

at any time a convection shower with a rather limited cloud canopy.

Nevertheless, conditions 1 and 4, above, are the same there as on land; hence even over the ocean the lunar bow is a comparatively rare phenomenon.

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OBSERVATION OF A LUNAR RAINBOW BY FRANKLIN

WHILE reading Carl Van Doren's biography of Benjamin Franklin I was reminded of Professor A. K. Lobeck's report (SCIENCE, August 26, 1938) on his observation of a rainbow at night. In 1726, at the age of twenty Franklin kept a journal of his return trip from England to America. The *Berkshire* sailed into the Channel on August 5. Under the date of Tuesday, August 30, young Franklin recorded that "the moon being near full as she rose after eight o'clock, there appeared a rainbow in a western cloud, to windward of us." He also had the experience on this trip of witnessing an eclipse of the sun and an eclipse of the moon just fifteen days apart.

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FREQUENCY OF LUNAR RAINBOWS

A RECENT note by Lobeck recognizes the fact that to most continental residents a lunar rainbow is a distinct novelty.¹ Lobeck also infers greater frequency of lunar rainbows in the trade wind belt, due to thunder squalls. However this may be, it is the purpose of this note to point out that both solar and lunar rainbows are relatively frequent in occurrence in the Hawaiian Islands, where most of the geographically variable rainfall is of orographic origin, *i.e.*, due to cooling of trade winds in passing over rugged island topography. Here, where local showers and mists occur sporadically on days and nights which are generally clear, are ideal conditions for rainbows, and persons in certain localities probably see rainbows almost daily at certain seasons. Any one who has occasion to travel about in upland districts ordinarily sees two or more rainbows a week. Near the full moon, lunar rainbows are often seen and certainly the matters of common knowledge to young and old in this part of the United States. In the solar rainbow, the secondary spectrum is visible more often than not, and the writer has a persistent impression of having seen the secondary spectrum in a lunar rainbow, but can not offer date or systematic observations.

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¹ A. K. Lobeck, SCIENCE, 88: 2278, 187, 1938.

MASTODON DISCOVERED IN OHIO

EARLY in September, 1938, a part of the skeleton of a mastodon (*Americanus*) was unearthed in a field by an Amish farmer, J. J. Miller, who was digging a drainage ditch. The remains consist of a thigh bone and eight teeth, the largest of which weighs a little more than 6 pounds. The remainder of the skeleton was so badly decomposed that it could not be recovered. About ten years ago, during the excavation of a drainage ditch on the same site, the skeleton was partially destroyed by dynamite. It interfered with the digging, and the farmer, not aware of the nature of the obstruction, used the explosive to remove it.

The plot of ground on which the bones were found is located on the extreme western end of the area known as "The Plains" in Berlin Township in Holmes County, Ohio, about two miles southwest of Benton and three miles northwest of Berlin. "The Plains" is already noted for the discovery of the skeleton of a giant sloth, *Megalonyx (Jeffersoni)*, in 1890, on the farm of Abraham Druschell. This specimen, an excellent one, is mounted and stands in the Geological Museum in Orton Hall at Ohio State University.

The remains of the giant sloth were found embedded in shell marl, beneath six feet of black earth. The bones of the mastodon were found lying on top of the shell marl and three feet below the surface beneath black earth, high in humus content. Evidently, the area known as "The Plains" was at one time a glacial lake, which was destroyed by natural processes such as the lowering of the outlet and gradual filling-in by wash and plant and animal accumulations. When finally reduced to a bog, the sloth and mastodon were probably mired in and the skeletons preserved in the bog waters.

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FRESH-WATER MEDUSAE IN TENNESSEE

ON July 15 about a half dozen live *Craspedacusta ryderi* were brought into my office. These had been collected by Miss Sara Betty Fowler from Andrew Jackson Lake, privately owned, at the suggestion of Mr. Harry McCann, custodian.

The lake, about twelve miles west of Knoxville, has an area of from 50 to 65 acres with the greatest depth of from 20 to 30 feet. When we visited the lake on the afternoon of July 15 thousands of the medusae were found at and near the surface of the water. Something like 300 were collected in a short time over a small area. These were placed in an unaerated aquarium. By July 18 most of the specimens remained on the bottom of the aquarium or had disintegrated. Only a few swam irregularly about. Eleven of the more active specimens were preserved. It was found