

more or less rounded, still fitting into their original places, although the decayed connecting rocky matter has long since been removed. Most of the boulders have spheroidal or ellipsoidal forms, and resemble as much northern erratics, or perched blocks, as any seen within the drift zone of America or modern glacier regions of Europe. One of these boulders is about thirty feet long, fifteen feet broad, and twenty feet high, perched on top of a rounded hummock, and resting on only a few small points.

When one compares the forms of these rocks south of the line of northern drift, and of others similar in the more southern Appalachians, and reads of the same in warm countries, as Ceylon and Brazil on the one hand, and, on the other, with those of the Swiss valleys and the greater and more wide-spread rounded surfaces of Norway, still in contact with living glaciers,—where he may see how unimportant a factor is the land-ice in gnawing away the old crystalline rocks,—one is forced to look upon the structure of both as more or less of common origin,—atmospheric erosion, perhaps aided by currents,—although the latter region has been swept off by a brush of ice which has left scratches behind.—*J. W. Spencer, University of Missouri, Columbia, Mo.*

The Dinosaurian Genus *Cœlurus*.—This genus was described by Marsh, in 1871,¹ from material obtained in the Jurassic deposit of Wyoming Territory. Characteristic bones not distinguishable as to genus from those described by Marsh are in my collection from New Mexico, probably from beds of Triassic age. They consist of nearly all parts of the skeleton, excepting jaws and teeth, and but little of the skull is determinable. The material is much more complete than that described by Marsh.

The remains show that the genus *Cœlurus* is a Dinosaurian, and I cannot agree with Professor Marsh's view "that *Cœlurus* cannot be placed in any known order."² The ilium has the general character of that of the carnivorous suborder (*Goniodontia*), and the other parts of the skeleton confirm this reference. Such is the possession of compressed, strongly-curved claws, which were capable of very extensive flexion and extension. *Cœlurus* is in fact allied to *Megadactylus* (Hitchcock) from the Trias of Massachusetts, differing principally, so far as determinable, in the form of the condyles of the femur. They are simple in *Cœlurus*, but in *Megadactylus* the external condyle has the double character seen in *Megalosaurus*.³

The vertebræ are all of slender proportions, especially those of the neck and tail. These, with most of the bones of the

¹ Amer. Journal Sci. Arts, p. 339, Plate X.

² L. c., p. 340.

³ See Cope, Trans. Amer. Philosoph. Soc., xiv., 1870, Plate XIII.

The horizon from which these species were obtained is probably upper Trias. It becomes, therefore, important to re-examine the locality from which Professor Marsh obtained the *Cælorus fragilis* to determine whether its deposit is really of Jurassic age, as stated by Marsh. It is, however, not fixed beyond doubt that the New Mexican locality is Triassic.—*E. D. Cope.*

Geological News. GENERAL.—M. Nouvy, in his "Geology of Jersey," assumes that the island had an original granitic crust on which the gneisses were deposited in an intensely heated ocean. The sedimentary rocks are chlorite-schist, feldspathic schist (which is most common), metamorphic schist, and conglomerate. There is much eruptive rock, varying from granitic to diorite. The author states that the age of the true granites now found cannot be proved, but that the other eruptive rocks are certainly later than the schists. No sedimentary rock exists between these Cambrian strata and the conglomerate, which he attributes to the Permian age. After a careful sifting of the evidence, he concludes that subsidence has occurred only since the Roman occupation, and that Jersey was probably still joined to Normandy in the sixth century.

DEVONIAN.—M. Ch. Deperet has studied the Devonian of the eastern chain of the Pyrenees. This formation forms a narrow band running 15° north of east, parallel to the general direction of the chain. The belt can be traced across the basins of the Aude and the Tet, from the elevated valley of the Aniège on the west to the plain of Reussillon on the east, and has a length of sixty kilometres, with a width of five kilometres at the mountain-mass of Villefranche. The western part of this Devonian crest is nearly uninterrupted, but the eastern part is cut up into fragments and thrown northwards by the granite-mass of Canigon.

MESOZOIC.—Dr. Carl Diener has published a monograph upon the geology of the Lebanon. He has worked out the numerous lines of faulting and flexuring which have occurred, mainly during the Miocene, in the strata, which, both in the Lebanon and Anti-Lebanon, are chiefly Cretaceous and Eocene limestones. Jurassic beds occur in a narrow belt at the western base of Mount Hermon, which is to a great extent built upon the line of a great fault that coincides with its western base. The limestone beds of this mountain belong to the age of the Lower Chalk of Europe, and are disposed in the form of a low arch with a north-northeast axis. There are other faults on the south and east flanks. Doubtless the system of disturbance here is identical with that which caused the Jordan-Arabah depression; and the main line of fault of that depression enters the valley of the Leontes at the western base of Hermon. Here