

ART. XXIV.—*Description of a New Genus and Species of Fossil Crab from Port Townsend, Washington*; by MARY J. RATHBUN, Associate in Zoology, United States National Museum.

THE crab described in this paper was presented to the Yale Museum in 1873 by Dr. Thomas T. Minor, a graduate of the University. Although it is from the late Tertiary, the exact horizon is not known, and according to Dr. John C. Merriam, of the University of California, who has kindly examined the specimen, it is impossible even with a fair knowledge of the geology of the region to state its position with certainty.

For the privilege of making the description I am indebted to Prof. Charles Schuchert.

Tribe **BRACHYURA.**

Subtribe **Brachygnatha.**

Superfamily **BRACHYRHYNCHA.**

Family **Goneplacidae.**

BRANCHIOPLAX, gen. nov.

Carapace a little broader than long. Anterior margin arcuate. Orbits of moderate size. Antero-lateral margins dentate and very short, about half as long as postero-lateral margins, which are subparallel, but with the posterior angles rounded. Front not emarginate. Regions well defined, branchial regions swollen dorsally and approximate. Chelipeds unequal, of moderate length, carpus not much broader than long, manus high.

(*βράγχια*, gills, branchiae, in allusion to the swollen branchial region; *πλαξ*, anything flat and broad, carapace.)

This genus is akin to the recent genus *Eucrate* de Haan* (type, *E. crenata* de Haan, from Japan), of the subfamily Carcinoplacinae, but differs in having an entire front, that is, uninterrupted by a median emargination or by a separate small tooth at the inner angle of the orbit; in the narrower and more oblique orbit; in the shorter antero-lateral margin with only two teeth, and those distant from the orbit; in the after part of the carapace being squarer, the sides subparallel in part instead of constantly converging; in the more areolated carapace and less massive and very unequal chelipeds.

Type of the genus, *Branchioplax washingtoniana*.

As the characters of the ventral surface are not known, it is impossible to assign the genus to its subfamily.

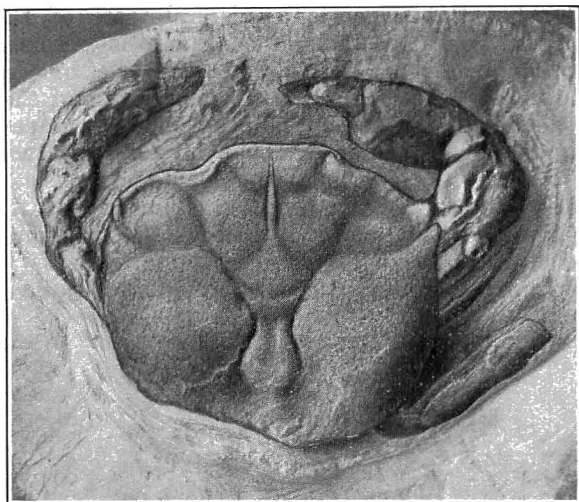
* Fauna Japon., Crust., p. 36, 1835.

BRANCHIOPLAX WASHINGTONIANA, sp. nov.

Type-locality.—Port Townsend, Washington ; late Tertiary.

Holotype.—Dorsal view of a single specimen exposed in nodule. Cat. No. 195, Yale University Museum. Presented by Dr. Thomas T. Minor, in 1873. A plastotype or cast of the holotype has been made by Dr. R. S. Bassler for the United States National Museum ; Cat. No. 167203.

Measurements.—Approximate. Length of carapace 28, width of carapace 30·7, width of front between the orbits 10·8, fronto-orbital width 17·4, width between the two branchial regions 3·5, length of that part of the merus of the right or



larger cheliped which shows outside the carapace 7, length of carpus 8, width of carpus 8·7, length of palm along upper margin 11·4, length of dactylus (perhaps an underestimate) 8, length of palm of left or smaller cheliped 6 mm.

Of the regions of the carapace, the branchial are the most prominent and are deeply separated from the cardiac ; the narrow part of the mesogastric region is bordered by broad, smooth furrows, and is acuminate ; from it a very shallow median furrow may be seen leading to, but not crossing, the slightly arcuate upper margin of the front ; the middle part of the mesogastric region is faintly outlined ; a broad and deep transverse depression between gastric and cardiac regions ; hepatic regions distinctly outlined. A shallow, oblique furrow

separates the upper surface of the orbit from that of the front. Surface of carapace granulated, granules coarser on the sides of the branchial regions, absent or scarce in the depressions and on the cardiac region and behind the margin of front and orbit. Edge of front and orbit granulated, granules placed irregularly, not all in one row. Next to the orbit, the antero-lateral margin appears straight and oblique for a distance a little greater than the width of orbit, after which there are two strong projecting teeth, the first being the wider. Behind these teeth the lateral margins are nearly straight and parallel for a way, then curve gradually into the posterior margin, which is broken away from the single specimen.

Details of the chelipeds are not easy to make out. The chelipeds are bent and similarly placed, so that the wrist nearly touches the larger antero-lateral tooth of the carapace; in this position the larger cheliped reaches to a point approximately in line with the middle of the body while the smaller cheliped reaches to the middle of the orbit. Very little of the merus is visible beyond the carapace; the carpus is rounded, without evidence of an inner tooth; the manus is apparently thick, and the movable finger is stout; no prehensile teeth are visible; propodal finger absent from the large cheliped, crushed and indistinct in the small one. Surface of chelipeds granulate, as also of the long merus joints of two ambulatory legs, which are all that is left of those appendages.