pleon is nearly three times as long as the carapace and terminates in a telson that is rounded at the extremity and fringed with ciliated hairs, flanked with a small spine on each side, and one on each side of the median line.

The ophthalmopod is orbicular and projects free in front of the frontal margin.

The first pair of antennæ carries two short flagella. The second pair is styliform and supports a small bud-like process near the middle.

The mandibles and first pair of siagnopoda have not been examined.

The second and third pairs consist of a peduncle and two unequal branches, the longer, which I take to be the basecphysis, is tipped with four or five long ciliated hairs; the shorter, which appears to be the incipient condition of the permanent joints, terminates in three or four simple hairs.

The first and second pairs of gnathopoda resemble the preceding two pairs of appendages but are slightly longer.

The first pair of pereiopoda is in an advanced condition and chelate, but unequal in form and proportion; that on the right side is the smaller, carries a multiarticulate basecphysis, and consists of a united ischial and meral joint, a short carpos, a propodos that has the margins parallel and forming with the dactylos a well-developed chela; that upon the left side differs in having the propodos very much larger, and the margins of that joint are not parallel, but much larger at the carpal extremity, gradually narrowing distally and terminating in a sharply pointed chela. The three succeeding pairs are biramose and resemble the four anterior, excepting that they are rather longer.

Each of the anterior five somites of the pleon carries a pair of short biramose pleopoda; the sixth is associated with the telson and has as yet no appendage.

The Megalopa was got from the ovum of a near ally of Alpheus minus, but differing in having a long powerful tooth on the outer margin of the scaphocerite, the foliaceous part being smaller, membranous and very thin. I previously (loc. cit., supra) named this specimen Homaralpheus, making it a separate genus, from the impression that species producing a Megalopa could not be placed in the same genus as those producing a Zoea.

Geographical Distribution.—The several species given in the following list, with their habitats and depths, so far as known, appear to belong to the shallow waters or to depths less than 60 fathoms. Only one locality is recorded with a greater depth than this—Alpheus avarus having been procured off Japan, at Station 234, in 2675 fathoms, but as this species is known to inhabit comparatively shallow seas, this case is probably due to some acceidental circumstance. Their geographical range is very extensive between the north and south temperate zones, and in one instance a specimen of Alpheus minus has been recorded from an inland fresh-water pond in southwest Colorado.