

treated with a reagent, it is difficult to determine their separation from each other, but the absence otherwise of the third pair of siagnopoda convinces me as to the homological relation of the two appendages.

The second pair of gnathopoda is long, slender, and five-jointed; the coxa is short, the basis but a little longer, and supports a broad, multiarticulate ecephysis that reaches as far as the distal extremity of the next succeeding joint, which probably consists of the ischium and meros fused together; it is longitudinally depressed on the upper surface, and slightly curved on the inferior to allow of free passage over the oral appendages; the next joint, which I take to represent the carpos, is cylindrical, and about half the length of the preceding; the terminal joint, which therefore represents the propodos, is half as long again as the carpos, and of the same diameter, it is cylindrical at the carpal extremity, and flattened and somewhat spatuliform at the rounded distal end, which is thickly tipped on the inferior margin with serrate hairs, and on the superior margin with equidistant, solitary, curved hairs.

The first pair of pereiopoda (Pl. CXL. *k*) is long and slender, reaching beyond the distal extremity of the scaphocerite; the coxa is short, and carries an ecephysis supported on a small pedicle, the base suddenly enlarging from the pedicle, it is cylindrical, and terminates in a multiarticulate extremity, which reaches beyond the ischium, which is long, slender, and laterally compressed on the outer side for the reception of the robust ecephysis; the meros is long, slender, and slightly compressed laterally, it is twice the length of the ischium, and small throughout; the carpos is short and slightly larger at the propodal than at the carpal extremity; the propodos is long, narrow, and chelate; the palm is twice the length of the carpos, and subequal in length with the pollex and dactylos, which correspond with each other in form, being long, slender, and curved; the points where the chela is closed overlap each other considerably, and the inner margin is deeply serrate (*k'*).

The second pair of pereiopoda resembles the first in form and appearance, but is a little longer, a circumstance that is due to a variation in the length of different parts; the coxa and basis are similarly formed to those of the first pair, and the latter supports a closely similar ecephysis, but the ischium is shorter, while the meros is much longer, being six or eight times as long as the ischium, and is armed with a small sharp tooth on the inferior margin, about one-third of its length from the ischial articulation; the carpos and palm are nearly the same length, but the fingers are longer than in the first pair, and are more strongly serrate. This serrature is peculiar, consisting of a series of processes that are flattened and pointed and stand on a long base in the case of the dactylos, and in the case of the pollex are rounded at the apex, slightly curved, and stand on a short base; in both pollex and dactylos they are directed obliquely forwards and possess a spiral structure.

The third pair of pereiopoda (*m*) is short and slender, and carries a short basecephysis