The ouly distinction that I can determine is that in the Challenger specimen, the dactylos of the great chela terminates in a long, slightly curved, tooth-like projection, attached not at the apex but on the under surface near the margin. It may be that it gets worn off by use, or it may have been so hidden in Heller's specimen by the hirsute margin that it escaped notice, as it did in this specimen for some time.

Alpheus lwvis, Randall (Pl. XCIX. fig. 3).
Alpheus lavis, Randall, Journ. Acad. Nat. Sci. Philad., vol. viii. p. 141.
$" \quad$ Dana, U.S. Explor. Exped., Crust., p. 556 , pl. xxxv. fig. 8.
$" \quad$ Heller, Reiso der Novara, Crust., p. 107.
Rostrum spiniform, reaching to nearly the extremity of the first joint of the peduncle of the first pair of antennæ, and separated from the orbital lobes by a deep fissure on each side. Orbital lobes prominent and armed with a small tooth on the frontal margin.

First pair of antennæ furnished with a stylocerite that reaches beyond the extremity of the first joint of the peduncle, and to nearly the middle of the second; second joint scarcely longer than the first, third shorter than the second. The flagella are short, the upper being about the length of the peduncle, and the lower about twice the length of the upper.

Second pair of antennæ having the tooth at the base moderately long, and the scaphocerite as long as the peduncle of the first pair, but scarcely so long as that of the second; the flagellum is about half the length of the animal.

First pair of pereiopoda subequal on the two sides, both being smooth and compressed, that on the left side having the dactylos shorter than that on the right, and armed at the dactyloid articulation with two blunt teeth, whereas that on the right has none. Second pair of pereiopoda a little longer than the third, and having the second articulus of the carpos subequal with the first, which is rather the longer. The third and fourth pairs of pereiopoda have the meros broad and long, and the carpos and propodos stout and short, the latter being armed on the posterior margin with short spines. The fifth pair is broken, but from the remnant it appears to be more slender than the preceding.

Telson slightly tapering, with two spines on the dorsal surface, on each side of the median line; posterior margin rounded and fringed with long hairs, and armed at the outer angles with a small spine.


