

with any known rock of this type in the North Atlantic basin. The lava-form and intrusive types of the basic materials have marked affinities with the tertiary volcanic rocks of the Inner Hebrides and the north of Ireland.

Of special interest is the evidence pointing to the conclusion that the rock fragments from this station must have been transported by floating ice during some phase of the glacial period. More than half of the specimens are glaciated, the larger part of the remainder are angular, and a number are well rounded. A typical example of one of the glaciated stones is shown in Fig. 145, which is a portion of a larger boulder broken off before being embedded. Irregular striæ appear on this specimen, but on one surface it is faceted and the striæ thereon are more or less parallel. It is noteworthy that the glaciated and ice-



FIG. 147.—SURFACE OF SPECIMEN NO. 4 IN FIG. 146, ENLARGED TO SHOW "CHATTER-MARKS."

moulded specimens include nearly every rock type represented in the collection from this particular station. The stones resemble those found in boulder clay or "moraine profonde," indeed in some instances the clayey matrix of this deposit has been cemented to some of them by calcareous matter.

Some of the rounded specimens, consisting of Silurian greywackes, carboniferous limestone, chalk-flint, dolomite, and vein-quartz, are shown in Fig. 146. These must have been rounded before they reached the position from which they were dredged.

An enlarged part of specimen No. 4 in Fig. 146 (chalk-flint) is represented in Fig. 147, to illustrate the bulbs of percussion or "chatter-marks" which it displays. Such evidence indicates that the stones had originally been dashed against each other by torrent or wave action.

A careful examination of the specimens points to the conclusion that all had been partially embedded in a *Globigerina* ooze on the sea-floor,