manganese on the surface, to which specimens of *Scalpellum* were attached. The fragments are whitish or yellowish, ellipsoidal, more or less flattened, and divide into parallel layers. Some of the layers contain larger fragments of minerals than others, but generally the layers are very fine grained. The mass of the concretions has a soft and earthy appearance, can be scratched with the nail, and easily broken; the fragments are more or less argillaceous, and are traversed in many directions by perforations of Annelids or Sponges. The surfaces are also frequently furrowed by striæ and worm tracks. Examined by the microscope with transmitted light, they are seen to consist largely of a great many volcanic minerals cemented by argillaceous matter; among the minerals are plagioclases, fragments of hornblende, magnetic iron, and rarely some glauconite-like grains.

In addition to these concretions were one or two small rounded manganese nodules, with concentric layers, and a pale earthy nucleus. These were not preserved in the collection brought home.

Station 71, 1675 fathoms.—In the trawl were several aggregations of the ooze, 3 to 4 cm. in diameter, traversed by worm-tubes, which were lined with a deposit of manganese. There was also a fragment of compact volcanic rock, more or less rounded, about 7 cm. in longest diameter; it had a slight deposit of manganese over the whole surface, to which a *Serpula*-tube was attached.

Station 85, 1125 fathoms.—There were several large fragments of a dead Gorgonoid Coral, coated with manganese, similar in every respect to that described from Station 3, also some fragments of volcanic rock, about 1 cm. in diameter, coated with depositions of manganese.

Station 87, 1675 fathoms.—Several pieces of a Gorgonoid Coral, similar to the above, were taken in the dredge and sounding tube.

Station 131, 2275 fathoms.—The trawl brought up the earbone of a *Ziphius*,[1] to which a polyp was attached, and a piece of pumice, 3 to 4 cm. in diameter, with an egg-capsule of a Mollusc attached to it. Both the earbone and pumice were coated with manganese. The pumice is rounded, white coloured, very fibrous, and contains magnetite and small crystals of hornblende.

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Station 143, 1900 fathoms.—The phosphatic nodules from this station had a slight coating of manganese (see description of phosphatic concretions).

Station 147, 1600 fathoms.—Several basaltic lapilli, covered and cemented by manganese, were obtained in the trawl.

[1] See Zool. Chall. Exp., part iv. p. 39, pl. ii. fig. 10.