Residue.				Additional Observations.	
Per cent.	Siliceous Organisms.	Minerals.	Fine Washings.		
37·59	(10·00 %), a few Radiolaria, principally red coloured casts of pelagic Foraminifera, Lituolidæ, a few Diatoms.	(10·00 %), m. di. 0·10 mm., angular; felspar, augite, olivine, many fragments of pumice, lapilli, volcanic glass transformed into palagonite, manganese grains.	(17·59 %), minute pumice and other mineral fragments, amorphous matter, and remains of siliceous organisms.	The Foraminifera of this sounding are worthy of notice, as while some of them are quite white and rose coloured, others are deep brown or black and have in some cases a deposit of manganese on their surfaces. Very many of them are filled and covered with a red siliceous matter, which remains as external and internal casts on removal of the carbonate of lime. On breaking one of these shells three distinct zones are observed: internal cast, shell, and external cast.	Fiji Islands to New Hebrides—*continued.*
86·86	(3·00 %), Sponge spicules, a few glauconitic-like casts of calcareous organisms.	(65·00 %), m. di. 0·30 mm., angular; black vesicular glassy fragments, pumice, plagioclase, augite, magnetite, more or less altered lapilli.	(18·86 %), amorphous ferruginous matter, very many mineral particles, and a few fragments of siliceous spicules.	Amongst the mineral particles are fragments of rocks and pumice from 0·5 to 1 cm. in diameter. Of the mineral particles many are often surrounded with volcanic glass. Casts of some of the organisms in a green matter remain after treatment with acid. The concretions are overgrown with Corals, *Serpula*, Polyzoa, and *Carpenteria*.	
100·00	(5·00 %), Radiolaria, Sponge spicules, a few *Ammodiscus incertus*, Diatoms.	(20·00 %), m. di. 0·06 mm., angular; felspar, plagioclase, augite, hornblende, pumice, small particles of manganese.	(75·00 %), amorphous matter, with many minute particles of pumice and other minerals, fragments of Diatoms and Sponge spicules.	This deposit does not show any sensible effervescence with acids and no carbonate of lime organisms have been observed. There are many fragments of pumice, some of which are dark coloured. It would appear that this deposit has its origin chiefly from volcanic debris.	
67·71	(2·00 %), Radiolaria and Sponge spicules.	(5·00 %), m. di. 0·06 mm., angular; plagioclase, augite, magnetite, pumice, brown glassy vesicular lapilli.	(60·71 %), much amorphous matter, many minute mineral particles, pumice debris, and fragments of siliceous organisms.	The larger Foraminifera are much broken and decomposed. Many small fragments of pumice, much decomposed, were observed among the minerals.	New Hebrides to Raine Island.
[99·00]	(1·00 %), Sponge spicules, fragments of Radiolaria, *Haplophragmium*, a few Diatoms.	(2·00 %), m. di. 0·06 mm., angular; felspar, plagioclase, augite, hornblende, pumice, volcanic glass, magnetite.	(96·00 %), amorphous matter, minute mineral particles, and fine fragments of siliceous spicules.	*Truncatulina pygmæa* is the only perfect representative of the bottom-living calcareous Foraminifera observed; the pelagic Foraminifera are nearly all fragmentary. At the bottom part of the sounding tube there appeared to be a stratification, evidenced by very thin dark and light coloured layers.	
93·58	(1·00 %), a few fragments of Sponge spicules, Lituolidæ, casts of Foraminifera.	(1·00 %), m. di. 0·07 mm., angular; felspar, volcanic glass, manganese grains.	(91·58 %), much amorphous matter, mineral and siliceous remains.	The sounding tube was full of mud in two layers, the upper layer, about three inches deep, being a Red Clay very like that obtained at the last station. Very little effervescence was noticed on treating a portion with acid.	
67·72	(1·00 %), fragments of Sponge spicules, a few casts.	(1·00 %), m. di. 0·06 mm., angular; felspar, plagioclase, augite, magnetite, palagonite, glassy volcanic particles, manganese grains.	(65·72 %), much brown amorphous matter and fine mineral particles.	Separated from the upper layer by a distinct line was a lighter coloured deposit which effervesced readily with acids, leaving a residue similar to the upper layer. The minerals are the same in each layer. Coccoliths and Rhabdoliths are present, but only a few are perfect. The Globigerinidæ are chiefly fragmentary. A piece of pumice about 3 mm. in diameter was observed. In the trawl were many pieces of pumice from the size of a pea to that of a hen's egg.	
50·10	(2·00 %), Sponge spicules, a few Radiolaria, *Rhabdammina*, *Haplophragmium*.	(2·00 %), m. di. 0·07 mm., angular; felspar, plagioclase, quartz, augite, magnetite.	(46·10 %), amorphous matter, fine mineral particles, and minute siliceous remains.	Very little of the deposit was obtained, and considerable washing may have taken place in the sounding tube. A relatively large number of calcareous spicules of Alcyonaria are present. The pelagic Foraminifera are nearly all fragmentary.	