

Botanical Excursions. (By J.G. Lemmon.) No. 2. The Northern Valleys and Lassen's Peak. (Continued.) Part III. Butterfly Valley and the Darlingtonia.

Butterfly Valley is a small out-lying dell in the high forest six miles northwest of Quincy. It must be peculiarly situated, and its origin as singular, for it is endowed with the greatest variety of rare, radiant and curious plants of any locality of its size met with thus far in all my exploration of the Sierra. This valley is most intimately related to all my labors, aspirations and achievements, such as they are for the last five years. The course and aims of my life were so changed by a discovery made here that I beg the reader's indulgence while I narrate.

In Black Hawk ravine, a mining camp near here, while following the business of book selling, five years ago, I found in an almanac a small leaf of a plant most interesting in appearance and which I recognized as belonging to the *Saracenia* (*Sarracenia*) order, but O, so different from anything ever seen before! All the latent botany of my being repressed for a lifetime because there was no money in it, was aroused beyond control. I demanded its origin. No one could tell. I ran from house to house. No clue to the place of its growth. At last I bethought me of the children, those natural conservators of such facts, and beset the first group met. "I know", said little Mamie Austin, "Uncle Rice brought it down from Butterfly". Here was light. Arrangements were made to have Uncle Rice meet me there two months from that day and guide me to Butterfly and the secret ravine where grew this curious plant. Before the time arrived, as I continued my long trips, I displayed the treasured leaf freely, and at the day agreed upon for the search I met at Black Hawk four persons, with whom I was subsequently to form the most sincere and enduring friendship, Mr. and Mrs. Moser, of American valley, and Mr. and Mrs. Ames, of Indian valley, the last the excellent lady and botanist so often mentioned and honored since by Drs. Gray, Canby and Thurber. Our hostess at Black Hawk, Mrs. Austin, with her children, also joined the exploring party. This lady, with her husband and family, soon after bought the wonderful Butterfly valley and removed to its Eden garden, where she and Mrs. Maxwell, residing in Glendale, just below, have since done most important botanical work, requiring the expenditure of much time and the closest scrutiny day after day, during season after season.

It was quite a cavalcade, that exploring party. The ladies and children were on horseback, the gents on foot, with the good souled Uncle Rice in the advance, all toiling up the steep mountain trail, tearing through bushes and plowing across streams, but the view that awaited repaid all. Our guide cunningly led the way as if to pass the object. "O, look! There they are!" shouted Mrs. Ames, pointing down toward a small round meadow, bordered with alder bushes, through a gap in which appeared the most wonderful plants to be seen north of tropical America. There, thickly covering a space of a fourth of an acre within the alders, stood the long, tubular, swollen stalks, surmounted with balloon-like scarlet hoods, with dependent, curled, crimson, mustache-like wings, all constituting the insect-catching leaves of the

#### DARLINGTONIA CALIFORNICA.

\*\*\*\*\* Mrs. Austin sat down by a splendid plant and at once commenced the close scrutiny which she has continued to give the living plant so many weeks and months since. Some 11 patches of *Darlingtonia* she has found in and around Butterfly, generally clustered around cool springs on a southern slope and at an elevation of about 4000 to 5000 feet. Another insect-devouring plant grows in the same bogs with it, *Drosera rotundifolia*; and on both of these plants Mrs. Austin has bestowed

observation and experiment that will be read with interest in lands beyond the sea, for she is as good at noting and reporting as at experimenting.

#### OBSERVATIONS ON DARLINGTONIA.

Dr. Canby, of Wilmington, Del., wrote, asking 32 questions, and Dr. Gray a long list more, relating to this wonderful plant, its structure, how and what it catches, and what for. Such is the interest manifested, that it will not be strange if one of these eminent scientists, or even the renowned Darwin himself, should visit Butterfly valley in the near future, and there institute those chemical experiments and microscopic observations that determine the law of development by adaptation, which in scarcely any other plant is more beautifully and distinctly illustrated than in Darlingtonia.

Fortunately Prof. Bessey and others have lately ~~brought~~ through the columns of the PRESS, familiarized your readers with the structure (illustrated though with engravings grossly at fault, and which the accompanying photograph may serve to correct), habits and appearance of this carnivora, so I will only add a few important facts, indistinctly derived from dried specimens sent him by me, and reported by Dr. Canby before the American Academy of Sciences, but now abundantly verified by observations on the living plant by Mrs. Austin and myself.

The notes which follow are full of mistakes, erroneous conclusions, &c., and are not worth copying; one sentence of possible significance is:

" This fluid continues to accumulate as long as the catching season lasts, is always sufficient to cover the mass of insects, and where the trap is so favorably situated as to catch its stomach full, or when fed to the top, as has often been done, slowly, the fluid will still rise to the necessities of the times, and fill the tube to overflowing".