

from granite; the largest of the two fragments weighed 15 grains.

- 5 Quartz, milky in colour or colourless; the largest of these weighed $90\frac{3}{4}$ grains, and showed evidence of having been derived from the quartz-veins so common in clay-slate.
- 19 Fragments of true volcanic lava, most of which were very — light and scoriaceous (vesicular), although some small
38 ones were compact and crystalline; and in these the minerals augite, olivine, and glassy felspar (Sanadine) could be distinctly recognized. Among these were fragments of trachytic, trachydoleritic, and pyroxenic (basaltic) lavas, quite similar to those of Iceland or Jan Mayen of the present period, from which they had probably been derived.

GRAVEL FROM 1,443 FATHOMS (STATION 20).

This sample of gravel consisted of 718 subangular fragments, in general not above from $\frac{1}{4}$ to $\frac{1}{2}$ grain in weight, with occasionally some of a little greater size; but the most considerable of all (a fragment of mica schist) only weighed 3 grains. They consisted of:—

- 3 Fragments of orthoclase felspar.
- 4 Bituminous or carbonaceous shale (? if not accidental).
- 5 Fragments of shell (undistinguishable species).
- 4 Granite, containing quartz, orthoclase, and muscovite.
- 15 Grey compact limestone.
- 69 Quartzose mica schist.
- 317 Hornblende schist; sometimes containing garnets.
- 273 Quartzite fragments, with a very few fragments of clear quartz. The majority of the pieces being of a dirty colour, often cemented together, were evidently the *débris* of quartzite rocks or beds of indurated sandstone, and not from granite.
- 28 Black compact rock, containing augite, most probably a — volcanic basalt.
- 718.