

Comox, and in the Bow River region, north of Montana, probably in beds of Montana age (Dawson).

But the coal-beds are mostly in the Laramie formation. They are worked for coal in Colorado, Utah, Wyoming, Montana, and New Mexico. In Colorado alone the coal-fields have an aggregate area of about 18,000 square miles (R. C. Hills, 1892). The beds are often five to six feet in thickness, and one at Evanston, in western Wyoming, has been described as 26 feet thick. In British America, at Edmonton ($113\frac{1}{2}^{\circ}$ W. $53\frac{1}{2}^{\circ}$ N.), and in the Souris district, there are Laramie coal-beds.

In Gunnison County, Col., at Crested Butte, a bed of anthracite five feet thick is worked; and in New Mexico, at the Old Placer Mountain, eight miles east of San Antonio, is another locality of anthracite. The anthracite is a result of alteration by the heat of eruptive rocks.

To appreciate the position and width of the Cretaceous seas over the western Continental Interior during the Colorado and Montana epochs, and especially the Niobrara portion of the former, the reader should refer again to the map on page 813; and, still better, to some colored geological map of North America.

Their eastern border extended, from what is now western Texas, eastward and northward over central Kansas, and thence along eastern Nebraska and Dakota into British America. In the western portion of these interior waters there were the large Archæan islands of the protaxis, high lands and low lands varying in limits with oscillations in level, which were mostly forest-clad, and well populated, as evidence shows, by Mammals, Amphibians, and Reptiles, the Reptiles taking the lead in size and power. Beyond these islands the seas spread still westward over nearly all of Wyoming and Utah to a line passing southward through Great Salt Lake, where the western shores lay along the lands of the Great Basin.

In the progress of the Upper Cretaceous, the non-marine Dakota epoch was followed by a second, the COLORADO, in which the Interior sea gradually attained ocean-like conditions, and was inhabited by great Mosasaurids or Pythonomorphs, and Sea-Saurians related to the Plesiosaurs, as well as Sharks and Saurodont Fishes. Even before the Niobrara beds had all been deposited, a shallowing had begun in Kansas. S. W. Williston states that in the beds of Kansas Invertebrates abound; that Reptilian remains are unknown in the lower part of the Niobrara beds within 100 feet of the base, but higher up are common fossils. "Species of two or three genera of Mosasaurs occur at different levels, but those of *Clidastes* [*Edestosaurus* of Marsh] only in the upper part. Turtles are rare in the lower portion, while very common in the uppermost beds."

This shallowing was general over the Continental Interior as the Colorado epoch closed. Moreover, the Colorado fauna, in some unexplained way, disappeared. During the Montana epoch the waters, however, were still salt, and marine life was abundant, and included Plesiosaurids. But the shallowing was continued; and in the following Laramie epoch the waters