sional but rare occurrence. According to my own experience the compressed perianth is a very constant feature of the species. The perigonial bracteoles of *L. Rutheana* are sometimes, but not always, shorter than the ordinary underleaves.

IO LOPHOZIA KAURINI, (Limpr.) Steph. Bull. de l'Herb. Boissier, II. 1: 1147. 1901.

Jungermannia Hornschuchiana paroica, Ekstrand, Bot. Notis. 1879: 36.

Jungermannia (Lophosia) Kaurini, Limpr. Jahresb. Schles. Gesell. vaterl. Cultur, 61: 204. 1884.

Jungermannia Muelleri, forma paroica, Bernet, Cat. Hép. Sud-Ouest de la Suisse, etc. 68. Pl. 3. 1888.

Hunker Creek (44 p.p., 49, 63). New to America. Previously known from Norway, Switzerland and Siberia.

Limpricht's description of L. Kaurini and the beautiful figures published by M. Bernet give so clear an idea of the species that only its more important characters will be alluded to here. It agrees with L. Rutheana in its paroicous inflorescence, in its bifid leaves and in the possession of underleaves. It is, however, less robust and shows little or no trace of purplish or reddish coloration. The lobes of its leaves are rounded to acute and on slender shoots are not infrequently apiculate; the sinus is broad, varying from obtuse to lunulate. According to Limpricht obtuse or rounded lobes are to be regarded as the more typical, but acute lobes are about as frequent in the Yukon material. In most cases the lobes are subequal in size, but sometimes the postical lobe is slightly the larger and in such cases tends to be blunter also. The leaf-cells are somewhat smaller than in L. Rutheana, averaging 0.035 x 0.025 mm. in the middle of the leaf; the trigones also are less conspicuous, but the cuticle is similarly striateverruculose. The underleaves are small and are commonly undivided; they vary from subulate to lanceolate and end in a long attenuate point. Sometimes an underleaf will bear one or two short marginal teeth or occasionally a longer tooth near the base.