

## ON CERTAIN SPECIES OF SATYRUS.

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Conclusion.—The North American species of this genus may be divided into three Groups, with several sub-groups. Group 1 comprises *Pegala* and all the larger species. Group 2 *Silvestris* and others, characterized by their small size, and the peculiar outline of the discal band on under side of hind wings, there being two long serrations against end of cell. This division will throw *Meadii* into Group 1, in which the band has a rounded prominence against cell. Group 3 comprises *Sthenela* only.

It seems to me probable that the species forming the first sub-group of Group 1 have originated with a form either identical with *Pegala*, or very near it, characterized by a rufous band on which was a single ocellus, by an ocellus at anal angle, and six complete ocelli on under side of hind wing. And it may have occupied a considerable territory, at least including what is now the southern tier of States. At present, *Pegala* is restricted pretty much to the vicinity of the Gulf of Mexico, and a strip along the Atlantic coast, at least as far to the north as Charleston, S. C. This is but a small area when compared with that occupied by *Alope* and its co-form *Nephele*. The two species, *Alope* and *Pegala*, are separated by a sandy zone, which the former does not penetrate, and the latter at most but occasionally.

It will be noticed that *Pegala* possesses in perfection many points which are found in one or other or all the members of the sub-group. It is considerably the largest, though occasionally an *Alope Texana* fully equals it. Its peculiar brown color on upper side and gray-brown on lower side passes into *Alope*, which gradually changes into the darker shade of *Nephele*. The rufous band becomes yellow in *Alope*, but breaks out in that species in certain localities, as seen in var. *maritima*. After the band has become suppressed in *Nephele*, every now and then it reappears in greater or less degree, even in *Olympus* and *Boopis*. If the original form presented a single ocellus, that is now a prominent characteristic of *Pegala*, but there has come to be a certain modification, so that in some cases, in the female, there are two complete ocelli, but in many more of both sexes there are dots and small spots in place of a second ocellus. In