

## A FOSSIL TORTRICID MOTH.

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Practically nothing is known of fossil Tortricidæ, or indeed of any group of Microlepidoptera in Tertiary times. No extinct Tortricid has been named, although Gravenhorst (1835) referred to the existence of one in Baltic amber, and Menge (1856) reported four larvæ, two pupæ and a moth, supposed to be Tortricids, from the same substance. In the Florissant shales moths are exceedingly rare, and usually not fit to describe; but a fairly good *Tortrix* (sens. lat.) found in the summer of 1907 deserves to be reported.

*Tortrix Florissantana*, n. sp.

♀.—Length of head and body, 14 mm.; head, 1  $\frac{3}{5}$  mm. wide, palpi robust, probably directed upwards, almost 2 mm. long; antennæ with minute dark dots at intervals; thorax 3  $\frac{2}{3}$  mm. long, about 3 broad; wings probably striped along the veins, but the scaling appears to have been nearly all lost, except at the apex of hind wings, which are here much darkened; primaries 14 mm. long, the costa very strongly arched, so that the centre of the arch is about 2 mm. distant from the straight line between base and apex of wing; outer margin about 5 mm. long, with a gentle double curve, the concave part uppermost; apex obtuse; inner angle very obtuse, and close to tip of abdomen when the wings are folded backwards; lower margin about 10 mm. long.

Hind wing about 10  $\frac{1}{3}$  mm. long, the apex considerably less than a right angle; frenulum distinct, of two strong bristles; a part of the venation of the hind wing is visible; what appears to be the fork between the media and cubitus is about 4 mm from tip of wing; the second cubitus and first anal are also seen, normally placed.

Florissant, Colorado, in the miocene shales, Station 14 (*W. P. Cockerell*). The insect as preserved is pale yellowish-red; the wings are directed backwards, as in repose. The arched costa and gently curved outer margin, without any suggestion of a projecting point, indicate Tortricid rather than Pyralid affinities, and I think the family reference is reasonably safe. The generic term is of course used only in the old broad sense.

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