

Prof. French. These were of the earliest butterflies, and I expected to raise them to imago the same summer.

On 2nd and 3rd July, all these larvæ passed 1st moult; on 5th July, two passed 2nd moult; on 10th or 11th, one passed 3rd moult. On 27th July, the three survivors had been lethargic for about a week, as I recorded. Later, I sent these to Clifton Springs. So that larvæ from the earliest flight of the butterflies, as far as observed, hibernate, as do the larvæ of the later flight, and all would produce butterflies in spring. How comes it then that there is the appearance of a second brood of the butterfly in late summer, or August? Apparently one brood flies in June, another in August, though fresh butterflies are also found in July, and one would expect eggs of the June brood to produce the August butterflies. The explanation I conceive may be this: in June, the butterflies from the lower elevations first come from pupæ, in July from higher elevations, and in August from the highest of all, and a constant stream of fresh butterflies is kept up from higher to lower elevations. Mr. David Bruce has collected several seasons in Colorado at every altitude, and in 1887, particularly, his attention was directed to the habits of *Alexandra*, and this is what he writes 22nd Sept., 1887: "I think my notes and the specimens sent will satisfy you that there can be but one brood annually of *Alexandra*. This species is a powerful flier and takes very long flights, and in the narrow canons will fly along the side of the trail or stream down hill for miles. Even *Colias Meadii*, when it once gets in the canons, will follow the track, and I have found several at Webster, 9000 feet, and below it, though their proper habitat is 2000 or 3000 feet higher." *Alexandra* is found at various elevations from 6000 to 10,000 feet.

As to *C. Edwardsii* and its relationship to *Alexandra*; I have of late years thought it probable that the former might be a dimorphic form of the other. But if there is but one annual brood of *Alexandra*, that view is not tenable. *Edwardsii* was named by Dr. Behr, from examples taken in Nevada, and was first described in vol. 1, But. N. A., in 1869. At that time very few examples were known, and the same is true as to *Alexandra*, originally described in 1863. It was not till Mr. Mead collected in the summer of 1871, in Colorado, that *Alexandra* became better known. Since then a vast deal of collecting has been done in Colorado, and *Alexandra* is found in every collection. *Edwardsii* yet differed from *Alexandra*, as known up to 1869, in the shape of the wings, these being narrow, the fore-wings pointed apically, the hind margins incurved;