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Contributions to the Ophiology of Lower California, Mexico and Central America

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Caudisona mitchellii, Cope.
Head depressed, covered with small irregular scales, posteriorly keeled, anteriorly, and upon the obtuse muzzle, rugged, free at the lateral or hinder edges. Superciliaries prominent, striate rugose. One loreal ; nostril large, prenasal small, higher than long, separated from the rostral and superior labials by small scales. Rostral low, an equilateral triangle. Sixteen superior labials, the last large, three rows between them and the orbit; temporals, large, smooth. Superior labials sixteen. Scales elongate, striate rugose, in 25 rows, all strongly keeled except the first. Crepitaculum well developed of the C. a t r o x type, i. e. strongly compressed, having the terminal complete segments as broad as the basal. Gastrosteges 198; urosteges 26. Total length (excl. crepitaculum) 44 in., tail 3 in. 6 1.

The color above and below is greyish yellow. The upper surface of the head is shaded, that of the body coarsely and densely punctulated with brown.
The regular aggregation and deepness of these punctulations, form a series of about forty-two dorsal spots. These are transverse, with produced lateral angles, extending across twelve rows of scales from angle to angle, separated from the adjacent ones by a bright band of ground color one and a half scales wide. On the posterior fourth of the total length, they form brown cross bands: five upon the tail are black on a very light ground as in C. atrox. Anteriorly there is an ill-defined series of spots which are opposite those of the dorsal line. A yellow band extends from the nasal plates anterior to the eye, involving from the ninth to the last superior labial. Superior to this is a brown band extending from the eye and ceasing on a line with the angle of the mouth. Some indistinct brown marks on the top of the head are arranged as follows: one on the inner border of each superciliary ; three posterior to these, the median short and broad ; four further posterior, the median pair longer, diverging, reaching the neck. Cape St. Lucas, Lower California; one specimen (5291 ½ Sm. No.) in Mus. Smithsonian from Mr. John Xantus.

This curious rattlesnake is related to C. t i g r i s, C. cerastes, and C. lucifer. In common with the first two and C. e n y o, lepida and molossus, it exhibits a low rostral plate. The plates of the superior parts of the muzzle resemble only those of (among the above mentioned species) cerastes and enyo, being small,

irregular and rough, without even the marginal series seen in 1 u c i f e r, atrox, h o r r i d a, etc. In shade of coloration it is not unlike tigris, being well adapted for concealment upon the sandy soil of the Californian deserts: the distribution and form of the spots are like those of l u c if e r. The separation of the prenasal from the rostral plate is peculiar to the species. It is named in honor of Dr. S. W. Mitchell, the author of the interesting "Researches upon the Venom of the Rattlesnake."

In the catalogue of rattlesnakes in the Smithsonian contributions, previously cited, thirteen species of the genus Caudisona were referred to, as distinguishably described. Two have been since added to this list, making, with those of the present memoir, the whole number seventeen. Of these, three inhabit South America, six Mexico, two Lower California, and eleven the United States. Two of the eleven are found east of the Mississippi River; one west of the Rocky Mountains; the intermediate region is inhabited by ten species, l u c i f e r entering from the west, and h o r r i d a from the east. Of these, the most northern, and widely diffused is Le C o n t e i; it extends from southern Nebraska to Utah; in the great basin of the latter country a curious variety of it is found. C. a t r o x alone inhabits the greater part of Texas; in the extreme west of that State, and probably in Chihuahua, C. lepida occurs. The greatest intensity of species is in south western New Mexico and Apacheria (or Arizona), where are found tigris, cerastes, scutulatus, atrox sonoraensis, molossus, and perhaps lucifer.

Structurally, the South American species and molossus form a group characterized by the six regular plates of the muzzle, and the small rattle. The single nasal and smooth head plates isolate the l e p i d a. The superciliary hornlike processes, and the rostral plate, broader than high, separate the cerastes. The remaining species form the largest group, where there are two nasals, one or more pairs of marginal plates between the superciliary and rostral, separated on the median line by smoother or rougher, small irregular scales; no superciliary processes. C. mitchellii must be distinguished from these by its absence of marginal plates, and presence of scales on the lateral borders of the rostral. All the species have Professor Reinhardt's scale pores in pairs; they are very difficult to observe in some of the species as cerastes and mitchellii. In durissa, a single pore is frequently met with.