

premature to generalize as to the actual nature of the deposits now in course of formation in the depths of the Atlantic, before a careful examination had been made of a series of such specimens from different localities. The soluble silica is principally from silicious organisms.

As regards the probable origin of the pebbles and gravel found in the various dredgings, it will be at once seen, from the description, that they consist principally of fragments of volcanic rocks and crystalline schists. The former of these have in all probability come from Iceland or Jan Mayen; whilst the latter, associated as they are with small fragments of grey and somewhat altered calcareous rock, would appear to have proceeded from the north-west coast of Ireland, where the rocks are quite identical in mineral character. The north of Scotland and its islands also contain similar rocks; but, without being at all positive on this head, I am rather inclined to the opinion that they have been derived from Ireland, and not necessarily connected with any glacial phenomena, believing that their presence may be accounted for by the ordinary action of marine currents.

PEBBLES FROM 1,215 FATHOMS (STATION 28).

The stones were all subangular, the edges being all more or less worn or altogether rounded off. The specimens were thirty-eight in number, and upon examination were found to consist of—

- 5 Hornblende schist; the largest of these (which also was the largest in size of the entire series) weighed 421 grains ($\frac{7}{8}$ of an ounce), was extremely compact, and was composed of black hornblende, dirty-coloured quartz, and some garnet.
- 2 Mica schist; quartz with mica, the largest weighing 20 grains.
- 5 Grey pretty compact limestone, the largest being 7 grains in weight.
- 2 Fragments (showing the cleavage faces rounded off on edges) of orthoclase (potash felspar), evidently derived