

- \**Navicula subtilis*, Greg.  
*Thalassiothrix longissima*, var. *antarctica*,  
 Cl. et Grun.
- \**Synedra lanceolata*, Cstr.  
 „ *nitzschoides*, Grun.  
 „ *filiformis*, Grun.  
*Thalassionema nitzschoides*, var. *lanceolata*, Grun.
- \**Trachysphenia australis*, Petit, var. *antarctica*, Schwarz.
- \**Diatoma rhombicum*, O'Me., var. *oceanica*,  
 nov.  
*Nitzschia constricta*, var. *antarctica*, nov.
- †*Rhizosolenia styliformis*, Brightw.  
 „ *furcata*, n.sp.
- \**Corethron criophilum*, Cstr.  
*Hemiaulus antarcticus*, Ehrenb. = *Eucampia balaustium*, Cstr., and var. *minor*.  
*Asteromphalus hookerii* (Ehrenb.), Ralfs.  
 „ forma *buchii*, Ehrenb.  
 „ forma *humboldtii*, Ehrenb.  
 „ forma *cuvierii*, Ehrenb.  
 „ forma *denarius*, Janisch.  
 „ *darwinii*, Ehrenb.  
*Hyalodiscus radiatus*, O'Me., var. *arctica*,  
 Grun.
- \**Actinocyclus oliveranus*, O'Me.  
*Coscinodiscus margaritaceus*, Cstr.
- \* „ *lunæ*, Ehrenb.  
 „ *excentricus*, Ehrenb.
- \* Indicates the peculiarly Antarctic species.
- Coscinodiscus atlanticus*, Cstr., and var.  
 „ *lineatus*, Ehrenb.  
 „ *lentiginosus*, Janisch.  
 „ „ var. *maculata*,  
 Grun.  
*Coscinodiscus africanus*, var. *wallichianus*,  
 Grun.  
*Coscinodiscus subtilis*, Ehrenb.  
 † „ „ var. *glacialis*, Grun.  
 „ *tumidus*, Janisch.  
 „ „ var. *fasciculata*,  
 nov.  
*Coscinodiscus radiatus*, Ehrenb.  
 † „ *decrescens*, var. *polaris*, Grun.  
 † *Coscinodiscus decrescens*, var. *repleta*, Grun.  
 „ *fasciculatus*, A.S.  
 „ *griseus*, var. *gallopagensis*,  
 Grun. (?)  
*Coscinodiscus curvulatus*, *maculata*, nov.  
 „ *tuberculatus*, Grev., var.  
*excentrica*, nov.  
*Coscinodiscus tuberculatus*, var. *antarctica*,  
 nov.  
*Coscinodiscus elegans*, Grev.  
 „ *robustus*, Grev.  
 „ „ var. *minor*.  
 „ *antarcticus*, Cstr. (nov.  
 Grun.).  
*Coscinodiscus denarius*, A.S.  
 „ *marginatus*, Ehrenb.
- † Species also recorded from the Arctic zone.

As all the Diatom deposits, so far as we know, are confined to the Southern or Antarctic Oceans, or to the northern parts of the North Pacific, none of the species of Foraminifera, Radiolaria, or Diatoms characteristic of the tropical regions are found in them; Coccoliths and Rhabdoliths are absent, except in a few of the more northerly samples in the southern hemisphere.

The carbonate of lime varies from 2.00 per cent. in 1975 fathoms to 36.34 per cent. in 600 fathoms, the average being 22.96 per cent. By far the larger part of this