$36^{\circ} 44^{\prime}$ S., long. $46^{\circ} 16^{\prime}$ W. 2650 fathoms. South Atlantic Ocean, east of the Rio de la Plata.
5. Specimen showing no fusion of the septa, but with the synapticulæ fairly developed. Same locality as the foregoing.
6. Specimen showing a complex transverse connection of the septa, and hypertrophy of synapticulæ, and a circular lamina of hard tissue in the centre. Lat. $35^{\circ} 41^{\prime}$ N., long. $157^{\circ} 42^{\prime}$ E. 2300 fathoms. North-West Pacific Ocean.
7. Specimen, showing a fusion of the septa, and in one of the deltoid spaces a development of cancellar hard tissue, but with very few synapticulæ. Lat. $36^{\circ} 44^{\prime}$ S., long. $46^{\circ} 16^{\prime} \mathrm{W} .2650$ fathoms. South Atlantic Ocean, east of the Rio de la Plata.
8, 8a. Upper and under surface of a small adult specimen, showing very regular fusions of septa and synapticulæ. Off Bermuda. 1035 fathoms.
9, 9a. Deformed specimen, fractured and reunited. Off Bermuda. 32 fathoms. $10,10 a$, and 11, 11a. Specimens dredged in lat. $13^{\circ} 50^{\prime}$ S., long. $151^{\circ} 49^{\prime} \mathrm{E}$. Off the north-east coast of Australia.
12, 12a. Minute adult specimen dredged in lat. $37^{\circ} 29^{\prime} \mathrm{S} .$, long. $27^{\circ} 31^{\prime} \mathrm{W}$. 2200 fathoms. South Atlantic Ocean.
13, $13 a$. Smallest specimen obtained, dredged in lat. $38^{\circ} 30^{\prime} \mathrm{N}$., long. $31^{\circ} 14^{\prime} \mathrm{W}$. 1000 fathoms. Off the Azores.

## PLATE XII.

Figs. 1-3. Heteropsammia multilobata. Off Samboangan, Philippine Islands. 10 fathoms.

1. View of upper surface, showing the several calicles.
2. Side view, showing part of the under surface. At the bottom on the right is seen the aperture of the canal occupied by the sipunculid, and above, at the bases of the calicles, a row of pores by which this canal communicates with the interior.
Figs. 4-7. Balanophyllia bairdiana. Bass Strait, Australia. 38 fathoms.
3. Mouth of the calicle of the same.
4. Young specimen of the same.
5. Interior of the calicle of foregoing, much enlarged.

Figs. 8-10. Thecopsammia elongata, attached to a fragment of a Balanophyllia. Off the Admiralty Islands. 150 fathoms.
9. Mouth of the calicle.
10. Enlarged view of the outer surface.

