denticulate bars. Outer spongy shell very delicate, arachnoidal, with numerous prominent conical spongy papillæ. Central capsule ellipsoidal, half as long and broad as the shell.

Dimensions.—Shell 0.46 long, 0.32 broad; mouth 0.045 broad.

Habitat.—Central Pacific, Stations 271 to 274, surface.

2. Arachnocalpis sphæroides, n. sp.

Shell spheroidal, of the same structure as the preceding ellipsoidal species, with the same form of the spongy envelope; differing from it in the globose form and the shorter peristome, bearing only nine or ten small conical divergent teeth. Central capsule spherical.

Dimensions.—Shell 0.3 diameter, mouth 0.04 broad.

Habitat.—Central Pacific, Stations 265 to 270, surface.

Subfamily 2. Archiphænida, Haeckel, 1881, Prodromus, p. 429.

Definition.—Phænocalpida with the basal mouth of the shell fenestrated (vel Monocyrtida multiradiata clausa).

Genus 522. Phænocalpis, n. gen.

Definition.—Archiperida (vel Monocyrtida multiradiata clausa) with an internal axial simple columella, prolonged outside into an apical horn.

The genus *Phænocalpis* and the following *Phænoscenium* comprise those Archiphænida in which the vertical axis of the shell-cavity is occupied by a simple or branched columella, arising from the centre of the base and prolonged into an apical horn. This columella may be either the vertical rod of a *Plectaniscus* or the remnant of an original ring of *Petalospyris*. The latter genus differs by its sagittal constriction.

1. Phænocalpis petalospyris, n. sp. (Pl. 97, fig. 4).

Shell subspherical, rough, with irregular, roundish pores, larger than the bars. Columella straight, central, thin, prolonged into a large apical horn with three dentate edges. Six basal feet curved, divergent, lamellar, with a middle rib and dentate edges.

Dimensions.—Shell 0.07 long, 0.05 broad; horn and feet 0.06 long. Habitat.—Tropical Atlantic, Station 347, depth 2250 fathoms.

1 Phonocalpis = Urceolate shell; Quiva, nalais.