The genus Conchopsis and the following Conchoceras differ from the other Concharida in the strong lateral compression of the shell, so that each valve is provided in the sagittal plane with a sharp prominent keel, comparable to the dorsal and the anal fin of fishes. These compressed shells are in general twice to three times as large as the more roundish and keelless shells of the five preceding genera. The sculpture of the fenestrated valves is extremely elegant. Conchopsis possesses at the aboral hinge not the two prominent caudal horns, which mark the following genus Conchoceras, but in some species a peculiar ligament connects the aboral ends of both valves.

1. Conchopsis orbicularis, n. sp. (Pl. 125, fig. 3).

Shell subcircular, lenticular, strongly compressed on both sides, nearly as high as long, its sagittal perimeter nearly circular; frontal and cinctural perimeter spindle-shaped. Borders of the two boat-shaped valves smooth in 0.4 of the oral part, and in 0.1 of the aboral part of their length, strongly dentated in the remaining 0.5 middle part; about twenty-five slender, straight teeth on each side of one valve, size of the teeth increasing from the aboral towards the oral pole. In the half lateral perimeter of the shell (along the right and the left borders of each valve) sixty to sixty-five pores, in the half sagittal perimeter (along the keel of each valve) eighty to eighty-five pores, in the half equator sixty to sixty-five pores.

Dimensions.—Length of the shell 0.53, height 0.55, breadth about 0.2.

Habitat.—South Atlantic, west of Tristan da Cunha, Station 333, depth 2025 fathoms.

2. Conchopsis compressa, n. sp. (Pl. 125, figs. 7, 8).

Shell lenticular, strongly compressed on both sides; proportion of its longitudinal diameter to the sagittal and lateral = 10:9:3, its sagittal perimeter elliptical (fig. 7), cinctural and frontal perimeter spindle-shaped (fig. 8). Borders of the two boat-shaped valves smooth in 0·3 of the oral, and 0·3 in the aboral part, dentated in the remaining 0·4 middle part; about forty to forty-four very slender teeth of equal size on one lateral edge of each valve. In the half frontal perimeter of the shell (along the border of the valve) sixty-four to sixty-eight pores, in the half sagittal perimeter (along one valve-keel) seventy to eighty pores, in the half equator forty-four to forty-eight pores. Ventral and dorsal pores linear, three to four times as long as the circular, lateral pores.

Dimensions.—Length of the shell 0.6 to 0.8, height 0.55 to 0.72, breadth 0.2 to 0.3.

Habitat.—North Pacific, between 30° and 40° north latitude (between Japan and San Francisco), in depths from 2000 to 3000 fathoms frequent, Stations 241 to 252.

3. Conchopsis carinata, n. sp. (Pl. 123, fig. 8).

Shell subcircular, lenticular, in the central half slightly compressed, nearly spherical, in the peripheral half strongly compressed, with a broad, hyaline, smooth keel on the sagittal plane. Borders of the two valves smooth in the 0.2 of the oral, and 0.1 of the aboral part, strongly