Special meeting, March 20th, 1866.

President WALKER in the Chair.

Dr. John H. Rauch was elected a Resident Member of the Academy.

The following paper was presented.

Descriptions of new Genera and Species of Macrurous Crustacea from the Coasts of North America.

By Dr. WILLIAM STIMPSON.

The materials upon which this paper is based, have been chiefly supplied from the Museum of the Smithsonian Institution. By the liberality of that Institution, however, most of the species herein described are also to be found in the Museum of the Chicago Academy of Sciences.

Glypturus, nov. gen.

Flagella of the antennulæ much longer than their peduncles. External maxillipeds indurated; merus and ischium not dilated, no broader than the propodus (penult joint), and concave on the outer surface; ischium armed along the middle of its inner edge with a sharp, prominent, spinous crest; carpus thick, and only half as broad as the propodus, which is greatly dilated within, and truncated, but not grooved, at the broad anterior margin, against which the dactylus folds; dactylus rather stout, compressed, and rather longer than the anterior margin of the propodus. Mandibles strong, much indurated; corona with its margin unevenly toothed, deeply cleft within, and with the basal process as broad and half as high as the corona itself, and having also a toothed edge. Appendages to the first two joints of the abdomen in the male nearly similar to the corresponding parts in the female. Caudal lamellæ deeply sculptured. Of the appendages to the penult joint of the abdomen, the outer lamella appear as if composed of two pieces soldered together, the outer one of which overlaps the inner; while the inner lamellæ are obliquely triangular. Terminal segment of the abdomen very small.

Glypturus acanthochirus, nov. sp.

Dorsal suture very deep. Front bearing an erect spine close to its anterior extremity, and a sharp, curved spine on either side, over the insertion of the outer autennae. Greater cheliped rather short and stout; ischium, merus and carpus with their lower edge spinous; merus with two spines above, and no projecting lobe at the base below; carpus much shorter than the palm of the hand; hand much broader than the carpus, with three spines on the upper edge, and a granulated area on the outer surface behind the base of the pollex or immovable finger; dactylus two-thirds as long as the palm of the hand. Smaller cheliped nearly similar to the greater one in shape and armature, but of less than half its size.

In a female specimen, the length of the animal, exclusive of the antennæ, is 3.9 inches; length of the carapax, 1.02; length of carpus and hand taken together, and measured to the end of the daetylus, 1.5 inches.

This species is not uncommon among the Florida Keys. A considerable number of specimens was found at the Tortugas by Dr. Whitehurst.

It cannot be mistaken for any of the Thalassinidea found on our coast, unless it be a species described by Prof. Lewis R. Gibbes under the name of Callianassa grandimana, in the Proceedings of the Charleston meeting of the American Association for the Advancement of Science, in 1850. If the description given by that author is correct, however, our species differs from that named by him in having the palm of the hand less than twice as long as the carpus, and in having a granulated area on the outer surface of this palm; as well as in the armature of the lower edge of the greater cheliped.

Callichirus, nov. gen.

Flagella of antennulæ rather shorter than their peduncles. External maxillipeds soft, coriaceous; merus and ischium compressed and dilated; merus short; carpus and propodus much dilated at the inner margins; propodus larger and more dilated than the carpus, and with a groove in its anterior margin, into which the small, curved dactylus folds. Inner lobes and laciniæ of the second pair of maxillæ for the most part narrow. Mandibles very small and weak, not indurated; internal basal projection only slightly developed. Carpus and hand of the greater cheliped very long. The appendages to the first and second joints of the abdomen in the male are small; those of the first pair having but one branch, while those of the second pair have two branches, the outer branch being minute. Caudal lamellæ much thickened. Inner lamellæ of the appendages to the penult joint of the abdomen very narrow, almost styliform. Terminal joint of the abdomen short and broad, contracted at the base, and emarginated at the extremity.

The type of this genus is the Callianassa major of Say (Jour. Acad. Nat. Sci., Philad., I, p. 238). This species is found abundantly on the sandy shores of the Southern States,—North and South Carolina, Georgia, Florida, etc. It burrows in the sands about low-water mark, its holes being usually about one foot in depth.

Scyllarus nodifer, nov. sp.

Upper surface tuberculated; tubercles sparsely setose. A strong, bidentate projection on the gastric region of the carapax. On the third segment of the abdomen above there is a very prominent, median knob, which forms the posterior extremity of the body when the abdomen is folded in. The second joint of the antennæ is armed with four or five teeth on the antero-exterior margin,—the teeth, with the exception of that at the angle, being little prominent. Fourth joint of the antennæ broader than long, with the margins crenulated, and the antero-exterior angle prominent.

The length of the largest specimen is about five inches. In a male, the length of the carapax is 2.1; and its breadth at the anterior extremity, 1.88 inches. In a female, length of carapax, 1.225; breadth anteriorly, 1.13 inches.

Found among the Florida Keys. The specimens in the Smithsonian Museum were taken at the Tortugas by Dr. Whitehurst, and there are examples from Key West in the Museum of Comparative Zoölogy at Cambridge.

Hippolysmata californica, nov. sp.

Surface of carapax and abdomen minutely pubescent. Rostrum short, scarcely over-reaching the ante-penult joint of the peduncle of the antennulæ, and six-toothed above, the posterior tooth being situated at one-half more than the usual interval, behind the next tooth, and at about the anterior third of the length of the carapax; below, the rostrum is armed with three minute teeth. On the anterior margin of the carapax there is a strong spine above the base of the antennæ, and a minute one below it. Flagella of the antennulæ equal, and very long, one and a half times as long as the body. Acicles or appendages to the antennæ broad even to their tips, and much longer than the peduncles of the antennulæ. External maxillipeds thickly setose, and reaching the extremity of the acicles. Terminal segment of the abdomen with two pairs of aculei above.

Length, 1.25 inches.

Found at San Diego, Cal., by Mr. Cassidy.

This is the analogue of the Florida species, H. Wurdemanni (Hippolyte Wurdemanni Gibbes), from which it differs in its longer antennulæ, smaller eyes, etc.

Rhynchocyclus parvulus, nov. sp.

Dorsum of the carapax elevated, and protuberant at the middle of its length, its anterior half having a considerable slope forward, and being obtusely carinated and armed with five small, spiniform teeth;—the poste-