the central part of the medal-shaped or cylindrical disk. Two opposite radial spines very long and thin, cylindrical, twice to three times as long as the diameter of the disk, only half as thick as the breadth of one ring.

Dimensions.—Diameter of the disk (with five rings) 0.17; breadth of each ring 0.014; pores 0.003 to 0.012.

Habitat.—North Pacific, Station 244, depth 2900 fathoms.

## 2. Xiphodictya amphirrhopalia, n. sp. (Pl. 42, fig. 11).

All rings of the disk concentric, circular, with increasing breadth from the centre; the fifth ring twice as broad as the second. Central chamber very large. Margin of the lenticular disk thorny, much thinner than the central part. Pores irregular, roundish, two to three on the breadth of each ring. Two opposite radial spines club-shaped, about as long as the diameter of the disk, in the outer spindle-shaped part three to four times as broad as at the base.

Dimensions.—Diameter of the disk (with six rings) 0.17; breadth of the second ring 0.008, of the fifth ring 0.016.

Habitat.—Pacific, central area, Station 265, depth 2900 fathoms; also fossil in the Tertiary rocks of Sicily (Caltanisetta).

## Subgenus 2. Xiphospira, Haeckel.

Definition.—All rings of the disk or a part of them not concentric, spirally convoluted; sometimes irregular or interrupted.

## 3. Xiphodictya staurospira, n. sp. (Pl. 42, fig. 12).

All rings of the disk not concentric, half spiral. Four radial beams, crossed perpendicularly and zigzag-shaped, divide each ring into four quadrants; the quarter-ring of each quadrant halves the two adjacent rings. All rings of equal breadth. Pores irregular, roundish, two on the breadth of each ring. Two opposite radial spines pyramidal, somewhat shorter than the diameter of the disk.

Dimensions.—Diameter of the disk (with six rings) 0.16; breadth of each ring 0.014; pores 0.003 to 0.007.

Habitat.—South Pacific, Station 295, depth 1500 fathoms.

## 4. Xiphodictya heliospira, n. sp.

All rings of the disk not concentric, convoluted in a simple, regular, spiral line; all nearly of equal breadth. Pores subregular, circular, two on the breadth of each ring. Two opposite radial spines conical, about as long as the radius of the disk. Margin of the disk thorny. (Differs from Stylodictya heliospira, Pl. 41, fig. 8, mainly by the two strong, opposite, radial spines.)