

Article XXXIV.—DESCRIPTION OF A NEW AMPHISBÆNIAN
COLLECTED BY THE LATE DR. CHARLES S. MEAD
IN 1911, ON THE ISLE OF PINES, CUBA.

BY MARY C. DICKERSON.

Cadea palirostrata,¹ sp. nov.

Type, No. 2717, American Museum of Natural History, from San Pedro, Isle of Pines, Cuba, 1911, Charles S. Mead.

Paratypes, Nos. 2718 and 2719, American Museum of Natural History. No. 2718 has been deposited at the United States National Museum, Washington, D. C.

Description of the Type.—Premaxillary teeth, 7; maxillaries, 5-5; mandibulars, 8-8. Mouth inferior, muzzle extending beyond it a distance equal to the length of the nasal. Muzzle long and pointed. Head compressed with spadelike ridge extending dorsally from occipitals forward, and ventrally the length of the mental. Rostral large, compressed and extending in a conspicuously convex band forward and upward over the end of the muzzle, and backward to an angular suture with the præfrontal—thus adding to the adaptability of the head for digging. Præfrontal relatively large, its width little less than its length, compressed and folded over the dorsal ridge of the muzzle, indented anteriorly by the entrance of the rostral, and posteriorly by the two frontals. The latter equal in length to the præfrontal, widest in the middle. Frontals followed by a pair of subquadrilateral occipitals. Eye visible under the anterior angle of the ocular. Nostril pierced in the middle of the anterior end of the nasal. Supraocular very elongate, forming sutures with nasal, præfrontal and frontals, second labial, ocular and parietals. Three upper labials subequal, although of greatly varying shape; first slightly smallest, second slightly largest. Mental subquadrilateral with short winglike extensions anteriorly, and in the midline anteriorly compressed into a short downward-projecting wedge; chin shield nearly twice as long as mental, broadest near the anterior end; three lower labials, the first small, the second very large, twice as large as the second upper labial. Annuli, dorsal, 329; ventral, 286. Annuli on the tail, dorsal, 21; ventral, 16. Annulus on the middle of the body contains 39 segments. Dorsal segments narrow, oval; ventral, slightly broader than long, square-angled. No lateral line. Anal segments, 10; præanal pores, 10. General coloring brownish, darkest on head, lightest ventrally—each segment with one or more irregular brown blotches, varying in position on the segments.

Type: Length to vent, 280 mm.; tail, 15.

Paratypes: No. 2718, length to vent, 225; tail, 12. No. 2719, length to vent, 190; tail, 12.

The new species although very distantly related to *Baikia africana* recalls that species in the shape of the head, the cutting edge of the rostral

¹ *Pala*, spade; *rostrata*, relating to the snout.

being similarly developed, although that shield is not so enormously increased in size.

The new species is closely related to the form heretofore known as

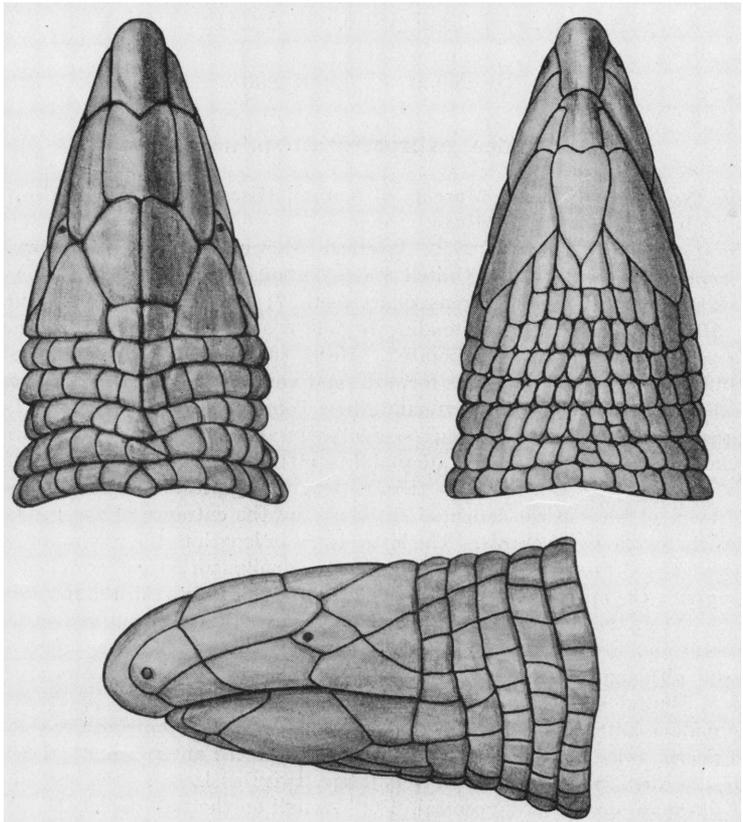


Fig. 1. *Cadea palirostrata* sp. nov. Dorsal, ventral and side view of head of type (No. 2717, A. M. N. H.).

Amphisbaena punctata Bell, of Cuba, about which Stejneger has recently published a note referring it to the genus *Cadea*, with a specific name of *blanoides*.¹

¹ The particular Cuban amphisbænian known in Boulenger's 'British Catalogue' as *Amphisbæna punctata* was first described in 1828 by Thomas Bell and placed under the genus *Amphisbæna* made by Linné seventy years previously, when only five species were known of the family of Amphisbæniidæ, which now numbers more than seventy. Gray in 1844 created the genus *Cadea* for this amphisbænian, distinguishing it from the genus *Amphisbæna* because of its *separated nasals* and *single large præfrontal plate*, instead of *united nasals* extending across the muzzle, and a *pair of præfrontals* behind them. This was published in the 'Catalogue of Tortoises, Crocodiles and Amphisbæniæ,' of the British Museum (1844). In 1865 in the 'Proceedings' of the Zoölogical Society of London, Gray published

Boulenger's key, not recognizing the validity of *Cadea*, and giving the shovel shape of the head, as in *Baikia africana*, undue importance, carries the new species far astray from its real relationship. Scutellation, not the shape of the head however, must constitute the character of generic rank: the new species notwithstanding the unusual shape of its head, has certainly developed side by side with *C. blanooides* and is distinctly of the same genus.

Cadea palirostrata agrees with *C. blanooides* in the general conformation of the head shields: that is, nasals on the sides of the head, a single præfrontal, the long supraoculars lying between labials and frontal, forming sutures anteriorly with the nasal. It agrees also in general in the shape and arrangement of mental and chin shields. While agreeing thus, it differs in having the nasals form a suture only with the long rostral, while in *C. blanooides* the nasals form a longer suture with the præfrontal than with the rostral. The narrowing of the head in producing the spade effect has narrowed the præfrontal; the præfrontal is not greatly shorter however, than in *C. blanooides*, the greatly increased length of the rostral corresponding with a lengthened muzzle.

Attention is called to the fact that the description of the teeth of *Cadea blanooides* as given in the British Catalogue is correct, premaxillary teeth 7, maxillaries 5-5, and mandibulars 8-8. (This is in the face of some previous confusion. Duméril and Bibron gave a smaller number of maxillaries and this was quoted by Gray.) The two Cuban species, *Cadea blanooides* and *Cadea palirostrata*, therefore show closest relationship in this primary character.¹

Thus the number of West Indian representatives of the tropical family

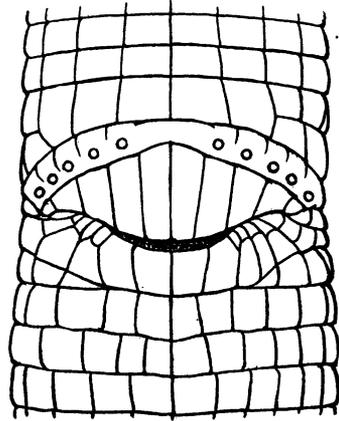


Fig. 2. *Cadea palirostrata* sp. nov. Ventral posterior of body to show number of anal segments and præanal pores.

a careful study of the then considerable collection of the British Museum and retained *Cadea*. Again, in 1872, for the third time, Gray presented a classification and description of amphisbænians in the 'Catalogue of Shield Reptiles' of the British Museum, and retained the name, *Cadea punctata*, giving *Amphisbæna punctata* as a synonym. *Cadea* is a valid genus, as has recently been stated by Stejneger in the 'Proceedings' of the Biological Society of Washington, April 14, 1916. Also, as Stejneger calls to our attention, the name *Amphisbæna punctata* was given by Wied to a Brazilian *Amphisbæna* in 1825 (three years prior to Bell's description of the Cuban species), and this Cuban species must therefore give up its specific name *punctata*. It thus becomes *Cadea blanooides* Stejneger.

¹ I wish to express my gratitude to Dr. Leonhard Stejneger for his help in loaning the American Museum a specimen of *C. blanooides*, that I might check up this point.

Amphisbænidæ is increased by one, making seven known species. With the exception of the two species of *Cadea*, all West Indian amphisbæniæ, including the third form known from Cuba, *Amphisbæna cubana*, are distinguished by paired præfrontals.