In the darker forms (the darkest from Oregon) there is a broad brown band with lighter margins, sometimes entirely involving the protuberance, and extending downward and backward to the margin of the pronotum. The anterior extremity of the brown mark, medially, where the protuberance slopes down in front to the level of the pronotum, persists as a characteristic brownish mark even in the palest southern forms, and is present as usual in both of the forms named by Goding.

Micrutalis, sp.

This genus might almost be called the dominant group of the super family in Central America and the West Indies, as it is also in the Southern United States. But it is also widely distributed in the United States and Canada. One has only to collect considerable series in any species-say calva, which is common in the United States-to discover that like some other membracids (Telamona or Cyrtolobus, for instance) these species possess a remarkable range of colour variation. Even Clastoptera proteus with all its forms is not more protean than some of these species of Micrutalis. But I cannot find in the literature that any account has been taken of these marvellous variations, nor have I seen heretofore sufficiently large series in collections to properly illustrate them. Many of the Micrutalis "species" of literature have been described from one or a few specimens, whereas but very few of the names represent more than the merest colour forms, as large series clearly prove. For instance, I have now before me from the Southern States, Mexico, Central America and the West Indies, a series of one hundred and seventy-two specimens, which evidently belong to the one specific group, binaria, of Fairmaire, some from Belize representing the typical form.

But in the lot there are scarcely two exactly alike, and the gradations extend in various directions. For some of these names can be found, like mutabilis, Fowler; discalis, Walker; pallens, Fowler; lugubrina, Stal; Illinoiensis, Goding; apicalis, Goding; trifurcata, Goding; occidentalis, Goding; parva, Goding; and binotata, Goding. All of these are based on the merest colour characters. But we would need twice again as many names to designate the other forms which are equally distinct, and all of which present the same range of form, size and structural characters as the original binaria. The relation of this species to calva, which appears to be generally larger and longer, and the variability of calva, are matters to be investigated by the many collectors living within the range of calva. Part, at any rate, of the South American species of Stal are the merest colour forms, and the relation of all of them to binaria and more northern

ai

he

ge

m

or

w]

on

pa

316