

**Article II.—NOTICE OF A NEW CRINOID AND A NEW MOLLUSK FROM THE PORTAGE ROCKS OF NEW YORK.**

By R. P. WHITFIELD.

PLATES I-IV.

Among the many specimens of *Cyathocrinus ornatissimus* collected by Professor James Hall, at or near the town of Portland, on Lake Erie, and described and figured in the Geological Report of the Fourth District of the New York Geological Survey, 1843, p. 247, there are two specimens of a second and quite distinct species, which, though badly mutilated, are, I think, quite worthy of a distinct name and notice. The specimens lie on blocks of the same stone with fragments of the original species and among them, so that they have remained these many years undistinguished, but the species differs so remarkably in many particulars that it is a wonder it had not been seen before this late date.

The specimens lie on the stone with the anal side exposed and preserve several of the arm bases on the left side as they rest on the stone, a small portion of those on the right side and much of the anal area, with, on one, a portion of the base of the ventral sack. The following description gives the features of the species as far as can be ascertained.

In correspondence with Mr. Frank Springer in regard to these specimens he recommends the formation of a new genus for this new form, as he is satisfied there is no known genus now existing that will exactly correspond to its characters. I have therefore concluded to propose for its reception the name *Maragnicrinus*, from the Greek word *μάραγμα*, meaning a scourge or whip, in reference to the long, slender, whip-like arms, and *κρίνον*, a lily, with the following generic characters.

***Maragnicrinus*, gen. nov.**

*Generic description.*—A dicyclic, inadunate, fistulate crinoid, having five infrabasals. Calyx obconical; posterior interradius composed of a large anal, a large radi-anal and one tube-plate within the calyx, and extended into a strong ventral sack. Articulating facets excavate, and not occupying the full width of the radials. Rays dividing but once into two main arm-branches, which are pinnulate.

The following description of the species gives the specific features as far as ascertained.

**Maragnicrinus portlandicus, sp. nov.**

Body obconical, forming a conical cup somewhat wider at the top than the height to the base of the arms. Infrabasal plates (Wachsmuth and Springer) forming a shallow cup above the column; basal plates largest in the calyx, one at least of which is heptagonal, slightly wider than high or equal; first radials (brachials) much wider than high and supporting three arm plates in each of the posterolateral rays, the upper of which is a bifurcating plate giving origin to a very long, slender arm on each sloping face, which are simple above throughout their entire length of nearly or quite four inches (10 cm.). Arm plates very short, alternately longer and shorter on the opposite sides, the thicker edge being tentacle-bearing; tentaculæ very long, some of them being traceable for 2.8 cm., composed of many plates, longer than wide, and flattened on the face with a ridge along the centre of each giving a carinate appearance to the lines of tentaculæ. The tentacula of *P. ornatissimus* presents a similar feature, differing in this respect from Carboniferous crinoids. Anal plates large, two filling the space between the postero-lateral brachials, with three in the next series, above which they are small, transversely hexagonal and numerous.

The body plates are minutely radiatingly ridged and the plates of the arms are longitudinally corrugated.

Column round, composed of very short plates alternately thicker and thinner, and of larger and smaller discs, largest just below the calyx and gradually decreasing in size below. On one of the two specimens the column can be traced for a distance of over 22 cm.

Geological position, in the Portage group at the town of Portland on Lake Erie, associated with *Cyathocrinus ornatissimus* Hall.

Associated with these specimens of crinoids and with those of *Cyathocrinus ornatissimus* there are many specimens of a *Lunulicardium*, a small bivalve shell usually occurring in pairs so placed as to indicate a union of the two shells by a connecting hinge ligament, as they are found generally back to back as if imbedded in the matrix while the valves were still united. The species is entirely different from any of those heretofore described, being smooth on the surface, quite ventricose, with strongly incurved beaks and a profoundly excavated lunule. Consequently I have considered it as forming a new genus and have described it below as *Onychocardium*, in consideration of its claw-like beak, which feature is partly produced by the deeply excavated lunule.

**Onychocardium, gen. nov.**

Shell bivalve, small, resembling *Lunulicardium* of Munster in its general form and truncated anterior end. Beaks sharp, pointed, and strongly incurved, the lunule deeply and profoundly excavated. Surface smooth or destitute of radii, unlike most of the group. Internal features and hinge unknown, valves presumably united by an external ligament.

Geological position, Portage limestone.

EXPLANATION OF PLATE I.

*Maragnicrinus portlandicus* Whitf., page 18.

FIG. 1.—A view, nat. size, of one of the type specimens of the above genus and species.

*Onychocardium portlandicum*, page 19.

FIG. 2.—View, nat. size, of a fragment of crinoidal rock bearing on its surface three single valves, and three paired valves. See also Vol. XX., Bulletin A. M. N. H., Pl. xi., Fig. 4.



## EXPLANATION OF PLATE II.

*Maragnicrinus portlandicus*, page 18.

FIG. 1.—View, natural size, of a second type specimen of the genus and species, showing the anal side of the specimen and some of the arms, with a fragment of *C. ornatissimus* above it with a portion of the ventral sack protruding on the lower left side. The column of this second specimen of *Maragnicrinus* can be traced on the stone for a distance of over 22 cm.

*Cosmocrinus ornatissimus* Hall, sp.

FIG. 2.—View, nat. size, of the original type specimen of Hall's *Cyathocrinus ornatissimus*, given on page 247, also on table of organic remains No. 56, and on the back and side of the vol. of the Geol. Rept., 4th Dist., N. Y. The figure is turned down in the same position in which it is given in the report, to aid in comparison.



### EXPLANATION OF PLATE III.

#### *Maragnicrinus portlandicus.*

FIG. 1.—View, nat. size, of a third specimen of the species, being the specimen claimed as the type of *Cyathocrinus ornatissimus* Hall, in the publication referred to on a previous page as "Naples Fauna in Western New York," pages 348 and 349, and Plate F, the figure there given being enlarged. The specimen figured is the property of Williams College, and probably belongs to the collection given by the late Dr. Ebenezer Emmons.

#### *Cosmocrinus ornatissimus* Hall, sp.

FIG. 2.—View, nat. size, of a specimen of *C. ornatissimus* showing the ventral sack with a portion of a second one. In the original figure and description given in the Rept. 4th Dist., N. Y. Geol. Surv., there was no mention of the existence of this ventral appendage by the author, and its nature was probably not suspected, especially as the type specimen does not show it; but on several individuals in the original collection it is plainly shown; on one to the length of 8 cm. above the top of the radial plate, on another to a length of 9 cm. from the same point. It consists, as flattened on the rock, of four rows of short, broad plates, with sharp ridges extending from the centers to the lateral edges, which gives the peculiar structure shown on the figure reproduced from photographs.

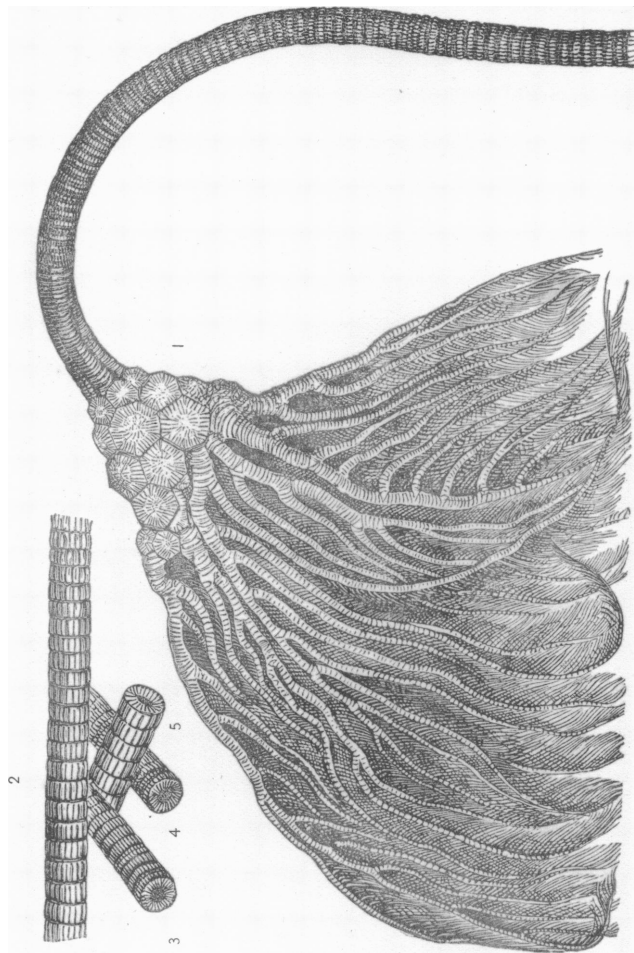




#### EXPLANATION OF PLATE IV.

The plate is a reproduction of the original woodcut given by Prof. James Hall on page 247 of the Rept. on the 4th Dist. of the N. Y. Geol. Surv., 1843, which, it is stated in "Naples Fauna in Western New York," is a "composite design from many fragments." It will be readily seen from this figure and a comparison with Fig. 2 of Plate II in this publication, which is from a photograph, that there is nothing needed to produce the figure but the addition of the stem, for which there was ample material present when the figure was made. If one compares the details of the two figures it will be seen that it is more perfect in detail than nine tenths of the figures of natural objects made at the time (1841 to 1843).





COPY OF ORIGINAL FIGURE OF CYATHOCRINUS ORNATISSIMUS *Hall*. Geol. Rept. 4th Dist. N. Y.



***Onychocardium portlandicum*, sp. nov.**

## PLATE I., FIG. 2.

Shell small, prominently convex, with a deeply excavated lunule, occupying the entire anterior end of the shell and bordered by a sharp ridge representing the anterior umbonal ridge of the valve, giving to the beaks of the shell a strongly curved, claw-like curvature, suggesting the generic name. Surface of the shell smooth, destitute of ornamentation.

Geological position and locality, in the Portage group at or near Portland Harbor, Lake Erie. Associated with the crinoid *Cyathocrinus ornatissimus* Hall.

## CORRECTION OF A MISSTATEMENT.

While cataloguing the collection of *Cyathocrinus ornatissimus* of the Portage group in the collection of the Museum, my attention was called to a statement recently made in a work published under State authority at Albany, N. Y., entitled "Naples Fauna in Western New York," a beautiful and very valuable work supplementary to Hall's volumes of "Palæontology of the State of New York," regarding the type specimen of the above-named Crinoid which is in the possession of the Museum of Natural History at New York.

If the statement above alluded to should be taken literally as it reads, it would seem to throw strong doubt on the authenticity of the claim that the specimen in the Museum collection is really the type of the species as figured and described in the Geological Report of the Fourth District of New York, on page 247 of that work, and also on table 56, figures 1-5, as well as on the back or sides of the volume itself.

The statement above referred to is that the author "elicited from Professor Hall the statement that this drawing (given in the Fourth District Report, p. 247), was a composite design from many fragments, in which all the parts represented were not actually shown, and that some of this material on which the figure was based had been in the possession of a collector who subsequently made over his collection to Williams College." The author of the statement also figures, in connection with the statement, a specimen which he calls on the base of the plate "The type specimen" under the name *Scytalocrinus ornatissimus* Hall.

In order to correct this misstatement, and to show to the scientific world the true type of the species, I have had photographs taken of the type specimen in the Hall Collection, together with a reproduction by the same means of the figure given in the Fourth District Report of the Geological Survey of New York, that any one caring for the truth of the matter may convince himself of the facts of the case. I

also give by the same photographic process a figure, natural size, of the specimen which is claimed in the above statement as the original type of the species *C. ornatissimus* Hall.

Early last spring (1904) I noticed among the specimens of *Cyathocrinus ornatissimus* in the collections here an imperfect specimen of another species entirely distinct from the original *C. ornatissimus* Hall (which, by the way, is not a *Cyathocrinus* or a *Scytalocrinus* as given in the work above mentioned, but is more probably a member of Jaekel's genus *Cosmocrinus*, which is based largely on Hall's *C. ornatissimus* and is a Devonian genus with the arms branching as in *C. ornatissimus* Hall) and which I now publish as *Maragnicrinus portlandicus*, and am convinced that the specimen stated by the author of the work above referred to as the type of *C. ornatissimus* is a third specimen of this new genus and species.



1, *MARAGNICRINUS PORTLANDICUS* *sp. nov.*

2, *ONYCOCARDIUM PORTLANDICUM* *sp. nov.*



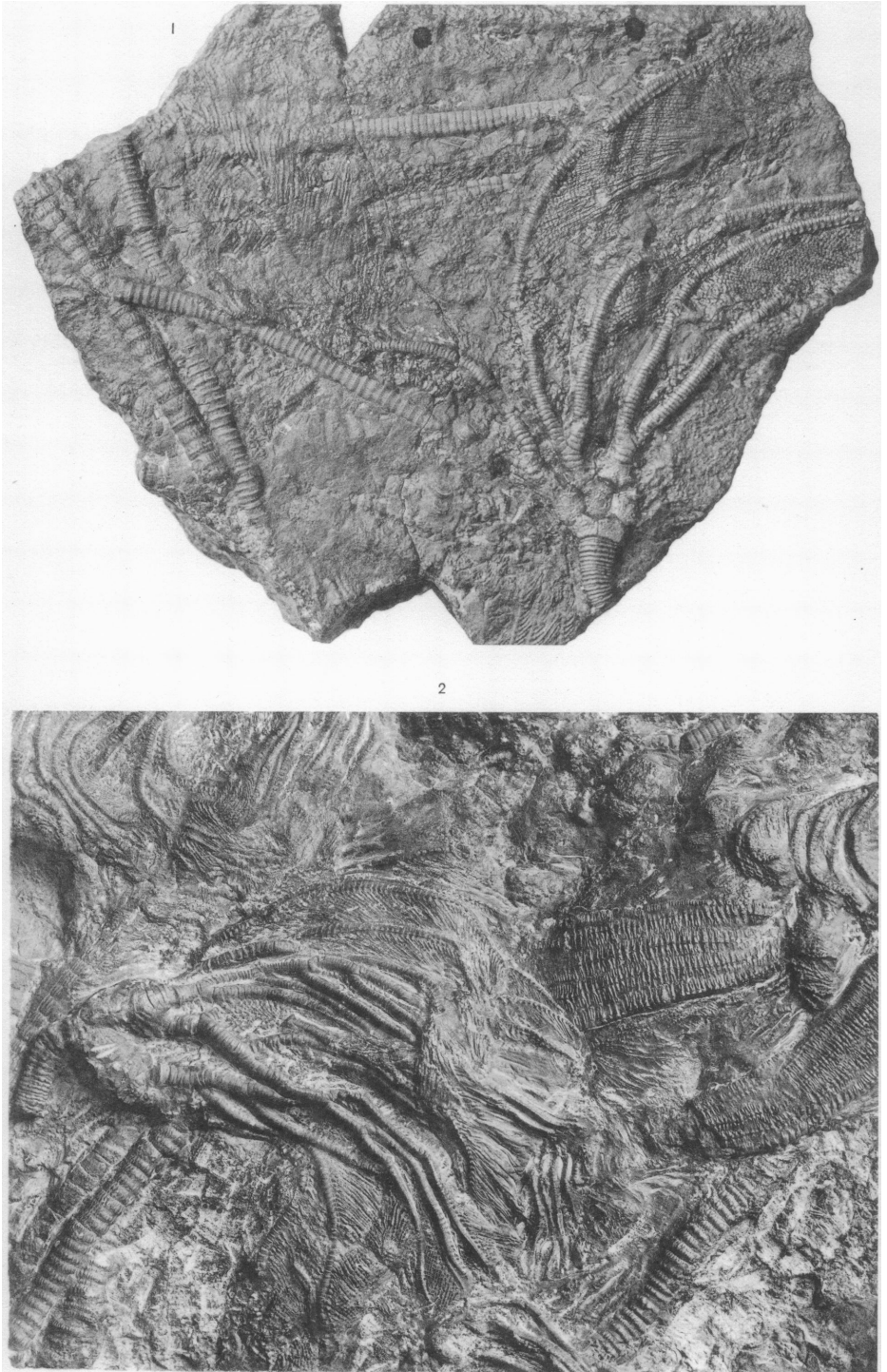




1, *MARAGNICRINUS PORTLANDICUS* *Whitf.*

2, *CYATHOCRINUS ORNATISSIMUS* *Hall. sp.*





1, *MARAGNICRINUS PORTLANDICUS* *Whitf.*

2, *CYATHOCRINUS ORNATISSIMUS* *Hall. sp.*

