

REGULAR MEETING, FEBRUARY 1st, 1864.

President in the Chair.

Eleven members present.

Donation to the Cabinet: A collection of dried plants from Arizona, by Mr. Spence.

Prof. Brewer presented the following papers:

Description of a New Species of *Virgularia* from the Coast of California.

BY WM. M. GABB.

VIRGULARIA LAM.

V. gracilis Gabb.

Polypidom long and very slender. Decorticated stem circular or elliptical in section, smooth on the surface. Polypiferous lobes, slender, exsert, lunate, acute at the tips and broad at the base; arranged obliquely and alternately on the antero-lateral face of the stem. These lobes occupy the upper half of the polypidom; retaining their full size to the extreme apex, but diminishing below, so that on the middle of the stem they are exceedingly minute; and an inch or two below, are only represented by a slight ridge on the sheath, in which are two or three cells. The lower fourth of the sheath is dilated to about three times the thickness of the rest of the stem.

Length 19 inches; diameter of the naked stem .03 in.; smallest diameter of stem, with the sheath, .04 in.; diameter of expanded base .13 in.; length of largest lobes .15 in.

Locality, Bay of Monterey, 20 fms. Collected by Dr. J. G. Cooper, of the State Geological Survey.

This species can be at once distinguished from *V. elongata*, G. (Proc. Cal. A. N. S., vol. 2, p. 167) by its more slender form, its proportionally large polypiferous lobes, its cylindrical stem, without any grooves, and by the comparatively smaller portion of the stem bearing the lobes.

Notice of Plants found Growing in Hot Springs in California.

BY PROF. WM. H. BREWER, OF THE STATE GEOLOGICAL SURVEY.

More than two years ago I laid before this Society some facts in regard to the growth of plants in the thermal waters of this State. Since that time we have more observations, and some of the facts are worthy of record, although the fact is not new that plants will grow in hot water.

At the Geysers in Lake County, there are numerous hot springs and steam jets, in and around which there is an abundant growth of a low form of vegetation (*Nostoc*?) growing on the soil and covering it with a bright green coating. In some of the warm springs and streams it accumulates in considerable quantities in the water. The highest temperature of water observed at the time of our visit, in 1861, was 207° F.; the water of many of the springs boiling violently at temperatures ranging from 196° to that stated. This vegetable