Columella tuberculate, distinct. Synapticulæ rarely conspicuous, fused throughout so as to give a close and dense texture to the corallum.

This species may be easily distinguished from *Domoseris porosa* by the rather finer striations of the under surface, by the more isolated projections of the upper surface, by the non-perforated septa, by the thinner, nearly entire, less swollen and less irregularly discontinuous septo-costæ, by its rather conspicuous columella, and by the fused state of the synapticulæ. It has many points of general resemblance to *Leptoseris* (*Mycedium*) elegans (Milne-Edwards and Haime), but differs from it in essential structure.

A single large specimen is in the collection.

Locality.—Tahiti.

3. Domoseris regularis, n. sp. (Pl. V. figs. 6-6b).

Corallum broad, explanate, irregularly bent, thin, from about 4 to 5 mm. thick at a distance of about 8 cm. from the margin, and very thin at the extreme marginal parts; with supplementary basal attachments. Under surface with well-pronounced depressions and prominences marked by fine costal striations. The calicles irregularly scattered, not crowded, and rarely or not at all grouped into nodular masses, the projections being low and rather small; the fossa small, about 1 mm. wide, rather deep. The septa of two or three cycles, unequal, close, very granulated, perforated; the septo-costæ nearly evenly raised, alternately very much thickened, with a rounded upper margin divided into rather unequal, broad, blunt teeth; often discontinuous, and, more especially below the more central calicles, very irregularly bent, sinuous and contorted. Columella small, inconspicuous. Synapticulæ small, irregularly developed, not abundant, nor fused throughout to form a continuous, solid lamina except quite at the base.

This species is easily distinguished from the *Domoseris solida* by its distinctly toothed and more unequal, perforated septa, by its non-fused synapticulæ, and by the less elevated and more distant projections of the upper surface. From the *Domoseris porosa* it is distinguished by the very thin corallum, by its much less uneven and scarcely rough surface, due to the more evenly raised and more equally thickened septo-costæ, which are much less discontinuous and contorted, by the much less perforated nature of the septa, and by the comparatively slight and irregular development of synapticulæ.

Only a fragment of a large specimen, and a very small specimen, were obtained. The small specimen is from about 2 to 3 cm. wide, irregularly shallow-vasiform, attached to and incrusting a portion of a shell. It contains about four distinct calicles which have the lower border scarcely at all raised, with the septo-costæ irregularly toothed and subentire. Its growth has been much interrupted by foreign matter, so that the parent calicle does not occupy a central position.

Locality.—Tahiti, 30 to 70 fathoms.