inhabitants of the deep sea. Still more astonishing are the vast numbers of their skeletons and shells which are found in the deposits at great depths, especially between 2000 and 4000 fathoms, and even to the greatest known depths. The area of their richest distribution is the tropical zone of the Pacific Ocean, between latitudes 20° N. and 10° S., and longitudes 140° W. and 140° E. At many of the Challenger Stations (particularly 225, 226, 266 to 274) the chief part of the deposit at the bottom of the sea

## *Explanation of Plate* A.

Figs. 1–14. *Challengeria.*

Fig. 1. *Challengeria naresii*, seen from the flat side; magnified 60 diameters.
Fig. 1*a*. The same, seen from the upper surface; magnified 60 diameters.
Fig. 1*b*. Dwarf variety; magnified 60 diameters.
Fig. 1*c*, *d*, *e*. Portions of the shell, showing the pores; magnified 940 diameters.
Fig. 2. *Challengeria thomsoni*, seen from the flat side; magnified 60 diameters.
Fig. 2*a*. Portion of the shell, showing the pores; magnified 940 diameters.
Fig. 3. *Challengeria macleari*, seen from the flat side; magnified 60 diameters.
Fig. 3*a*. The same, seen from the upper surface; magnified 60 diameters.
Fig. 3*b*. Variety; magnified 60 diameters.
Fig. 4. *Challengeria aldrichi*, magnified 60 diameters.
Fig. 4*a*. Portion of the shell, showing the pores; magnified 940 diameters.
Fig. 5. *Challengeria bromleyi*, magnified 60 diameters.
Fig. 6. *Challengeria bethelli*, magnified 60 diameters.
Fig. 7. *Challengeria tizardi*, seen from the flat side; magnified 200 diameters.
Fig. 7*a*, *b*. Portions of the shell, showing the pores; magnified 940 diameters.
Fig. 8. *Challengeria carpenteri*, magnified 60 diameters.
Fig. 9. *Challengeria campbelli*, magnified 60 diameters.
Fig. 10. *Challengeria balfouri*, magnified 60 diameters.
Fig. 11. *Challengeria swirei*, magnified 60 diameters.
Fig. 12. *Challengeria channeri*, magnified 60 diameters.
Fig. 13. *Challengeria haverysalli*, magnified 60 diameters.
Fig. 14. *Challengeria harstoni*, magnified 60 diameters.
Fig. 14*a*. Variety; magnified 60 diameters.
The species of *Challengeria* are named after the naval officers of the Expedition.

Figs. 15–20. *Tuscarora.*

Fig. 15. *Tuscarora belknapi*, magnified 20 diameters.
Fig. 15*a*. Basis of a tubular spine, magnified 200 diameters.
Fig. 15*b*. Small portion of the shell, magnified 200 diameters.
Fig. 15*c*. Central capsule and lumps of the phæodium, magnified 400 diameters.
Fig. 15*d*. Granules of the phæodium, magnified 140 diameters.
Fig. 16. *Tuscarora bisternaria*, magnified 10 diameters.
Fig. 16*a*. The same, mouth with three tubular spines, magnified 20 diameters.
Fig. 17. *Tuscarora tubulosa*, magnified 10 diameters.
Fig. 18. *Tuscarora porcellana*, magnified 10 diameters.
Fig. 19. *Tuscarora tetraedra*, magnified 10 diameters.
Fig. 20. *Tuscarora cygnea*, magnified 10 diameters.