

DIATOMACEÆ.—The following species were observed by Mr. Rattray :—

STATION 157.

<i>Navicula subtilis</i> (Gregory) [= <i>Pinnularia criophila</i> , Castracane].	<i>Chætoceros atlanticum</i> , Cleve.
<i>Pleurosigma antarcticum</i> , Grunow.	" " var. <i>attenuata</i> , Cleve and Grunow.
<i>Amphiprora antarctica</i> , Grunow.	" <i>antarcticum</i> , Grunow.
<i>Thalassiothrix longissima</i> , Grunow, var. <i>antarctica</i> , Cleve and Grunow [= <i>Synedra thalassiothrix</i> , Cleve in parte].	" <i>dispar</i> , Castracane.
<i>Trachysphenia australis</i> , Petit, var. <i>antarctica</i> (Schwarz) [= <i>Fragilaria antarctica</i> , Castracane].	" <i>sigmoidea</i> , Rattray, MS.
<i>Fragilaria</i> (?) an <i>Terebraria</i> (?) sp., Castracane.	<i>Corethron hispidum</i> , Castracane.
<i>Rhizosolenia inermis</i> , Castracane.	" <i>splendens</i> , Rattray, MS.
" <i>setigera</i> , Brightwell.	" <i>murrayanum</i> , Castracane.
" <i>styliformis</i> , Brightwell.	" <i>criophilum</i> , Castracane.
<i>Dactyliosolen antarcticus</i> , Castracane.	" " var. <i>tumescens</i> , Rattray, MS.
<i>Chætoceros decipiens</i> , Cleve.	<i>Hemiaulus antarcticus</i> , Ehrenberg [= <i>Eucampia balaustium</i> , Castracane].
" <i>remotum</i> , Cleve and Grunow [= <i>Chætoceros janischianum</i> , and var. <i>lata</i> , Castracane].	<i>Actinocyclus oliveranus</i> , O'Meara, and forma <i>minor</i> .
" " var. <i>robusta</i> , Rattray, MS.	<i>Coscinodiscus lunæ</i> , Ehrenberg [= <i>Coscinodiscus cycloteres</i> , Castracane].
" " var. <i>biaurita</i> , Rattray, MS.	" <i>excentricus</i> , Ehrenberg.
" <i>boreale</i> , Bailey, var. <i>brightwellii</i> , Cleve [= <i>Chætoceros criophilum</i> , Castracane].	" <i>lineatus</i> , Ehrenberg.
	" <i>lentiginosus</i> , Janisch.
	" <i>tumidus</i> , Janisch.

In addition to the foregoing, the following species were observed by Mr. Comber :—

<i>Navicula aspera</i> , Ehrenberg.	<i>Coscinodiscus convexus</i> , A. Schmidt.
<i>Synedra lanceolata</i> , Castracane.	" <i>margaritaceus</i> , Castracane.
<i>Nitzschia scalaris</i> , W. Smith.	<i>Melosira</i> sp. (?)
<i>Coscinodiscus anguste-lineatus</i> , A. Schmidt.	<i>Asteromphalus brookei</i> , Bailey.
" <i>kutzingii</i> , A. Schmidt, var. <i>glacialis</i> , Grunow.	" <i>hookerii</i> , Ehrenberg.
" <i>denarius</i> , A. Schmidt.	<i>Rhizosolenia indica</i> , Peragallo.
" <i>subtilis</i> , Ehrenberg.	<i>Chætoceros tetrachæta</i> , Ehrenberg (?).
" <i>oculus-iridis</i> , Ehrenberg.	<i>Bacteriastrum varians</i> , Lauder.
" <i>africanus</i> , Janisch, var. <i>wallichiana</i> , Grunow.	<i>Corethron pennatum</i> [= <i>Actiniscus</i> , Grunow].

Among the masses of Diatoms only comparatively few animals were observed, viz., Cypridinidæ, Copepods, *Hyperia*, *Primno*, and a few small shells of *Spirialis* [= *Limacina*].

Station 158 (Sounding 262), Termination Land to Melbourne (see Chart 24, and Diagrams 9 and 10). STATION 158.

March 7, 1874 ; lat. 50° 1' S., long. 123° 4' E.

Temperature of air at noon, 48°·5 ; mean for the day, 47°·4.