 98. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 99. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 100. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 101. (————).  $63^{\circ} 12' N, 174^{\circ} 45' W, 45$  f., clay,  $\frac{1}{7}$ , 79.  
 102. (————).  $62^{\circ} 39' N, 177^{\circ} 5' W, 55$  f., clay,  $\frac{5}{7}$ , 79.  
 103. (————). St Lawrence Island, 1-4 f., stones & sand,  $\frac{7}{7}$ , 79.

104. (————).  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 4–5 f., sand,  $\frac{17}{7}$ , 79.  
 105. (————).  $67^{\circ} 53' N$ ,  $176^{\circ} 6' W$ , 4–6 f., sand,  $\frac{25}{7}$ , 78.  
 106. (————). Bering Island, 0–1 f., stones & algae,  $\frac{15}{7}$ , 79.  
 107. *Patella* sp. Bering Island, 0–1 f., stones & algae,  $\frac{19}{2}$ , 79.  
 108. (————). Port Clarence, 4–6 f., stones & sand,  $\frac{22}{7}$ , 79.  
 109. (————). Port Clarence, 4–6 f., stones & sand,  $\frac{22}{7}$ , 79.  
 110. *Purpura* sp. Bering Island, 0–1 f., stones & algae,  $\frac{15}{7}$ , 79.  
 111. *Purpura* sp. & other Gasteropoda. Bering Island, 0–1 f., stones & algae,  $\frac{19}{2}$ , 79.  
 112. *Margarita* sp.  $62^{\circ} 39' N$ ,  $177^{\circ} 5' W$ , 55 f., clay,  $\frac{5}{7}$ , 79.  
 113. *Amauropsis helicoides* & other Gasteropoda.  $66^{\circ} 58' N$ ,  $171^{\circ} 35' W$ , 21 f., sand,  $\frac{19}{7}$ , 79.  
 114. (————).  $67^{\circ} 53' N$ ,  $176^{\circ} 6' W$ , 5 f., sand,  $\frac{21}{7}$ , 78.  
 115. (————). Bering Island, 0–1 f., stones & algae,  $\frac{15}{7}$ , 79.  
 116. *Mytilus* sp. Bering Island, 0–1 f., stones & algae,  $\frac{19}{7}$ , 79.  
 117. *Mytilus* sp. (? *edulis* LIN.). Port Clarence, 4–6 f., stones & sand,  $\frac{22}{7}$ , 79.  
 118. *Mytilus* sp. (? *edulis* LIN.). Port Clarence, 4–6 f., stones & sand,  $\frac{22}{7}$ , 79.  
 119. *Modiolaria* sp.  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5–10 f., stones,  $\frac{11}{7}$ , 78.  
 120. *Modiolaria* sp.  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5–10 f., stones,  $\frac{11}{7}$ , 78.  
 121. 

<i>Axinus flexuosus</i> MONT. <i>Modiolaria</i> sp.	} $70^{\circ} 14' N$ , $170^{\circ} 17' E$ , 12 f., loam & stones, $\frac{9}{7}$ , 78.
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 122. *Pecten grönlandicus* SOW.  $76^{\circ} 52' N$ ,  $116^{\circ} E$ , 36 f., clay,  $\frac{22}{7}$ , 78.  
 123. *Pecten Hoskynsi* FORBES.  $55^{\circ} 24' N$ ,  $165^{\circ} 37' E$ , 75 f., sand,  $\frac{13}{7}$ , 79.  
 124. *Astarte* spp.  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5–10 f., stones,  $\frac{11}{7}$ , 78.  
 125. *Astarte* spp.  $69^{\circ} 26' N$ ,  $177^{\circ} 30' E$ , 10 f., sand & stones,  $\frac{19}{7}$ , 78.  
 126. *Astarte* spp.  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5–10 f., stones & algae,  $\frac{15}{7}$ , 78.  
 127. *Cyprina islandica* LIN.  $66^{\circ} 10' N$ ,  $169^{\circ} 45' W$ , 24 f., sand,  $\frac{21}{7}$ , 79.  
 128. (————). Bering Island, 0–1 f., stones & algae,  $\frac{16}{7}$ , 79.  
 129. *Yoldia arctica* GRAY.  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5–10 f., stones,  $\frac{11}{7}$ , 78.  
 130. *Yoldia arctica* GRAY.  $73^{\circ} 28' N$ ,  $68^{\circ} 32' E$ , 10 f., sand,  $\frac{5}{7}$ , 78.  
 131. *Yoldia arctica* GRAY.  $70^{\circ} 14' N$ ,  $170^{\circ} 17' E$ , 12 f., loam & stones,  $\frac{9}{7}$ , 78.  
 132. *Nucula expansa* REEVE.  $70^{\circ} 14' N$ ,  $170^{\circ} 17' E$ , 12 f., loam & stones,  $\frac{9}{7}$ , 78.  
 133. *Nucula expansa* REEVE.  $70^{\circ} 14' N$ ,  $170^{\circ} 17' E$ , 12 f., loam & stones,  $\frac{9}{7}$ , 78.  
 134. *Arca* sp.  $70^{\circ} 14' N$ ,  $170^{\circ} 17' E$ , 12 f., loam & stones,  $\frac{9}{7}$ , 78.  
 135. *Arca* sp.  $70^{\circ} 14' N$ ,  $170^{\circ} 17' E$ , 12 f., loam & stones,  $\frac{9}{7}$ , 78.  
 136. *Conchifera* spp.  $62^{\circ} 39' N$ ,  $177^{\circ} 5' W$ , 55 f., clay,  $\frac{5}{7}$ , 79.  
 137. *Tellina solidula* PULT.  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 4–5 f., sand,  $\frac{17}{7}$ , 79.  
 138. *Tellina solidula* PULT.  $67^{\circ} 53' N$ ,  $176^{\circ} 6' W$ , 5 f., sand,  $\frac{21}{7}$ , 78.  
 139. *Tellina solidula* PULT.  $68^{\circ} 55' N$ ,  $180^{\circ} 35' E$ , 3–6 f., stones,  $\frac{12}{7}$ , 78.  
 140. *Tellina solidula* PULT.  $67^{\circ} 53' N$ ,  $176^{\circ} 6' W$ , 4–6 f., sand,  $\frac{23}{7}$ , 78.  
 141. *Conchifera* spp.  $73^{\circ} 28' N$ ,  $68^{\circ} 32' E$ , 10 f., sand,  $\frac{5}{7}$ , 78.  
 142. (————).  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5–10 f., stones,  $\frac{11}{7}$ , 78.

## Echinodermata.

143. *Chiridota levis* (FABR.).  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 9–10 f., stones,  $\frac{31}{7}$ , 79.  
 144. (Holothurian). Bering Island, 0–1 f., stones,  $\frac{16}{7}$ , 79.  
 145. *Molpadia borealis* M. SARS.  $76^{\circ} 52' N$ ,  $116^{\circ} E$ , 36 f., mud,  $\frac{22}{7}$ , 78.  
 146. *Psolus Fabricii* DÜB. & KER.  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 10–14 f., sand & stones,  $\frac{4}{7}$ , 79.

147. *Echinus* sp. Bering Island, 0—1 f., stones & algæ,  $16\frac{1}{2}$ ; 79.  
 148. *Echinus* sp.  $65^{\circ} 34' N$ ,  $168^{\circ} 37' W$ , 30 f., sand,  $22\frac{1}{2}$ ; 79.  
 149. (————).  $64^{\circ} 52' N$ ,  $172^{\circ} 3' W$ , 18 f., clay,  $23\frac{1}{2}$ ; 79.  
 150. *Asterias* sp. Yugor char, 5—8 f., mud & stones,  $31\frac{1}{2}$ ; 78.  
 151. *Asterias* sp. Bering Island, 5—10 f., rock & algæ,  $15\frac{1}{2}$ ; 79.  
 152. *Asterias* sp. Bering Island, 5—10 f., rock & algæ,  $17\frac{1}{2}$ ; 79.  
 153. *Asterias* sp.  $67^{\circ} 53' N$ ,  $176^{\circ} 6' W$ , 5 f., sand,  $24\frac{1}{2}$ ; 78.  
 154. *Asterias* Lincki M. & TR.  $76^{\circ} 52' N$ ,  $116^{\circ} E$ , 36 f., mud,  $22\frac{1}{2}$ ; 78.  
 155. *Asterias* Lincki M. & TI.  $76^{\circ} 58' N$ ,  $116^{\circ} E$ , 32 f., mud,  $22\frac{1}{2}$ ; 78.  
 156. *Asterias* sp. Port Clarence, 4—6 f., stones & sand,  $22\frac{1}{2}$ ; 79.  
 157. *Asterias* sp.  $62^{\circ} 39' N$ ,  $177^{\circ} 5' W$ , 55 f., clay,  $5\frac{1}{2}$ ; 79.  
 158. *Asterias camtschatica* BRANDT.  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 9—15 f., sand & stones, June 79.  
 159. *Asterias* sp.  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 9—15 f., sand & stones, 1879.  
 160. *Asterias* sp. Port Clarence, 4—6 f., stones & sand,  $25\frac{1}{2}$ ; 79.  
 161. *Pteraster militaris* MÜLLER.  $76^{\circ} 52' N$ ,  $116^{\circ} E$ , 36 f., clay,  $22\frac{1}{2}$ ; 78.  
 162. *Pteraster* sp.  $62^{\circ} 39' N$ ,  $177^{\circ} 5' W$ , 55 f., clay,  $5\frac{1}{2}$ ; 79.  
 163. *Archaster tenuispinus* D. & K.  $76^{\circ} 18' N$ ,  $92^{\circ} 20' E$ , 40 f., clay & stones,  $13\frac{1}{2}$ ; 78.  
 164. *Ctenodiscus crispatus* (RETZ.).  $72^{\circ} 5' N$ ,  $66^{\circ} 10' E$ , 85 f., mud,  $3\frac{1}{2}$ ; 78.  
 165. *Ctenodiscus crispatus* (RETZ.).  $76^{\circ} 18' N$ ,  $92^{\circ} 20' E$ , 40 f., clay & stones,  $13\frac{1}{2}$ ; 78.  
 166. (————).  $55^{\circ} 20' N$ ,  $165^{\circ} 27' E$ , 65 f., sand,  $11\frac{1}{2}$ ; 79.  
 167. *Ophioglypha nodosa* LTK.  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 12 f., sand,  $23\frac{1}{2}$ ; 79.  
 168. *Ophioglypha nodosa* LTK.  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 10—15 f., sand, 1879.  
 169. *Ophioglypha nodosa* LTK.  $67^{\circ} 53' N$ ,  $176^{\circ} 6' W$ , 5 f., sand,  $21\frac{1}{2}$ ; 78.  
 170. *Ophioglypha ?robusta* AYRES.  $64^{\circ} 52' N$ ,  $172^{\circ} 3' W$ , 18 f., clay,  $25\frac{1}{2}$ ; 79.  
 171. *Ophiacantha bibentata* (RETZ.).  $71^{\circ} 3' N$ ,  $63^{\circ} 46' E$ , 70 f., mud,  $3\frac{1}{2}$ ; 78.  
 172. *Ophiocten sericeum* (FORBES).  $62^{\circ} 39' N$ ,  $177^{\circ} 5' W$ , 55 f., clay,  $5\frac{1}{2}$ ; 79.  
 173. *Ophiocten sericeum* (FORBES).  $62^{\circ} 39' N$ ,  $177^{\circ} 5' W$ , 55 f., clay,  $5\frac{1}{2}$ ; 79.  
 174. *Astronyx Loveni* M. & TR.  $55^{\circ} 24' N$ ,  $165^{\circ} 37' E$ , 75 f., sand,  $13\frac{1}{2}$ ; 79.  
 175. *Astrophyton eucnemis* M. & TR.  $55^{\circ} 24' N$ ,  $165^{\circ} 37' E$ , 75 f., sand,  $13\frac{1}{2}$ ; 79.  
 176. *Astrophyton eucnemis* M. & TR.  $76^{\circ} 18' N$ ,  $92^{\circ} 20' E$ , 40 f., clay & stones,  $13\frac{1}{2}$ ; 78.  
 177. *Astrophyton eucnemis* M. & TR.  $76^{\circ} 52' N$ ,  $116^{\circ} E$ , 36 f., clay,  $22\frac{1}{2}$ ; 78.  
 178. *Antedon Eschrichti* MÜLLER.  $76^{\circ} 18' N$ ,  $92^{\circ} 20' E$ , 40 f., clay & stones,  $13\frac{1}{2}$ ; 78.

## Anthozoa.

179. *Alcyonium* sp.  $76^{\circ} 32' N$ ,  $116^{\circ} E$ , 36 f., mud,  $22\frac{1}{2}$ ; 78.  
 180. *Alcyonium* sp.  $69^{\circ} 32' N$ ,  $177^{\circ} 41' E$ , 12 f., mud & stones,  $7\frac{1}{2}$ ; 78.  
 181. *Alcyonium* sp.  $73^{\circ} 53' N$ ,  $138^{\circ} E$ , 12 f., clay,  $22\frac{1}{2}$ ; 78.  
 182. *Alcyonium* sp.  $73^{\circ} 53' N$ ,  $138^{\circ} E$ , 12 f., clay,  $22\frac{1}{2}$ ; 78.  
 183. *Alcyonium* sp.  $65^{\circ} 34' N$ ,  $168^{\circ} 37' W$ , 30 f., sand,  $22\frac{1}{2}$ ; 79.  
 184. *Alcyonium* sp. Port Clarence, 4—6 f., stones & sand,  $22\frac{1}{2}$ ; 79.  
 185. (Actinian).  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , 9—15 f., mud & stones, 1879.  
 186. (Actinian).  $69^{\circ} 32' N$ ,  $177^{\circ} 41' E$ , 12 f., mud & stones,  $7\frac{1}{2}$ ; 78.  
 187. (Actinian).  $73^{\circ} 53' N$ ,  $138^{\circ} E$ , 12 f., clay,  $22\frac{1}{2}$ ; 78.  
 188. (Actinian).  $73^{\circ} 53' N$ ,  $138^{\circ} E$ , 12 f., clay,  $22\frac{1}{2}$ ; 78.  
 189. (Actinian).  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 3—10 f., stones,  $15\frac{1}{2}$ ; 78.  
 190. (Actinian).  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 3—10 f., stones,  $15\frac{1}{2}$ ; 78.  
 191. (Actinian).  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 3—10 f., stones,  $15\frac{1}{2}$ ; 78.

## Calycozoa.

192. *Lucernaria ? convolvulus* JOHNST.  $76^{\circ} 40' N$ ,  $115^{\circ} 30' E$ , 35 f., clay, <sup>28</sup>/<sub>78</sub>.

## Hydrozoa.

193. (Acaleph).  $67^{\circ} 7' N$ ,  $173^{\circ} 24' W$ , surface, May 1879.  
 194. (Hydroid). St Lawrence Island, 0—1 f., stones & algae, <sup>27</sup>/<sub>79</sub>.  
 195. *Sertularia* sp. Port Clarence, 4—6 f., stones & algae, <sup>22</sup>/<sub>79</sub>.  
 196. (Hydroid).  $64^{\circ} 52' N$ ,  $172^{\circ} 3' W$ , 18 f., clay, <sup>27</sup>/<sub>79</sub>.  
 197. (Hydroid).  $55^{\circ} 24' N$ ,  $165^{\circ} 37' E$ , 75 f., mud, <sup>13</sup>/<sub>79</sub>.  
 198. (Hydroid).  $73^{\circ} 5' N$ ,  $144^{\circ} 20' E$ , 8 f., mud, <sup>31</sup>/<sub>78</sub>.  
 199. (Hydroid).  $67^{\circ} 53' N$ ,  $176^{\circ} 6' W$ , 5 f., sand, <sup>24</sup>/<sub>78</sub>.

## Spongozoa.

200. (————).  $73^{\circ} 2' N$ ,  $142^{\circ} 36' E$ , 9 f., mud, <sup>31</sup>/<sub>78</sub>.  
 201. (————).  $68^{\circ} 55' N$ ,  $180^{\circ} 35' E$ , 3—6 f., stones, <sup>12</sup>/<sub>78</sub>.  
 202. (————).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 15 f., stones & clay, <sup>16</sup>/<sub>78</sub>.  
 203. (————). Bering Sea, several localities, 1879.  
 204. (————).  $67^{\circ} 5' N$ ,  $173^{\circ} 24' W$ , 15 f., stones & clay, <sup>16</sup>/<sub>78</sub>.  
 205. (————).  $73^{\circ} 5' N$ ,  $144^{\circ} 20' E$ , 8 f., clay, <sup>31</sup>/<sub>78</sub>.  
 206. (————).  $76^{\circ} 18' N$ ,  $95^{\circ} 30' E$ , 5—10 f., stones & algae, <sup>15</sup>/<sub>78</sub>.  
 207. (————).  $55^{\circ} 24' N$ ,  $165^{\circ} 37' E$ , 75 f., sand, <sup>13</sup>/<sub>79</sub>.

B. SKELETON OF *RHYTINA STELLERI* FOUND ON THE SHORE OF  
BERING ISLAND.

C. ALGÆ FROM BERING ISLAND AS SAMPLES OF THE FOOD OF  
*RHYTINA STELLERI*.



D. FISHING GEARS AND IMPLEMENTS FOR CATCHING SEALS AND BIRDS,  
FROM THE *CHUKCHES* AND *ESKIMO* IN THE N. E. OF ASIA  
AND N. W. OF AMERICA.

(ARRANGED AND CATALOGUED BY K. PÄLMAN).

1	ICE-SIEVE of bone and strips of whalebone, the shaft of wood, used to keep the surface of the water clear of pieces of ice.	Chukches.	—	Norden- skiöld: Voyage of the Vega. I, 493 <sup>*</sup> .
2	FISHING-ROD, short, of wood with line of twine made of whalebone, sinker and hook of ivory.	—	—	Voy. of Vega II, 110.
3	FISHING-ROD, short, of wood and bone with line made of twine of whalebone, sinker of ivory, and hook of ivory and iron wire.	—	—	—
4	FISHING-ROD, short, of wood with line of seal skin, sinker of bone and three hooks of bone and copper wire affixed to the sinker by tufts of twine made of whale bone ornamented with white beads.	—	Pitekaj.	—
5	FISHING-ROD, short, of wood with line of twisted sinews. sinker and hook of ivory.	—	—	—
6	FISHING-ROD, very short, of wood with line of seal skin and twine made of whalebone, sinker and hook of ivory.	—	—	—
7	FISHING-ROD, short, with line of seal skin, sinker of ivory and hook of ivory and copper wire.	—	Yinretlen.	—
8	SINKER of ivory with one hook of ivory and two of bone and copper wire.	—	Pitekaj.	—
9	SINKER of ivory with two hooks of ivory and iron wire, each tuft provided with a red bead.	—	—	—
10	LEISTER of bone.	—	—	Voy. of Vega II, 105 f. 6.
11	FISHING-NET made of twisted sinews, with floats of wood; used for catching salmon.	—	—	Voy. of Vega II, 109.
12	NET made of strong seal skin thongs for catching seals. The nets are set in summer among the ground-ices along the shore. The animal gets entangled in the net and is suffocated, as it can no longer come to the surface to breathe. In winter the seal is taken with nets in leads among the ice.	—	—	Voy. of Vega II, 108; 109.
13	ICE-SCRAPER of wood and four seal claws, with bone amulet affixed; intended for decoying the seal from its hole.	—	—	Voy. of Vega II, 117 f. 3.
14	ICE-SCRAPER of wood and two seal claws used in the same manner as no. 13.	—	Pitekaj.	—

\* The Voyage of the Vega round Asia and Europe, by A. E. Nordenskiöld, translated by Alexander Leslie. In two Volumes. London, Macmillan and Co. 1881.

15	HARPOON, the shaft made of wood and ivory, the head of bone armed with a thin, flat plate of iron; used to kill the walrus and the largest kind of seals.	Chukches.	—	Voy. of Vega II, 105 f. 1; 109.
16, 17	Two OAKS, not painted.	,	—	Voy. of Vega II, 93.
18	Seal-gut <i>great coat</i> .	,	Pitlekaj.	Voy. of Vega I, 432.
19, 20	BIRD-DARTS of wood with point and barbed projections of bone or ivory, resembling the darts used by the Eskimo.	,	Irkaipij.	Voy. of Vega II, 105 f. 5; 109.
21	Wooden <i>handle</i> for throwing the bird-darts no. 19, 20.	,		
22	DART of wood.	,	—	Voy. of Vega II, 105 f. 4.
23	DART of wood with ivory point.	,	—	
24	DART of wood with carved ivory point.	,	—	
25	WHIP SLING with shaft of wood and cord of leather, for casting the darts no. 22, 23, 24.	,	—	
26	Seventeen ARROWS with ivory, bone or iron-points; feathers are generally wanting; the shaft is a clumsily worked piece of wood.	,	—	Voy. of Vega II, 107.
27	Seventeen ARROWS with ivory, bone, wooden or iron-points, feathers generally wanting, shaft of wood.	Yinretlen.	—	
28, 29 30, 31	Four QUIVERS of red leather with a beautiful embroidery of white reindeer hair and white strips of skin. No. 28 ornamented with four tails of ground-squirrel (SPERMOPHILUS).	Pitlekaj.		Voy. of Vega II, 106; 135.
32, 33	Two BOWS consisting of a slightly bent elastic piece of wood, with the ends drawn together by a skin thong. The old Chukches used the bow for martial purposes. Now this weapon is employed only for hunting, but it appears as if even for this purpose it would soon go out of use.			Voy. of Vega II, 107; 108
34	BOW, old, larger than no. 32, 33 carefully made of a sharply bent elastic piece of wood, covered with birch-bark, and strengthened by an artistic plaiting of sinews on the outer side. String of a skin thong.		—	Voy. of Vega II, 108.
35	BOW, old, in the form resembling n. 33 but consisting of three pieces of wood not surrounded by birch-bark and strengthened by only a small number of plaited sinews on the outer side. String of a skin thong.	Pitlekaj.		
36	CROSSEBOW of wood with a string of seal skin.		—	
37, 38	Two BIRD-SLINGS consisting of a number of round balls of ivory or bone fastened to strings of twisted sinews or to leather thongs which are knotted together. Some feathers are fixed to the knot in order to increase the resistance of the air to this part of the sling. When the sling is thrown the balls are thereby scattered in all directions, and the probability of the hitting becomes greater. Every man and boy in summer carries with him such a sling, often bound round his head, and is immediately prepared to cast it at flocks of birds flying past.		—	Voy. of Vega II, 100; 105 f. 3.

39	FISHING-ROD, short, of wood and ivory with line of whalebone, sinker of ivory and hooks in the form of beetles made of stone of different colours, ivory, horn, glass beads, horny red plates taken from the beak a species of seabird (PHALERIS CRISTATELLA) and iron wire. The different materials are bound together by twine made of whalebone.	Eskimo.	Port Clarence.	Voy. of Vega II, 234.
40	FISHING-ROD, short, of wood, with line of whalebone and one hook in the form of beetle made of stone, ivory, blue beads, red horny plates taken from the beak of PHALERIS CRISTATELLA and iron wire.	"	"	"
41	FISHING-ROD, short, of wood, with line made of whalebone; sinker and hook of ivory.	"	"	—
42	FISHING-ROD, short, of wood with line of whalebone with red horny plates from the beak of PHALERIS CRISTATELLA, the hook of bone with iron wire.	"	"	Voy. of Vega II, 234.
43	SINKER of stone and ivory with fish-hook of bone, a blue bead, horny red plates from the beak of PHALERIS CRISTATELLA and copper wire.	"	"	"
44	SINKER of stone and ivory with horny red plates from the beak of PHALERIS CRISTATELLA and one fish-hook in the form of beetle made of ivory, blue beads, red plates from the beak of PHALERIS CRISTATELLA and copper wire.	"	"	"
45	SINKER of stone with fish-hook in the form of beetle made of ivory, blue beads, horny red plates from the beak of PHALERIS CRISTATELLA and iron wire.	"	"	"
46	SINKER of ivory and stone with two fish-hooks in the form of beetles made of stone, ivory, blue beads, horny red plates from the beak of PHALERIS CRISTATELLA and iron wire.	"	"	"
47	SINKER of stone with one fish-hook in the form of beetle made of stone, bone, a blue bead, horny red plates taken from the beak of PHALERIS CRISTATELLA and iron wire.	"	"	"
48	SINKER of ivory and stone with two fish-hooks made of ivory, blue beads, horny red plates from the beak of PHALERIS CRISTATELLA and copper wire.	"	"	"
49	SINKER of stone with two fish-hooks in the form of beetles made of stone, bone, blue beads, horny red plates from the beak of PHALERIS CRISTATELLA and iron wire.	"	"	"
50	SINKER of ivory with three fish-hooks of ivory and one hook of bird skin and copper wire.	"	"	—
51	FISH-HOOKS of wood with ivory points.	"	"	Voy. of Vega II, 234.
52	FISH-HOOKS resembling no. 51.	"	"	"
53	LEISTER of bone and wood.	"	—	Voy. of Vega II, 229.
54	FISHING-NET of thongs of seal skin.	"	Port Clarence.	—

55	FISHING-NET of thongs of sealskin with sinkers of bone or stone and floats of bladders.	Eskimo.	Port Clarence.	
56	FISHING-NET of twisted sinews with sinkers of bone and floats of bladders.			
57	HARPOON-POINT of bone and a species of nephrite, which is very like the well known nephrite from High Asia and probably comes originally from that locality.	"		Voy. of Vega II, 229 f. 3; 236; 238.
58	HARPOON, wooden shaft, the foremost end of which made of ivory, the hindmost provided with an iron point; point of bone armed with a thin flat piece of iron; line of a skin thong with hook of ivory.			—
59, 60	Two HARPOONS, the shaft of wood, bone and ivory, the head armed with a thin flat plate of iron.			—
61	HARPOON-FLOAT of seal skin ornamented with a tail made of the hairs of the Northamerican porcupine, ERETHIZON DORSATUM, and provided with an amulet (a human face carved in wood).			—
62	Flint DART POINT.			Voy. of Vega II, 220.
63, 64	Two WHALE-HARPOONS of wood with flint point.			
65	OAR, the blade partly painted black and ornamented with two eyes.			Voy. of Vega II, 241 f. 4.
66	OAR, part of the blade painted red and black.			—
67	OAR, the upper part of the handle painted red, part of the blade painted black and red.			—
68	OAR, the blade partly painted black and ornamented with eyes, eye-brows, nose and mouth.			Voy. of Vega II, 241 f. 4.
69	BOAT-HOOK, the shaft of wood, the hook of carved ivory.			Voy. of Vega II, 241.
70	BOAT-HOOK resembling no. 69 but less carved.			—
71	Seal-gut <i>great coat</i> with borders of seal and bird-skin. The ornaments of small feather-tufts and horny red plates from the beak of PHALARIS CRISTATELLA.		Lawrence.	—
72, 73	Two BIRD-DARTS with shaft of wood, long barbed points and projections of ivory.		Port Clarence.	Voy. of Vega II, 220.
74, 75	Two wooden HANDLES for throwing the bird-darts no. 72 and 73; no. 75 ornamented with five balls of blue glass.			
76	Seventeen wooden ARROWS or HARPOON-ENDS with points of iron, stone or glass.			
77	QUIVER of sealskin containing five arrows.			
78	QUIVER of sealskin containing three arrows.			
79	BOW, short, of a slightly bent piece of wood, strengthened by skin thongs; the string of twisted skin thongs.			—

















