

——— Notice of two New Fossil Mammals from Brunswick Canal, Georgia; with observations on some of the fossil quadrupeds of the United States.

Amer. Jour. Sci., vol. xliii, 1842, pp. 141-144, 2 plates.

Tooth of *Mastodon longirostris* from the Miocene of Maryland, hitherto found only in Europe, mentioned incidentally, p. 143.

LOOMIS, ELIAS. On the Dip and Variation of the Magnetic Needle in the United States.

Amer. Jour. Sci., vol. xliii, 1842, pp. 93-116.

Differs from Courtenay in the value for the dip at Baltimore.

MARKOE, FRANCIS, JR. [Remarks and list of fossils from Miocene.]
2nd Bull. Proc. Nat. Inst. Prom. Sci., 1842, p. 132.

Enumerates several new forms found with Mr. Conrad, which were later described by the latter.

ROGERS, HENRY D. An Inquiry into the Origin of the Appalachian Coal Strata—Bituminous and Anthracitic.

Trans. Assoc. Amer. Geol. and Nat., 1842, pp. 433-474.

A comprehensive general paper in which the author considers both the bituminous and anthracite formations to be continuous with each other, and that they extended from Pennsylvania to Alabama and eastward to the Appalachian valley. Such an extent is explicable only on assumption of the oceanic origin of coal.

——— W. B. & H. D. On the Physical Structure of the Appalachian Chain as Exemplifying the Laws which have Regulated the Elevation of great Mountain Chains.

Repts. Amer. Assoc. Geol. and Nat., 1842, pp. 474-531.

(Absts.) British Assoc. Repts., 1824, Pt. II, pp. 40-42; Proc. Assoc. Amer. Geol. and Nat. 1840-42, pp. 70-71; Amer. Jour. Sci., vol. xliii, 1842, pp. 177-178; vol. xliv, 1843, pp. 359-362.

Part I deals with a description of the area, its divisions; their structure, especially inverted dip, length, persistence and parallelism of axes and the increasing interval between them to the northwest.

Part II deals with a theory of the flexure and elevation of the strata, which are due to a combined undulatory and tangential movement.

RUFFIN, ED. An Essay on Calcareous manures. 8vo. 316 pp. Petersburg, Va., 1842. 3rd Edit.

General discussion of the tidewater marls, pp. 194-234. First use of marl in Maryland in Talbot County, 1805, by Mr. Singleton. (1st Edit. 1832. 2nd Edit. 1835.)

1843.

CONRAD, T. A. Description of a new Genus, and Twenty-nine new Miocene and one Eocene Fossil Shells of the United States.

Proc. Acad. Nat. Sci., Phila., vol. i, 1843, pp. 305-311.

Eleven of the specimens were found in Maryland.