

Fig. 5. *Stephanotrochus platypus*, a smaller specimen than the foregoing. *a* View of the under surface, showing in the centre an attachment to a small spiral shell. *b* Mouth of the calicle. *c* Tip of one of the exsert septa and its corresponding costa much enlarged. Off Sydney, New South Wales. 410 fathoms.

## PLATE IV.

- Fig. 1-6. Young specimens of *Desmophyllum ingens*, showing various stages of growth. Patagonia. Lat. 52° 50' S., long. 73° 53' W. 245 fathoms.
- Fig. 7. *Cyathoceras cornu*. *a* Mouth of the calicle. Off the Rio de la Plata. Lat. 37° 17' S., long. 53° 52' W. 600 fathoms.
- Fig. 8. *Caryophyllia maculata*. *a* Mouth of the calicle of the same. Off Barra Grande, Brazil. 400 fathoms.
- Fig. 9. *Caryophyllia maculata*, larger specimen than the foregoing, attached to a branch of a Stylasterid. Above 9 (with its number accidentally omitted in the plate), view of the mouth of the calicle of the same, enlarged three diameters. Off the Kermadec Islands. 630 fathoms.
- Fig. 10. *Deltocyathus magnificus*. Under surface. Off the Ki Islands. 129 fathoms.
- Fig. 11. *Stephanophyllia formosissima*. Under surface. Off the Ki Islands. 129 fathoms.
- Fig. 12. *Stephanophyllia complicata*. Under surface. Off the Ki Islands. 129 fathoms.

## PLATE V.

- Figs. 1-4. *Desmophyllum ingens*. Patagonia. Lat. 48° 18' S., long. 74° 33' W. 345 fathoms.
1. A specimen showing two examples of the largest size fused together laterally, with an attachment at the base to a fragment of a third example. *a* Mouth of the calicle of the upper example.
  2. A somewhat deformed specimen, with roots at the base encrusting the skeleton of a Gorgonoid. *a* Mouth of the calicle of the same, showing one side distorted and bent inwards.
  3. A cylindrical example, with numerous basal roots also adherent to the skeleton of a Gorgonoid. *a* Mouth of the calicle of the same.
  4. Mass composed of numerous examples fused together reduced in size one-half. *a* View of the broken end of the lower part of one of the calicles to show the continuation of the septa within it, and absence of a columella.