

STATION 162.

PTEROPODA (Pelseneer, Zool. pt. 65).

Cavolinia gibbosa (Rang).*Cleodora compressa*, Souleyet[= young of *Cavolinia trispinosa*].

TUNICATA (Herdman, Zool. pt. 76).

Doliolum denticulatum, Quoy and Gaimard.*Salpa democratica - mucronata*, Forskåhl.

In addition, the following are recorded in the note-books :—*Beroë*, *Hyperia*, *Euphausia*, Megalopa stage of crab, and small fish. Two fur-seals were seen swimming about the ship.

Willemoes-Suhm writes: "On the surface we found a great many *Euphausiæ* Megalopæ of a Brachyurous crab, many small chain-bearing *Salpæ*, and fine rose-coloured specimens of a *Beroë*."

STATION 163.

Station 163 (Sounding 267), Melbourne to Sydney (see Chart 25).

April 4, 1874; lat. 36° 57' S., long. 150° 34' E.

Temperature of air at noon, 67°·3; mean for the day, 65°·3.

Temperature of water :—

Surface,	72·0	200 fathoms,	51·4
50 fathoms,	65·2	250 "	49·2
100 "	59·3	300 "	47·6
150 "	54·9	Bottom,	34·5

Density at 60° F. at surface, 1·02652; bottom, 1·02601.

Depth, 2200 fathoms; deposit, Globigerina Ooze, containing 61·77 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 6.30 A.M. shortened and furled sails, and got up steam to sound and trawl. At 9 A.M. sounded in 2200 fathoms. Obtained serial temperatures at intervals of 50 fathoms down to 300 fathoms. At 11 A.M. completed temperature observations, and proceeded under steam W. by N. towards the land.

STATION 163A.

Station 163A.

At 1.30 P.M. stopped and sounded in 150 fathoms, deposit Green Mud (?). Put over trawl. At 2 P.M. hove up trawl and proceeded. At 2.30 P.M. stopped and put trawl over again. At 3.45 P.M. hove up trawl. The two trawlings were very successful, the