	Residue.			Additional Observations.	
Per cent.	Siliceous Organisms.	Minerals.	Fine Washings.		
73·29	(1·00 %), a few small fragments of Sponge spicules, Astrorhizidæ, Lituolidæ, a few pale and dark green casts.	(2·00 %), m. di. 0·08 mm., angular and rounded; felspar, quartz, augite, magnetite, olivine, mica, many grains of glauconite.	(70·29 %), amorphous matter, with many minute mineral particles.	This deposit contains a great many glauconite grains, which are mostly irregular in form, but would appear to have been at one time perfect casts of Foraminifera and other organisms. In some cases the transition can be traced by microscopic examination.	Sydney to New Zealand.—*continued.*
91·29	(2·00 %), a few fragments of Sponge spicules and Diatoms.	(60·00 %), m. di. 0·15 mm., angular and rounded; quartz, mica, magnetite, felspar, augite, many fragments of clastic rocks.	(29·29 %), amorphous matter, many fine mineral particles, and a few fragments of siliceous organisms.	A few of the mineral particles measure 1 or 2 mm., and several rounded pebbles 2 to 4 cm. in diameter.	
89·29	(1·00 %), Radiolaria, Astrorhizidæ, Lituolidæ, Diatoms.	(2·00 %), m. di. 0·10 mm., angular; monoclinic and triclinic felspars, quartz, augite, hornblende, magnetite, olivine, very many small fragments of pumice and volcanic glass.	(86·29 %), amorphous matter, many minute fragments of minerals and siliceous organisms.	The bag of the trawl was nearly filled with a brownish mud, in which were many large lumps of stiff blue clay, and several pumice stones more or less rounded and of the light coloured fibrous variety. The beam of the trawl had many lumps of stiff blue clay attached to it. There was a thin watery red coloured layer in which the calcareous organisms appeared to be more abundant than in the stiff blue layers beneath. Many of the bottom-living Foraminifera are macroscopic. The fragments of pumice and volcanic glass have sometimes a diameter of 1 mm., some felspar and quartz fragments also attain nearly the same size.	Off New Zealand.
95·64	(1·00 %), Radiolaria, Astrorhizidæ, Lituolidæ, Sponge spicules, a few Diatoms.	(25·00 %), m. di. 0·10 mm., angular, but some rounded; quartz, felspar, plagioclase, green mica, hornblende, glauconite, pumice, magnetite.	(69·64 %), amorphous matter, many minute fragments of minerals, a few siliceous fragments.	The trawl brought up a large quantity of the mud, some pumice stones and animals. The surface layer was red and not so compact as the stiff blue layer beneath. The washings of the mud were chiefly made up of arenaceous Foraminifera, many of which were macroscopic.	New Zealand to Tongatabu.
...	...	...	...	Only a small quantity of these deposits was obtained in the sounding tube. In the trawl there were several large pieces of pumice.	
100·00	(1·00 %), Radiolaria and one or two Diatoms.	(5·00 %), m. di. 0·07 mm., angular; plagioclase, magnetite, hornblende, quartz, pumice, red glassy particles, fragments of basaltic rocks, manganese grains.	(94·00 %), amorphous matter, small fragments of minerals and siliceous organisms.	There were several pieces of pumice stone in the clay brought up by the sounding tube, one of which was 1 cm. in diameter. Before the blow-pipe the deposit fuses into a grey magnetic bead. No effervescence is observed when treated with acids. The fine washings are chiefly composed of minute fragments of pumice.	
9·30	(1·00 %), Sponge spicules, Astrorhizidæ, Lituolidæ.	(3·00 %), m. di. 0·50 mm., angular; monoclinic and triclinic felspars, augite, hornblende, magnetite, pumice, glassy volcanic fragments, lapilli of basaltic and trachytic rocks, red-brown granules.	(5·30 %), a small quantity of amorphous matter, associated with flocculent organic matter derived from the Foraminifera, Algæ, &c.	The dredge brought up a large quantity of the Coral Sand with some large fragments of Corals, many *Orbitolites*, shells, &c. The diameter of some of the particles making up the sand exceeded 1 cm. The mineral particles are remarkable for the perfection of their crystallographic form; the felspar often has the form of rhombic tables.	Off Tongatabu.