

the other fish bones are largely made up of phosphate of lime associated with much albuminoid matter. The otoliths of a cod gave on analysis :¹—

Lime (CaO),	53.08
Carbonic Acid (CO ₂),	43.85
Magnesia (MgO),	2.71
Phosphoric Acid (P ₂ O ₅),	trace
Alumina (Al ₂ O ₃),	0.22
Silica (SiO ₂),	0.33
	100.19

The teeth of fish are rather rare in terrigenous deposits and tolerably abundant in some pelagic deposits; in certain regions of the Central Pacific and in the other oceans in great depths far removed from land, the teeth of sharks were most exceptionally abundant in many of the deeper trawlings and dredgings. These sharks' teeth, it will be observed, are from red clay areas as a rule, it being the exception to find any of the large specimens in the calcareous oozes or terrigenous deposits. In general all that remains is the hard dentine or enamel, the whole of the vaso-dentine having disappeared. In this respect the condition of these teeth differs from that of those belonging to the same species from the Tertiary deposits in Malta, Carolina, Australia, and from one tooth dredged by Agassiz from the existing sea-bed in relatively shallow water off the coast of North America ;² in all these the vaso-dentine and the base are almost always preserved. In the following list details are given as to the number, size, and condition of the teeth procured by the Challenger Expedition in the trawlings and dredgings in the order of the stations :³—

ATLANTIC OCEAN.

Station 16, 2435 fathoms.—Two *Oxyrhina* teeth, the larger 1½ inches (38 mm.) in length; one *Lamna*, about an inch (25.4 mm.) in length.

Station 106, 1850 fathoms.—One *Lamna* tooth, 1½ inches (38 mm.) in length.

SOUTHERN INDIAN OCEAN.

Station 160, 2600 fathoms.—Two *Carcharodon* teeth, one broken, over 1½ inches (38 mm.) in length, and three small *Lamna* teeth.

PACIFIC OCEAN.

Station 237, 1875 fathoms.—Two vertebræ and several large otoliths of fish.

Station 241, 2300 fathoms.—One small *Lamna* tooth, a little over half an inch (12.7 mm.) in length.

¹ Made by J. G. Ross.

² See Agassiz, *Three Cruises of the "Blake,"* vol. i. p. 276, 1888.

³ Dr. Albert Günther of the British Museum examined these teeth and was satisfied that the determinations were, as far as possible, correct.