by Gabb from fossils discovered during the Whitney Geological Survey (1864), and later studied over the Taylorville region by Diller and Hyatt (1892). The thickness of the Triassic in this region is about 4800 feet, and of the overlying Jurassic sandstones, limestones, and tufa about 2000 feet. The formation is continued northwestward into the Klamath Mountains. Whether it exists in the Cascade Range still farther north is unknown, as these mountains are mostly under recent volcanic rocks.

The Island belt in British Columbia contains areas of Upper Triassic on Vancouver Island, Queen Charlotte Islands, in the Straits of Georgia; and beyond they occur at Wrangel Bay, Alaska.

Upper Triassic beds occur also in Mexico, in the states of Sonora (Newberry, 1876), Puebla and Oasaca (Aguilera and Ordonez, 1893). They are found also in Honduras (Newberry, 1888).

In the Black Hills, the Triassic beds, or the "Red Beds" supposed to be Triassic, come to the surface, along with the Jurassic, from beneath the Cretaceous beds of the Continental Interior, as first shown by Meek (1858, 1860). They are mainly arenaceous clays, unfossiliferous, 300′ to 400′ thick, with 15′ to 30′ of impure limestone below the middle, and with gypsum in the upper half. In the foot hills east of the Front Range in Colorado, the Triassic and Jurassic often appear overlying the Archæan, or the Paleozoic, 600′ to 1000′ of the former, to 200′ or 300′ of the latter. In these foot hills, to the westward, within 30 miles of the line of New Mexico, and for 50 miles beyond, as stated by Stevenson, the Cretaceous rests on the Carboniferous over Archæan, the Triassic not extending so far west.

Bordering the Laramie Plains, in Wyoming, these formations may be seen over Archæan; the gypsum beds of the Triassic are sometimes over 20′ thick.

In Idaho, north of the Wasatch, between the Wyoming and Portneuf ranges (110½°–112° W.), upturned Triassic and Jurassic beds, according to A. C. Peale (1879), enter largely into the structure of the ridges; and these formations in the Blackfoot Basin, where the Triassic is about 4000′ thick and the Jurassic 1500′ (more than half limestones), afforded the fossils described by C. A. White in 1879 (page 758). In the Wasatch there are 1000′ to 1200′ of Trias overlaid by 1600′ to 1800′ of Jurassic beds (King). In the High Plateaus to the south, north of the Colorado Cañon, the "Vermilion Cliffs" of Powell, 1000′ to 1500′ high, which extend for 100 miles from Hurricane fault to Paria, and the "Shinarump Cliffs" below, are Triassic, while the overlying "White Cliff group," 2000′ or more thick, consisting of white sandstone and calcareous beds, and the "Flaming Gorge group" in Utah, are referred with some doubt to the Jurassic. The beds are continued southward in plateaus of Arizona and New Mexico.

The Trias of western Nevada consists, according to King, of a lower Koipato group of siliceous and argillaceous beds, 5000′, and above this, great limestone strata and alternating quartzyte of the Star Peak groups, 10,000′. The Trias of this region may have once been connected with that of the Sierra Nevada just west.

Upon the northern end of the Sierra Nevada, near Taylorville, Diller measured nearly 5000′ of Upper Trias. It lies apparently unconformably upon both sides between the Jurassic and Carboniferous. It consists below of 200′ of slates overlaid by 140′ of limestone, and above of over 4000′ of sandstones and slates. In the two lower members fossils are often abundant, but in the upper slates they are rare and chiefly land plants. The limestone is most persistent, and has been recognized by its fossils near Pit River and elsewhere in the Klamath Mountains, and even as far north as Siskiyou County, near the Oregon line. The presence in that region of large masses of eruptive material, often fossiliferous, shows