Through the kindness of Dr. TOKIOKA of the Seto Marine Biological Laboratory of the Kyoto University at Shirahama, Wakayama Prefecture, an interesting brachiopod obtained by Dr. R. YOSII during the Second Japanese Antarctic Research Expedition was forwarded to the writer for study. An examination of the brachiopod, which consisted of several well preserved specimens, revealed that it belongs to the genus *Crania*, and may be an undescribed species.

Phylum Brachiopoda
Family Craniidae KING, 1846
Genus *Crania* RETZIUS, 1781

The brachiopod genus *Crania* is based upon *Crania brattensburgensis* RETZIUS= *Anomia craniolaris* LINNÉ, a fossil species. According to THOMSON (1927, p. 136), the genus ranges from the Eocene of Belgium and Italy, through the Miocene of France, Italy and New Zealand, the Pliocene of Sicily and Italy, to the Recent seas of the Atlantic, Pacific and Indian Oceans including the Mediterranean, and is also known from the Antarctic region. A genus similar to the present one, *Ancistrocrania*, based upon *Crania parisiensis* DEFRANCE is found in the Cretaceous sediments and is also reported to inhabit the seas of Japan (ALLAN, 1937). It may be added that HALL and CLARK (1892, according to THOMSON, 1927, p. 136) give the range of the genus *Crania* from early Silurian to Recent.

All specimens at hand are only the dorsal valves which are in natural coloration, well preserved, sometimes retaining the animal, and show a rather wide range of variation of the shell. The very thin shell and other details to be mentioned later seem to indicate that the specimens belong to the genus *Crania*, and more or less close to *Crania lecointei* JOUBIN (JOUBIN, 1901, p. 9, pl. 2, figs. 13-15), a Recent species which was obtained by the S.Y. Belgica during her expedition to the Antarctic region, from a depth of 273 fathoms. The greatest depth recorded of the genus is that by DALL (1920, p. 273), who lists *Crania patagonica* DALL from a depth of 348 fathoms in the Magellan Straits.

Although the writer has not been able to see *Crania joubini* THOMSON, which was reported by THOMSON (1927, p. 134) from the depth of 240 fathoms in the Davis Sea, Antarctica and which seems to closely resemble the present specimens at least from the brief remarks by THOMSON (*op. cit.*). It should be mentioned that THOMSON referred his *joubini* to the genus *Discina* LAMARCK, 1819 with some doubt. THOMSON's species is represented only by the dorsal valves, just as in

the case of the present specimens. But since the present specimens seem better placed in the genus *Crania*, it may be thought that both *Discina* and *Crania* contain species bearing superficial resemblance. The genotype of *Discina* is *Discina ostreoides* LAMARCK=*Crania striata* SCHUMACHER, originally reported from Cape Palmas, West Africa, according to DALL (1920, p. 275).

Crania antarcticaensis HATAI, n. sp.
Figs. 1 a~5 b.

Description : Dorsal valve subquandrangular in shape, narrower posteriorly than anteriorly, posterior and anterior margins either somewhat straight or slightly rounded, generally more rounded in the anterior margin. Beak subcentral, situated posteriorly, near the rather short and straight posterior margin of the shell. Apex bluntly pointed, elevated. External surface with concentric growth lines and minute pustulose sculpture, the latter may be almost absent making the surface rather smooth. Concentric growth lines may be rough to more or somewhat smooth and appear as mere impressed lines. Interior with two seperated, rounded and elevated muscular scars situated near the posterior margin, elongate ovate or ovate in general shape. Anterior adductor scars situated a little posterior to middle of valve, separated from one another but closer than posterior adductors, slightly elevated and of irregular shape. No grooves for reception of pallial sinuses seen distinctly. Inner surface of ventral valve white in color and show minute punctations. External surface light brownish white in color and sometimes light brownish yellow. Minute punctations observable from external surface. Brachia spirolophus.

Dimensions (in mm) :

Length (antero-posterior)	10.0	8.0	9.6	8.6	9.1
Width	12.0	9.5	12.0	10.0	8.2
Height of shell	4.0	3.0	3.5	3.5	2.6

Localities : Inner part of Lützow-Holm Bay, 570 m depth, February 8, 1958. Off Cape Cook, 500 m depth, January 28, 1958. Off Cape Cook, 700 m depth, sandy bottom, February 1, 1958. Gunnerus Bank, 590 m depth, Februry 1, 1958.

Remarks : Some of the present specimens more or less resemble *Crania lecointei* JOUBIN (1901, p. 9, pl. 2, figs. 13-15) from a depth of 500 meters at "Foubert VII.—Lat. 70°23′S, Long. 82°47′W", but differs from the latter in the position of the apex, general shape of the shell, different growth lines and external sculpture. In the present species the beak is subcentral in position unlike *lecointei*, and the posterior margin is shorter than that of the latter; the concentric growth lines are stronger and apparently elevated in *lecointei* but not so in the present one.

So far as the general outline is concerned, *Vladiviathyris quenstedti* HELMCKE (ROWELL, 1961, pl. 68, figs. 5-7) resembles some of the present specimens, and *Ancistrocrania parisiensis* (DEFRANCE) (ROWELL, 1961, pl. 68, figs. 3, 4) is another species similar to the present in shape. However, the latter differs from the present specimens in the peculiar internal structures of the ventral valve and in the position of the apex. The former also differs from the present specimens by having the peculiar internal structures of the shell.

Crania valdiviae HELMCKE (1940, p. 234, text-fig. 4) resembles the present specimens in the rather short posterior margin and subcentral position of the beak, but differs in the general outline of the shell and in the details of the external surface sculpture and adductor scars.

Species similar to the present specimens are not illustrated by HERTLEIN and GRANT (1944) who made a monographic study of the Cenozoic brachiopods of western North America. No species identical with the present one are noted in the work of FISCHER and OEHLERT (1891) who described and illustrated the material of "Du Travailleur et de Talisman". DAVIDSON (1888) in his monograph of Recent brachiopods has described and illustrated many species of the group under consideration, but none seems to be identical with the present specimens.

Crania chathamensis ALLAN (1937, p. 155, pl. 16, fig. 4) from the Tertiary rocks of the Chatham Islands, New Zealand can be easily distinguished from the present specimens by the position of the apex, general shape of the shell and surface ornamentation. However, concerning *Crania joubini* THOMSON, which THOMSON (1927, p. 134) referred to the genus *Discina* with the remarks that, "known from the dorsal valve only, is without radial ornamentation, and is finely punctate internally, but is without strongly marked muscular impression typical of *Crania*, and may possibly be more allied to *Discina*", it is difficult to be compared with the present specimens because no illustration or description of the species is available to the writer. The present specimens have no radial ornament, and the dorsal valve is finely punctate internally and without very strong muscular scars; in these respects, apparent similarity to THOMSON's species just mentioned is suggested. Whether the present specimens are identical with *Crania joubini* THOMSON is difficult to determine at present, although it may be suggested that the generic position of his species is not the same as that of the present specimens.

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