

HAB. Caldera, Mindanao, one of the Philippine Islands. Without flowers or fruit.

A large and stiff species; foliage somewhat bristly, shining, yellow. Main stem 4–6 inches long, prostrate, sparingly radiculose; branches numerous, erect, 1–2 inches long, simple, or ramulose, they and the ramuli cuspidate. Leaves crowded, widely spreading, almost horizontal, ecostate, of a subelliptical outline, with a long linear often once or twice twisted acumen (about  $\frac{2}{3}$  the length of the rest of the leaf); margins more or less convolute, denticulate above; texture thin, firm, and smooth, composed of very minute, linear pachydermous cellules, indistinctly arranged in obliquely transverse lines; the cellules below the middle of the leaf, exhibit a subcrenate outline. The large subauriculate basal angles of the leaves are composed of numerous (30–40) large transparent, inflated, oblong cellules of a deep golden yellow, arranged in concentric lines.

PLATE 15, B.—HYPNUM CALDERENSE, a barren plant, of the natural size. Fig. 1. Portion of a branch. 2, 3, 4, 5, 6, 7, 8. Leaves. 9. Portion of the base of a leaf, showing the reticulation. 10, 11. Portions of upper part of a leaf, showing the same.—Details magnified.

*Sec. 9. Papillata: caulis decumbens vel assurgens vage vel subpinnatim ramosus, folia tenui-acuminata plus minus papillosa.*

### 39. HYPNUM PAPILLATUM, *Harv.*

*Hypnum papillatum*, Harv. in Lond. Jour. Bot. 2, p. 18; Hook. Ic. Pl. Rar. t. 23, f. 8; Müll. Synop. Musc. Frond. 2, p. 273.

HAB. Feejee Islands.

### 40. HYPNUM PUNGENS, *Hedw.*

*Hypnum pungens*, Hedw. Sp. Musc. p. 237, t. 60; Doz. & Molkb. Prod. Flo. Bryol. Surin. p. 35, t. 19.