MACRURA (Spence Bate, Zool. pt. 52).

STATION 281.

Haliporus curvirostris, n.g., n.sp. One specimen; obtained also at Station 285, 2375 fathoms.

LAMELLIBRANCHIATA (Smith, Zool. pt. 35).

Sarepta abyssicola, n.sp. One specimen; obtained also at Station 246.

FISHES (Günther, Zool. pt. 57).

Bathysaurus mollis, n.g., n.sp. One specimen; obtained also at Station 237.

In addition to the foregoing, a small Sponge attached to manganese slab and a Polyzoon (*Bicellaria*) are recorded in the Station-book.

Excluding Protozoa, about 20 specimens of invertebrates and fishes were obtained at this Station, belonging to 13 species, of which 10 (all those described) are new to science, including representatives of 4 new genera; 2 new species and 1 new genus were not obtained elsewhere.

Station 282 (Sounding 427), Tahiti to Valparaiso (see Chart 38 and Diagram 19). Station 282.

October 7, 1875; lat. 23° 46' S., long. 149° 59' W.

Temperature of air at noon, 70°8; mean for the day, 71°2.

Temperature of water:-

Surface,					$73\cdot 2$	400 fa	thoms	,		43.2
25 fathoms,					72.0	500	,,			41.2
50	,,				71.0	600	,,	20		39.6
75	,,				69.8	700	,,	•		38.3
100	,,			•	68.1	800	"			37.3
125	,,				66.5	900	"			36.7
150	,,				64.3	1000	,,			36.3
175	"				61.5	1100	"			36.0
200	"				58.3	1200	,,			36.0
225	,,				54.7	1300	,,			35.6
250	,,		73.6		50.8	1400	,,			35.4
275	,,				48.3	1500	,,			35.2
300	"	•			46.2	Bottom,		•	•	35.1

Density at 60° F. at surface, 1.02676; 2000 fathoms, 1.02549; bottom, 1.02582. Depth, 2450 fathoms; deposit, Red Clay, with very many crystals of phillipsite formed in situ at the bottom, containing only a trace of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).