

lands, however, are precious to the geologist and osteologist, for here was the home of the great dinosaurian, a huge kangaroo-like reptile, probably from forty to sixty feet long and which as one writer says "rivalled in bulk the yet future mammoth and mastodon."

To-day we have collected from these sands and sandstones many important remains of this great reptile. Here on this slab of sandstone is the right and left lower jaw, each about eight inches long. One ramus partly covers the other, hiding the teeth, but in the upper jaw the teeth are almost perfectly preserved, and show that this creature, which existed—well, say 2,000,000 years before man trod this earth—was a carnivorous animal, for the teeth are flattened, serrated, and taper to a sharp point, showing that they were formed for cutting and tearing flesh; the enamel is as perfect as when used. With these jaws—which lie on the roof of the cranium—were found several claws—powerful talons; dangerous weapons they must have been; these, with the teeth, make one think of Tennyson's lines:

" Monsters of the prime,  
Who tear each other in their slime."

Here is a femur or thigh-bone we have dug out of the hard sand. It is almost five feet long and too heavy for me to lift, but when lifted by two men crumbled into a thousand fragments. I had risked much to obtain this bone, and to see it crumble to fragments was very annoying. But we have portions of similar bones which are perfectly silicified and retain all the bony structure—Haversian canals, &c., as in recent bone; a thin slice of our fossil makes an interesting microscopic object. Other bones of the fore limbs show that they were small like those of the kangaroo, almost useless for walking. This creature must have squatted on its hind legs and supported itself partly on its heavy tail. Numerous vertebra bones were found on these sandy buttes and plains. Some dorsal and lumbar bones are three times larger than the largest vertebra of the buffalo. Other cordal looking vertebra which probably belong to the same beast taper in size to an inch in diameter. Overlying the sandstone which contained the lower jaws, cranium and other bones just spoken of, was a thin bed of hard sandstone holding on one side leaves of an exogenous tree,