chelate than the left, which approaches the more normal form. The carpos of the right side is generally formed as if it were a continuation of the propodos; this is particularly so in *Callianassa*, *Callianidea*, and *Trypæa*, and we presume from their general resemblance to the typical genus that it is the same also in *Cheramus* and *Scallasis*, of which genera, unfortunately, our specimens have lost the first pair of pereiopoda.

The genus *Gebia* differs only in this respect, but in nothing else can I detect any anatomical point of separation of more than generic value, and, according to Professor Huxley's observations, the branchiæ are of the same specific character as is found in the type of this family.

Both the podobranchia and mastigobranchia are wanting in *Callianassa*, but the mastigobranchia is present in *Callianidea* in the form of slender plates fringed with hairs, and at its base a small bud-like process represents the podobranchia.

Thus it appears that in the form of the carapace, in the subchelate character of the first pair of pereiopoda and the less Anomurous condition of the posterior pair, *Gebia* approximates to *Thalassina*, whereas in the form of the rhipidura, and in the condition of the branchiæ, it approaches nearer to *Callianassa*; it resembles *Callianidea* in having second pair of pleopoda constructed in the same form as the third and following, although fringed with articulate ciliated hairs as in *Cheramus*. It therefore appears correct to divide this family into three divisions.

Division A.

The carapace is ovate, the rostrum is reduced to a small point, and the posterior pair of pereiopoda is minutely chelate; the podobranchiæ, mastigobranchiæ, and pleurobranchiæ are entirely absent; the second pair of pleopoda is slender and filamentous, and the three following are broad, foliaceous, and fringed with ciliated hairs.

Callianassa, Leach.

The structure of the branchiæ of *Callianassa* is so intermediate in character that it may be claimed by anatomists as belonging to either the Phyllobranchiata or to the Trichobranchiata, as the plumes consist of two rows of long slender filaments so closely impacted together that they are flattened into plates; but we see in *Cheramus* that when the pressure is relieved, the filaments assume a cylindrical form, as in the typical Trichobranchiata, with which the external features of the animal strongly associate it.