

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

TWO NEW SUBTERRANEAN CRUSTACEANS FROM
THE UNITED STATES.

BY W. P. HAY.

During a recent visit to the Mammoth Cave of Kentucky, and Nickajack Cave in Tennessee, the writer was fortunate enough to obtain from the former twelve specimens of a small eyeless shrimp, and from the latter about as many specimens of an Isopod crustacean belonging to the genus *Cæcidotea* Packard.

The shrimp on examination proves to be so distinct from all the *Palæmonidæ* hitherto described as to necessitate the erection of a new genus. The Isopod, as it came from the type locality of *Cæcidotea nickajackensis* Packard was at first thought to be that species, but a careful comparison with Dr. Packard's description and figures and with specimens of *C. nickajackensis* from wells at Metcalf, Georgia, shows that it is distinct.

The new genus and the two new species may be described as follows:

Palæmonias gen. nov.

Similar to *Palæmonetes* in form and in the absence of a mandibular palpus. Gills four and a rudiment on each side. Rostrum long, slender

and serrate above and below. Antero-lateral margin of carapace with two spines. First two pairs of ambulatory appendages sub-equal in size and similar in form; chelate and with large bunches of pectinate bristles on the distal extremities of the fingers. The articulation of the hand with the carpal segment is at a point on the lower surface of the hand some distance from the proximal end; and the prominent knob-like extremity fits, when the limb is fully extended, into a broad sinus formed by the margin of a plate-like expansion of the carpus.

***Palæmonias ganteri* sp. nov.**

Carapace about one third the total length, very thin and delicate. Rostrum as long as the antennal scale, its upper surface with about fourteen small teeth, lower surface with two or three teeth. Eye stalks rudimentary and without pigment. Antennules bi-flagellate. Antenna longer than the body. Color in alcohol white; in life nearly transparent. Length about one inch and a quarter.

Named for Mr. H. C. Ganter, the manager of the cave, who through his deep interest in the scientific study of its fauna and flora was led to afford me exceptional facilities for making my investigations.

***Cæcidotea richardsonæ* sp. nov.**

Body slender but broader than in either *C. stygia* or *C. nickajackensis*. Margins of the head, body segments and telson hairy. Antennules as long as the peduncle of the antennæ, the flagellum with fifteen segments. Antennæ long and very slender, the flagellum with about sixty-five segments. Legs much longer than in the other species of this genus. Uropods of nearly uniform diameter throughout, slender, about one half as long as the body and thickly beset with short stiff hairs.

Color in life and in alcohol white.

Named for Miss Harriet Richardson, whose papers on North American Isopods are well known.