beginning of the arms; the suckers are small and globular and the highest power of a hand-lens shows no teeth on their horny rings.

Sepia andreana is distinguished by the extraordinary development of the second arms, which are nearly twice as long as the others, and by the greater shortness of the tentacular club, which bears a single median row of five suckers larger than the others. The suckers on the tips of the longest sessile arms are in two series.

In one specimen the tentacles were completely exserted, in another partially, in the third completely retracted, in which condition they could be distinctly traced through the integuments on the under surface of the head disposed in close windings (Pl. XXI. fig. 11).

Sepia kiensis, Hoyle (Pl. XVII. figs. 6-11).

1885. Sepia kiensis, Hoyle, Diagnoses II., p. 194. 1885. , , Hoyle, Prelim. Rep. II., p. 299.

Habitat.—Station 192, off the Ki Islands, Arafura Sea, September 26, 1874; lat. 5° 49′ 15″ S., long. 132° 14′ 15″ E.; 140 fathoms; blue mud. One specimen, ♀.

The Body is narrow, widest anteriorly, and tapering gradually backwards; the fin is narrow, less than one-quarter the breadth of the body, widening a little behind; it commences 1 mm. from the anterior margin and extends to within 2 mm. of its fellow behind. The mantle-margin is prominent dorsally and slightly emarginate ventrally. The siphon does not quite extend to the bases of the arms.

The Head is broad, and the eyes rounded and prominent.

The Arms are subequal, the order of length being 4, 3, 2, 1; they are very short, about one-third the length of the body; the first and second are conical, the third flatter, with a slight ridge externally, and the fourth broad and flat with a distinct crest. The suckers are in four series throughout, small, spheroidal, and not very oblique; the horny ring is smooth. The specimen being a female no hectocotylus is developed. The umbrella is evanescent, extending at most only up to the second row of suckers; the buccal membrane has five points and is rounded dorsally; the spermatic pad is but slightly developed. The outer lip is thin and grooved longitudinally, the inner thicker and papillate.

The Tentacles are as long as the head and body; the stem being slender and indistinctly three-sided. The club (fig. 8) is very slightly expanded; a protective membrane, grooved obliquely on the dorsal aspect, is situated on the outer margin, and there is a web on the internal side. The suckers are in four or five series, which are slightly larger towards the inner margin; the horny ring presents a few acute teeth.

The Surface is smooth throughout.

The Colour is a dull reddish grey above, yellowish below.