

daga counties. Preferring mossy rocks in damp, shady ravines.

VIOLA BLANDA Willd. Hort. Berol. *pl.* 24. 1806.

✓ VIOLA LECONTEANA Don, Gen. Syst. 1: 324. 1831. Britton, Man. 1049. 1901.

V. amoena LeConte, Ann. N. Y. Lyc. 2: 144. 1825. Not *V. amoena* T. F. Forst.; Symons, Syn. 198. 1798.

V. blanda var. *palustriformis* A. Gray, Bot. Gaz. 11: 255. 1886.

V. blanda amoena (LeConte) B.S.P. Prel. Cat. Anth. and Pterid. 6. 1888.

Viola alsophila Greene, Pittonia, 4: 7. 1899.

Rarely found in Herkimer county. Long Branch, Onondaga county.

✓ VIOLA RENIFOLIA A. Gray, Proc. Am. Acad. 8: 288. 1870.

V. blanda renifolia A. Gray, Bot. Gaz. 11: 255. 1886.

VIOLA LANCEOLATA L. Sp. Pl. 934. 1753.

Only a few specimens of *V. lanceolata* have been collected along the edge of a swamp near Syracuse, and so far as I know this is the only record of its being found in this region.

SYRACUSE, N. Y., March 1, 1902.

DESCRIPTION OF A NEW FOSSIL SPECIES OF CHARA

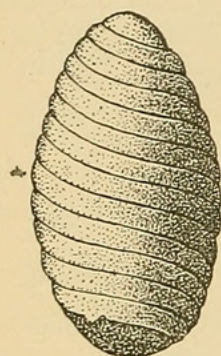
BY F. H. KNOWLTON

Some weeks ago, by the kindness of Professor T. D. A. Cockerell, of East Las Vegas, New Mexico, I was informed that certain fluviatile deposits of Pleistocene age exposed in that vicinity contained great numbers of *Chara* "fruits." A few days since I received from Miss Ada Springer, a student of Professor Cockerell's, a box containing a considerable quantity of this material. Accompanying it was a short description of the "fruits" and a drawing which is the basis of the one here presented.

As this species proves to be wholly unlike any fossil species previously described from this country I venture to describe it as new under the name :

Chara Springeræ

Fruit (sporostegium) elliptical-ovoid in shape, with rather broad point of attachment, and obtuse apex, nearly twice as long as broad ($0.65 \pm \text{mm.} \times 0.40 \text{ mm.}$); number of spirals as observed in side view 12 or 13; cells even or somewhat furrowed, obscurely punctate.



The "fruits" are present in considerable numbers, but they are very fragile and difficult to remove. For this reason it is hard to measure them with any degree of accuracy, but approximately they are 0.65 to 0.70 mm. in long, and about 0.40 mm. in short, diameter.

This form is separated at once from *Chara compressa* Knowlton* by its shape, and from *C. Stantonii* Knowlton† by its size, shape and the character and direction of the spirals.

The exact locality whence these specimens came is Arroyo Pecos, Las Vegas, New Mexico. The beds contain other fragmentary plant remains as well as a number of interesting animal remains. Professor Cockerell has kindly supplied me with the following section of the Pleistocene beds at this locality :

| Upper Zone. | | Land shells only, mostly Pupidæ. |
|-----------------------------------|--------------|--|
| Middle or Charcoal Zone. | Coarse Sand. | 2 or 3 distinct layers of charcoal or charred wood, with some not much charred (<i>Pinus?</i>). Great quantities of fresh water shells, especially <i>Physa humosa</i> and <i>Sphaerium magnum</i> . Various bones, including <i>Equus</i> with teeth agreeing with <i>E. Scottii</i> Gidley. |
| Lower or Clay Zone. | Clay. | Clay with <i>Chara</i> in great abundance. Leaves of <i>Salix?</i> <i>Pyramidula Hemphilli</i> var. is very common. Fresh water shells of several species not <i>Sphaerium magnum</i> . |

Professor Cockerell also sent me a number of fragments of wood and leaves, but the latter are so small and so poorly preserved that it was not possible to make them out. It was suggested that they belong to *Salix* and it is not improbable that they should be so referred. No sections of the twigs were made, but they are evidently coniferous, and may well have belonged to *Pinus*.

U. S. NATIONAL MUSEUM, February 25, 1902.

* Bot. Gaz. 13 : 156.

† Op. cit. 18 : 141



Knowlton, Frank Hall. 1902. "DESCRIPTION OF A NEW FOSSIL SPECIES OF CHARA." *Torrey* 2(5), 71–72.

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