

See Charts 27, 28, 29, and 30, and Diagrams 12 and 13.

Off Tongatabu—  
continued.

| Number of<br>Station. | Date.           | Position.                          | Depth in<br>Fathoms. | Temperature<br>of the Sea-<br>water<br>( Fahr.). |           | Designation and Physical Characters.                                                                                                  | CARBONATE OF CALCIUM. |                                                                                                                            |                                                                                                                                                                                                                                                                                                                 |
|-----------------------|-----------------|------------------------------------|----------------------|--------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                 |                                    |                      | Bottom                                           | Surface   |                                                                                                                                       | Per cent.             | Foraminifera.                                                                                                              | Other Organisms.                                                                                                                                                                                                                                                                                                |
| *172A                 | 1874<br>July 22 | ° ° °<br>20 56 0 S.<br>176 11 0 W. | 240                  | °<br>...<br>75·0                                 | °<br>76·0 | CORAL SAND, yellow-grey, slightly coherent when dry, fine grained.<br>Residue light yellow-brown.                                     | 86·44                 | (25·00 %), Globigerinidae, <i>Pulvinulina</i> .<br>(35·00 %), Miliolidae, Textularidae, Lagenidae, Rotalidae.              | (26·44%), Otoliths of fish, Gasteropods, Lamellibranchs, Pteropods, Echinoderm fragments, Polyzoa, Coral fragments, Alcyonarian spicules, calcareous Algae, a few Coccoliths.                                                                                                                                   |
| 173                   | „ 24            | 19 9 35 S.<br>179 41 50 E.         | 315                  | ...<br>76·0                                      |           | CORAL MUDS.                                                                                                                           | ...                   | ...                                                                                                                        | ...                                                                                                                                                                                                                                                                                                             |
| 173A                  | „ 24            | 19 9 32 S.<br>179 41 55 E.         | 310                  | ...<br>77·0                                      |           |                                                                                                                                       | 90·30                 | (50·00 %), Miliolidae, Textularidae, Nummulitidae.                                                                         | (40·30 %), <i>Serpula</i> , Gasteropods, Lamellibranchs, Pteropods, Ostracodes, carapace and other parts of Crustaceans, fragments of Echinoderms, Alcyonarian spicules, Polyzoa, Corals, calcareous Algae.                                                                                                     |
| 174                   | Aug. 3          | 19 6 0 S.<br>178 14 20 E.          | 140                  | ...<br>77·0                                      |           | CORAL MUD, cream-white with rose tinge, slightly coherent, fine grained, presenting no macroscopic elements.<br>Residue yellow-brown. | 86·41                 | (25·00 %), Globigerinidae, <i>Pulvinulina</i> .<br>(35·00 %), Miliolidae, Textularidae, Lagenidae.                         | (26·41%), Otoliths of fish, Gasteropods, Lamellibranchs, Pteropods, Ostracodes, Echinoderm fragments, Polyzoa, Coral fragments, calcareous Algae, a few Coccoliths.                                                                                                                                             |
| 174A                  | „ 3             | 19 6 32 S.<br>178 16 20 E.         | 160                  | ...<br>77·0                                      |           | CORAL MUD.                                                                                                                            | ...                   | ...                                                                                                                        | ...                                                                                                                                                                                                                                                                                                             |
| 174B                  | „ 3             | 19 6 45 S.<br>178 17 0 E.          | 255                  | ...<br>77·7                                      |           | CORAL MUD, cream-white with rose tinge, slightly coherent, fine grained, presenting no macroscopic elements.<br>Residue yellow-brown. | 86·31                 | (25·00 %), Globigerinidae, <i>Pulvinulina</i> .<br>(35·00 %), Miliolidae, Textularidae, Lagenidae.                         | (26·31 %), Otoliths of fish, Gasteropods, Lamellibranchs, Pteropods, Ostracodes, Echinoderm fragments, Polyzoa, Coral fragments, calcareous Algae, a few Coccoliths.                                                                                                                                            |
| +174C                 | „ 3             | 19 7 50 S.<br>178 19 35 E.         | 610                  | 89·0<br>78·0                                     |           | GLOBIGERINA Ooze, with rosy tinge, fine grained, plastic when wet, pulverulent when dry.<br>Residue light brown.                      | 79·65                 | (40·00 %), Globigerinidae, <i>Pulvinulina</i> .<br>(10·00 %), Miliolidae, Textularidae.                                    | (29·65 %), Otoliths of fish, Gasteropods, Lamellibranchs, Pteropods, Heteropods, Echini spines, fragments of Corals, Coccoliths, Rhabdoliths.                                                                                                                                                                   |
| 174D                  | „ 3             | 19 5 50 S.<br>178 16 20 E.         | 210                  | ...<br>77·7                                      |           | CORAL MUD, cream coloured, slightly coherent, fine grained.<br>Residue brown.                                                         | 86·97                 | (10·00 %) Globigerinidae, <i>Pulvinulina</i> .<br>(40·00 %), Miliolidae, Textularidae, Lagenidae, Rotalidae, Nummulitidae. | (36·97 %), Otoliths of fish, <i>Serpula</i> , Gasteropods, Lamellibranchs, Pteropods, Heteropods, Ostracodes, Echinoderm fragments, Polyzoa, Coral fragments, Alcyonarian spicules, calcareous Algae, Coccoliths.                                                                                               |
| ‡175                  | „ 12            | 19 2 0 S.<br>177 10 0 E.           | 1350                 | 36·0<br>77·5                                     |           | GLOBIGERINA OOZE, with much clayey matter, red when wet, red-brown when dry, coherent, earthy.<br>Residue chocolate coloured.         | 44·43                 | (35·00 %), Globigerinidae, <i>Pulvinulina</i> .<br>(2·00 %), Miliolidae, Textularidae, Lagenidae, Rotalidae, Nummulitidae. | (7·43 %), Otoliths and small teeth of fish, Ostracode shells, Echini spines, Coccoliths, Rhabdoliths. It is remarkable that no shells of Pteropods, Heteropods, or other pelagic Molluscs, are found in this deposit, although they were apparently more abundant than the Globigerinidae in the surface water. |

\* See Pl. XIV. fig. 1.

† See Pl. XIV. figs. 3a, 3b.

‡ See Pl. XIV. figs. 4a, 4b.