second, sub-chelate, the pollex never being produced beyond the length of the dactylos. The three following pairs monodactyle or imperfectly chelate. The posterior pair is more or less minutely chelate in the female, and monodactyle in the male.

This tribe consists of genera that differ widely in their external aspect, but are closely associated in structural affinities and development. Some are dorsally depressed, others are laterally compressed. Some have the ophthalmopoda projecting on an advanced somite, others have them lodged in orbits excavated in the frontal margin of the carapace. Some have the second pair of antennæ long and slender, while others have them reduced to a short discoid plate.

But they all agree in the following points:—the character of the branchiæ, the absence of a scaphocerite attached to the second pair of antennæ, in having only six joints to the pereiopoda, in having no true chela, in having the ova very small, and in the Phyllosoma condition of the brephalos. The examination of an undescribed form which I have named Synaxes, in which several features of these two families are combined, has induced me to arrange them all under one head. Synaxes has the antennæ of Palinurus, while the pereiopoda are like those of Scyllarus, the carapace is like that of Astacus, and the pleopoda like those of Scyllarus. Having no means of knowing the character of the brephalos when it quits the ovum, and as both Palinurus and the Scyllariform genera have the young hatched in the megalopa stage, resembling Phyllosoma, I am induced, until future observation demonstrates the fact, to believe that the brephalos of Synaxes also resembles Phyllosoma. I therefore follow the arrangement of previous authors and place the tribe under two families, into which it naturally divides, Scyllaridæ and Palinuridæ.

## Family SCYLLARIDÆ.

Carapace horizontally depressed. Eyes implanted in orbits excavated in the dorsal surface of the cephalon. Second pair of antennæ short, squamiform. The mandibles bearing a uniarticulate synaphipod. Pereiopoda simple, excepting the posterior pair of the female which is minutely chelate.

## Ibaccus, Leach.

Geographical Distribution.—Ibaccus incisus has been recorded from New Holland and the adjacent seas; Ibaccus antarcticus from Japan and the coasts of Asia; and Ibaccus parræ from the Antilles. Stimpson found Ibaccus novemdentatus at Hong Kong. De Haan obtained Ibaccus ciliatus from Japan. Ibaccus brevipes was taken south of New Guinea; Ibaccus alticrenatus off New Zealand, and Ibaccus verdi was taken in the Atlantic.

No specimen of this genus, so far as I am aware, has ever been found fossil.

<sup>1</sup> Ann. and Mag. Nat. Hist., ser. 5, vol. vii. p. 220, pl. xiv.