

apparent, and consequently described them as "seeming" to be in four series. The shell of the Challenger specimen is decidedly narrower than the one figured by Appellöf, and the raised median tract appears to be by no means so prominent.

Metasepia, subgen. nov.

Body short, rounded, thick dorso-ventrally; *nuchal cartilage* without linear groove and *mantle* devoid of corresponding ridge; *siphono-pallial* articulation deep.

Tentacular club with unequal suckers.

Shell rhomboidal in outline, with no calcareous covering on the dorsal surface of the chitinous sheet; no *spine*.

Sepia (*Metasepia*) *pfefferi*,¹ Hoyle (Pl. XXI. figs. 1-10).

1885. *Sepia* (*Metasepia*) *Pfefferi*, Hoyle, Diagnoses II., p. 199.

1885. " " " Hoyle, Prelim. Rep. II., p. 304.

Habitat.—Station 188, south of Papua, in the Arafura Sea, September 10, 1874; lat. 9° 59' S., long. 139° 42' E.; 28 fathoms; green mud. One specimen, ♀.

The Body is short and stout, broadest about the middle of its length, very thick (dorso-ventrally), and bluntly rounded behind. The *fins* are one-fourth as broad as the body and placed much nearer the dorsal than the ventral surface; they commence 2 to 3 mm. from the anterior margin and are connected by a narrow fillet behind; a slightly raised ridge passes down the ventro-lateral aspect of the body. The *mantle-margin* projects very slightly dorsally and is a trifle emarginate opposite the funnel; the *nuchal cartilage* has no distinct linear groove as in most species, but only a slight depression, while the corresponding part of the mantle has a triangular eminence about half as broad as long, and with the rounded apex directed forwards; the *connective cartilages* are deeper than in most species of *Sepia*, but there is no distinct knob as in *Sepiella*, their greatest depth being in the middle not anteriorly; there is no posterior gland. The *siphon* reaches up to the depression between the ventral arms.

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

The Arms are subequal, in order of length 3, 4, 2, 1, or 4, 3, 2, 1; they are rather more than half as long as the body and distinctly three-sided, having a ridge on the outer side of each, broadest on the ventral ones; they taper evenly to very fine points; the inner surface of each is roughly papillate, and has hemispherical depressions into which the suckers are retracted. The *suckers* are in four series throughout, almost hemispherical, not very oblique, and marked with meridional grooves; the *horny ring* bears irregular square teeth. The *hectocotylus* is not developed, the specimen being a

¹ Named after my friend Dr. Georg Pfeffer of the Hamburg Museum, who has recently published a valuable catalogue of the Cephalopoda of that institution.