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An Eocene *Aturia* from Cyrenaica

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A fragment of a large *Aturia* collected by a field party of the American Overseas Petroleum Limited at Wadi et Taga, 16 kilometers south, 35 degrees east, of Maraua, Cyrenaica, was presented by that company to the American Museum of Natural History. I wish here to repeat the Museum's thanks to the company and, in particular, to Dr. Robert E. King for this gift.

The remarkable size and comparatively good preservation of the specimen on the one hand and the scarcity of representatives of the genus *Aturia* in Africa (see Haas and Miller, 1952, p. 345) on the other seem to justify the present note.

Aturia cf. *alabamensis* (Morton)[1]

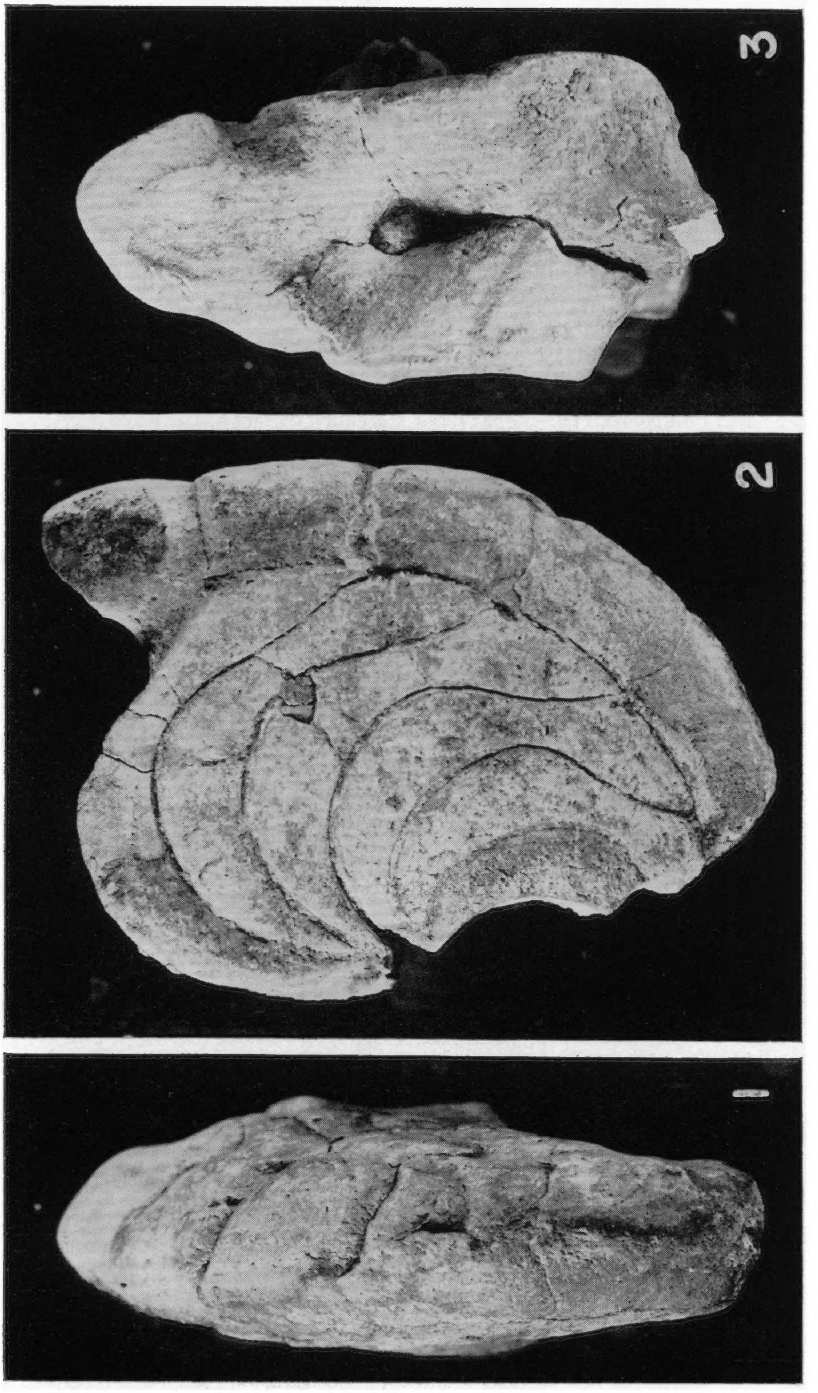
Figures 1–3

A.M.N.H. No. 27951

Description: The cast, corresponding to somewhat more than a quarter of a whorl, consists of five complete, or nearly complete, gas chambers, the first of which embraces the innermost part of a preceding chamber. The distance between the posteriormost and anteriormost points of the periphery is about 200 mm. The radius measures not fully 100 mm. at the posterior end of the fragment and about 155 mm. at the anterior one. The maximum thickness of the fragment is estimated at about 180 mm.

If the anteriormost septum were to be considered the last and half of a whorl added for the body chamber, the diameter of this shell, when complete, would have measured about 350 mm. Because, however, it is more

[1] For synonymy of *A. alabamensis* (Morton), see Miller (1947, pp. 81, 82).



FIGS. 1–3. *Aturia* cf. *alabamensis* (Morton), A.M.N.H. No. 27951, × ½.

likely than not that some gas chambers are missing, an even larger size for the entire specimen is probable. It may well have equaled, if not exceeded, in size the shell figured by Miller (1947, pl. 58), believed to be the largest North American *Aturia* on record.

The maximum width of the whorl is attained at about the inner fourth of its height; from here the whorl section converges gradually towards the narrowly rounded venter, more steeply, but without any shoulder, towards the umbilicus which seems to have been small and closed. The flanks are gently convex, with, at least in the anterior portion of the fragment, an indication of a shallow depression in about their middle, approximately corresponding to the apex of the lateral saddle (cf. Miller, 1947, pl. 58, fig. 1). In the frontal view of this fragment (fig. 3) the siphuncular funnel can be seen to occupy a position somewhat below the middle of the septum which bounds the fragment anteriorly, that is, somewhat ventrad of the site it occupies in Miller's illustration of the holotype (1947, pl. 57, fig. 2).

The test is not preserved anywhere on this cast.

The external sutures, six of which are counted on the whole fragment and four on the last quarter whorl, are characteristically aturian (fig. 2). There is the usual broad and nearly rectangular ventral saddle, the top of which is shallowly sunk between a gentle median swelling and blunt horns at the outer ends; in the only suture well enough preserved to permit this observation (fig. 1), these horns do not fully reach the height of the median swelling. There follow the narrow, deep, and pointed lateral lobe, the inner margin of which is more distinctly sinuous than in the holotype of *A. alabamensis* (Miller, 1947, p. 84, text fig. 22) but slightly less so than in specimens A.M.N.H. Nos. 26239 (*ibid.*, pl. 59) and 10319/1 (*ibid.*, pl. 65, figs. 1, 4, 5), and the nearly semicircular lateral saddle which markedly overtops the ventral one and occupies almost four-fifths of the flanks.

Discussion: Among the few *Aturia* forms known from the African continent (for an enumeration, see Haas and Miller, 1952, p. 345) the present fragment stands out by its considerable size. This very size makes comparison with other African aturias difficult.

On the other hand, it closely resembles the North American *A. alabamensis* (Morton); in side view, at least, it is for all practical purposes indistinguishable from the specimens of Morton's species illustrated in plates 59 and 66 of Miller (1947). The only morphologic difference I can notice is in the position of the siphuncle which is in the present fragment somewhat nearer to the center of the whorl section than in the holotype of *A. alabamensis* (Miller, 1947, pl. 57, fig. 2) and in the specimen from

Wilmington, North Carolina, illustrated in Miller (1947, pl. 66, fig. 1). This difference, however, hardly exceeds the range of individual variation within Morton's species and may, at least in part, also be caused by differences in perspective projection.

All the same, with regard to this difference and taking into account the fact that the present fragment has been found in a part of the world far distant from southeastern North America, I am identifying it, as a matter of caution, merely as *Aturia* cf. *alabamensis* (Morton).

AGE: On the strength of this identification and in view of the widespread occurrence of *A. alabamensis* in the Upper Eocene Jackson group of North America, a (middle to) late Eocene age may be assigned to the fragment from Cyrenaica.

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