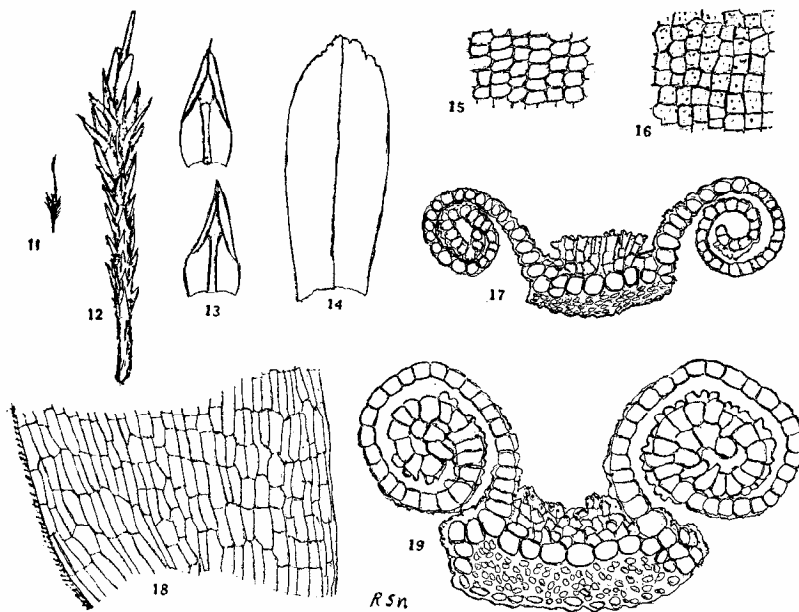


***Pseudocrossidium apiculatum* sp. nov.**

Dioicous, the outer perigonal leaves like those of the upper stem, the inner much shorter, broadly ovate, with narrow costa, enclosing numerous antheridia, 0.4 mm. long, and abundant, slightly club-shaped paraphyses: plants in compact, greenish brown mats with mostly simple stems 1 cm. high, with large, very distinct central strand and outer walls of 1 or 2 rows of rather small cells with scarcely thickened cell-walls; stem-leaves ovate lanceolate, acute, the upper about 1.5 mm. long appressed and mostly twisted about the stem when dry, the margins in the upper half often twice revolute; costa excurrent, apiculate, in the widest part 140-160  $\mu$  across, in cross-section showing 6 to 8 guide cells, below them a large stereid band and on the upper side 3 or 4 layers of lax, thin-walled cells forming a compact densely papillose surface or broken up into distinct filaments 2 or 3 cells high with the terminal cell papillose (sometimes also a thin band of stereid cells occurs just above the guide-cells); cells of upper leaf mostly not elongate or transverse elongate, often 12 x 12  $\mu$  papillose on both sides, those of the revolute part often much inflated or with greatly enlarged papillae on the upper face; lower cells of leaf paler, mostly rectangular, 12-16  $\mu$  wide and 20-40  $\mu$  long; perichaetial leaves pale, convolute, the inner 2.5 mm. long or more, projecting well above the stem-leaves, somewhat obovate to oblong, the apex obtusely rounded and more or less erose, the costa narrow and vanishing a little below the apex; fruit unknown.

PERU: above Arequipa, August, 1897.

BULL. TORR. BOT. CL. 42:397. 23 f. 1915



*Pseudocrossidium apiculatum* 11. Plant about natural size. 12 Plant, X 6. 13. Stem-leaves, X 13. 14. Perichaetial leaf, X 13. 15. Cells in upper leaf about midway between margin and costa, X 183. 16. Cells just above the rectangular basal cells, X 183. 17. Cross-section of leaf about one third down, X 124. 18. Basal cells of leaf from margin to costa, X 124. 19. Cross-section of a second leaf, X 183.