

## APPENDIX III.

### CHEMICAL ANALYSES.

The following analyses have been made during the Examination of the Challenger Deep-Sea Deposits by different analysts, and have been nearly all referred to in the body of the work. The name of the analyst is affixed to each analysis immediately after the locality.

1. RED CLAY (after the finer parts had been washed away).—Station 5.

Lat. 24° 20' N., long. 24° 28' W., 2740 fathoms (Brazier).

		Loss on ignition after drying at 230° Fahr.,	8·20	
Portion soluble in Hydrochloric Acid = 77·30	}	=	Alumina, . . . . .	4·70
			Ferric oxide, . . . . .	3·50
			Calcium phosphate, . . . . .	trace
			Calcium sulphate, . . . . .	0·70
			Calcium carbonate, . . . . .	56·39
			Magnesium carbonate, . . . . .	0·98
			Silica, . . . . .	11·03
Portion insoluble in Hydrochloric Acid = 14·50	}	=	Alumina, . . . . .	1·80
			Ferric oxide, . . . . .	0·80
			Lime, . . . . .	0·50
			Magnesia, . . . . .	0·40
			Silica, . . . . .	11·00
			100·00	

2. RED CLAY (after the finer parts had been washed away).—Station 5.

Lat. 24° 20' N., long. 24° 28' W., 2740 fathoms (Brazier).

		Loss on ignition after drying at 230° Fahr.,	2·60	
Portion soluble in Hydrochloric Acid = 82·84	}	=	Alumina, . . . . .	2·15
			Ferric oxide, . . . . .	4·76
			Calcium phosphate, . . . . .	2·09
			Manganese oxide, . . . . .	...
			Calcium sulphate, . . . . .	0·29
			Calcium carbonate, . . . . .	60·29
			Magnesium carbonate, . . . . .	0·72
Portion insoluble in Hydrochloric Acid = 14·56	}	=	Alumina, . . . . .	12·54
			Ferric oxide, . . . . .	3·13
			Lime, . . . . .	0·84
			Magnesia, . . . . .	0·68
			Silica, . . . . .	0·11
			9·80	
			100·00	