

From one of the joints of my plants there has exuded a straw-colored gum. The gum found on *Opuntia* is edible like that secreted by *Acacia vera* and *Prunus cerasus*.

New York, July 18th.

RICHARD E. KUNZÉ.

**Among the Palms and the Pines.**—On the 28th of May, 1883, my father, H. C. Orcutt, and myself left San Diego City, Cal., on what proved a short trip into Lower California.

The first day rewarded us with two beautiful Abutilons with orange-colored blossoms and velvety leaves (*A. Berlandieri*, Gray, var., and another) and a new species of *Cordylanthus* found at the head of Tia Juana Valley near the boundary.

A little beyond, among the hills, was *Lupinus gracilis* among the rocks in company with *Phacelia Parryi*, both struggling for existence in so "dry a year," while further along we found *Acanthomintha ilicifolia*, the beautiful *Chorizanthe procumbens*, *Breweria minima*, and others, thriving on the adobe hills (the whole surface of the latter cracked like the bottom of a dry mud-puddle), and, on similar ground, acres were covered with the red-flowered *Chorizanthe fimbriata*, forming a beautiful feature in the landscape as we entered Valle de los Palmas where we made our next camp among the mesquite, screw-bean and other trees—but no palms!

The next morning we proceeded through the valley till we noticed at our right, in a large cañon, two novel trees which proved to be palms, *Washingtonia filifera*, and on further exploration we found twenty still standing, but over fifty lying dead—cut down by the enterprising ex-governor that he might cover his house with their leaves!

Beneath the few remaining palms flowed a cool stream of water, enabling *Epipactis gigantea* and *Juncus xiphioides* to exist, while near by we found the last flower of *Lathyrus splendens*, *Lupinus albicaulis* as a small shrub, *Bærhavia viscosa*, *Galium pubens*, Gray, and others. *Mentzelia micrantha*, Torr. & Gray, with *Physalis crassifolia* were growing on the side of the cañon, the *Mentzelia* covering my clothes with its very tenacious brittle leaves which it was impossible to wholly remove.

May 31st found us in the evening at rancho Guadalupe, 75 miles from San Diego by road, where we made our headquarters for a day, till our return. Here, in the evening, we found a new (?) *Phacelia* with white flowers and yellow centre which had strayed to the dry bed of the San Antonio Creek, where in the morning I also found an abundance of *Astragalus Sonora*, Gray, in fruit, and *Lupinus gracilis*.

Late in the morning of June 1st we left the camp and proceeded up the valley till we came to a cañon which led to Guadalupe Mountains, credited with an altitude of 4,000 feet. Here we found many interesting plants at different altitudes. Among them were *Trichostema Parishii*, Vasey, *Mimulus Palmeri* (?), *Helianthus gracilentus*, Gray, *Actinolepis Wallacei*, Gray, at a low altitude, *Calochortus Weedii*, *C. venustus* above it, and, higher still, *C. Palmeri*, an *Allium*, *Dendromecon rigidum*, and many species of *Gilia*, one (a new species) being particularly conspicuous for its delicate, variegated blossoms.

After securing, near the top, specimens of the pine (*Pinus Coulteri*) which had attracted our attention we returned to the ranch, having walked about twenty miles in ten hours in the hot sun—repaid by over twenty interesting plants. During our return we found *Polygonum depressum*, Nutt., *Monardella linoides*, Gray, and others, near Palm Valley, over one hundred species, two or more new, on the whole trip of eight days.

San Diego, Cal.

C. R. ORCUTT.

**Pinus Banksiana**, Lamb.—This tree appears to considerably exceed the size given for it in our manuals of botany. Dr. Gray gives it as “a straggling shrub, or low tree, 5 to 20 feet high”; Dr. Wood as “a small tree”; Prof. Sargent, in his Catalogue of the Forest Trees of North America, says: “a low shrub or tree, rarely exceeding 20 feet in height.” The Abbé Provancher’s *Essences Ligneuses de la Province de Quebec* gives 30 to 40 feet as its maximum size.

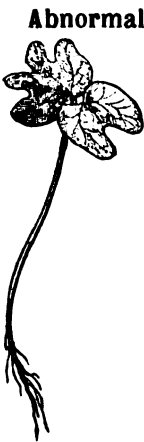
I noticed, in July, many trees in the vicinity of Marquette, Mich., which were at least 70 feet high, rising straight up from a base over one foot in diameter.

N. L. BRITTON.

**Clematis Viorna**, var. *coccinea*.—Some time early in June of this year, on a trip to Chattanooga, I was fortunate enough to find on the side of Lookout Mountain, above the line of the Chatt. & Nash. R.R., two plants of *Clematis Viorna*, var. *coccinea*. They were strong and healthy and growing and blooming freely. It was a matter of astonishment to find here a species which has not, I believe, been before recorded east of Texas. The two known localities there are Austin and New Braunfels; and it is interesting to now find the form so far away from the only place where it has hitherto been found.

Cincinnati, O., July, 1883.

JOS. F. JAMES.



**Abnormal Cotyledons in Ipomæa**.—I find in my garden a seedling of the morning-glory, *Ipomæa purpurea*, with what appears to be a supplementary cotyledon. The condition is better described by saying that one cotyledon is perfect, but that the other consists of *two* which are connate to near the middle. This is as if the plantlet had started with three cotyledons. The abnormal one has, in consequence, a triply retuse apex. The accompanying figure shows the condition.

Masters says, that “fusion frequently accompanies an increase in the number of cotyledons,” and attributes the phenomenon, at least in some cases, to chorisis or to a cleavage of the original cotyledon. The venation in my own example would indicate the fusion of the two originally distinct leaves.

Providence, R. I.

W. W. BAILEY.