

and styliform, consisting of about twenty smooth, flattened joints with sharp dorsal edges. The disk is completely covered with a pavement of small plates, as is the brachial perisome above the muscular bundles. Arm-groove moderately wide, and bordered by a discontinuous series of ambulacral plates. The pinnule-ambulacra have covering plates, and sometimes moderately distinct side plates.

Colour in spirit, yellowish-white, sometimes retaining a rosy tinge.

*Localities*.—Station 171, July 15, 1874; near the Kermadec Islands; lat.  $28^{\circ} 33' S.$ , long.  $177^{\circ} 50' W.$ ; 600 fathoms; hard ground; bottom temperature,  $39^{\circ} \cdot 5 F.$  One specimen.

Station 214, February 10, 1875; off the Meangis Islands; lat.  $4^{\circ} 33' N.$ , long.  $127^{\circ} 6' E.$ ; 500 fathoms; blue mud; bottom temperature,  $41^{\circ} \cdot 8 F.$  Several specimens.

Uncertain—Station 210, January 25, 1875; off the Panglao and Siquijor Islands; lat.  $9^{\circ} 26' N.$ , long.  $123^{\circ} 45' E.$ ; 375 fathoms; blue mud; bottom temperature,  $54^{\circ} \cdot 1 F.$

Some of the fifteen specimens sent to me were without labels; and I strongly suspect that this species, together with *Pentacrinus naresianus*, three examples of which are without labels, are those referred to by Sir Wyville, who recorded in his journal that four specimens of two species of Pentacrinidæ were dredged at Station 210; for the collection contains no specimens at all with the label of this Station.

*Remarks*.—*Pentacrinus alternicirrus*, like *Pentacrinus wyville-thomsoni*, appears to be pre-eminently one of those which lives in a semi-free condition, the stem having been broken at a nodal joint, the syzygial face of which becomes worn and more or less rounded, and has its central canal closed up. The following list shows the position of this terminal nodal joint and the corresponding length of the stem in twelve specimens.

Stem, 47 mm. long and terminating at the 11th node.

" 49	"	"	11th	"
" 63	"	"	11th	"
" 64	"	"	11th	"
" 65	"	"	11th	"
" 55	"	"	12th	"
" 66	"	"	12th	"
" 69	"	"	12th	"
" 70	"	"	12th	"
" 65	"	"	14th	"
" 91	"	"	14th	"
" 113	"	"	16th	"

The remarkable arrangement of the cirri in this species distinguishes it at once from all the other recent Pentacrinidæ. Except that the symmetry is pentamerous instead of tetramerous, the arrangement recalls that of the leaves on the stem of a Labiate plant. In one case only have I found any irregularity. The eighth whorl has its two regular cirri like the sixth, together with an additional one which therefore comes to be on the