vegetation, they form a rémarkably calcareous soil (pp. 226, 574). 301

5. Diatom-Earth or Ooze.-As the minute siliceous plants called diatoms occur both in fresh and salt water, the deposit formed from their congregated remains is found both on the sites of lakes and on the sea-floor. The most extensive terrestrial accumulations of this nature now in course of formation are probably those of the warm water marshes supplied by the hot springs of the Yellowstone Park, where the oozy deposits and drier meadows



Fig. 181.—Diatom ooze dredged up by the "Challenger" Expedition from a depth of 1950 fathoms in the Antarctic Ocean. Lat. 53° 85' S.; Long. 108° 38' E. Magnified 300 diameters.

cover many square miles, sometimes to a depth of six feet.352 "Infusorial" earth and "tripoli powder" consist mainly of the frustules and fragmentary débris of diatoms, which have accumulated on the bottoms of lacustrine areas. the purer varieties containing 90 to 97 per cent of silica, They form beds sometimes upward of 30 feet thick. (Richmond, Virginia; Bilin, Bohemin; Aberdeenshire.) Diatomaceæ occur in abundance, both in the surfacewaters of the ocean and on the bottom. In the Arctic

<sup>&</sup>lt;sup>851</sup> See Nelson, Q. J. Geol. Soc. ix. p. 200 et seq.; J. J. Rein, Bericht Senckenb. Naturf. Ges. 1872-73, p. 139; Wyville Thomson's "Atlantic," i. p. 290. (See ante, pp. 226, 573.)
<sup>352</sup> W. H. Weed, Botanical Gazette, xiv. 1889, p. 117.