

bracing several genera of univalves, and one bivalve, as the bivalves, of which there were many, belong to the genus *unio*, and bear a close resemblance to some of our modern clams. The univalves seem to belong to several genera, *Vivipara*, *Campeloma*, *Bulinus* and *Planorbis*. On breaking up some of the rock which contained the bivalve shells very complete casts dropped out. I might add here that the sandstone containing the shells seemed to be more compact and harder than that in which the leaves were found.

AN ENTOMBED BUFFALO.

At this place a condition was observed worthy of notice, as it explains how easily a person might be led astray by a too hasty explanation of certain facts.

The contractor at work on this division, (for at the time of my visit the track was not laid as far west as this) called my attention to the remains of a buffalo which his men found twenty-five feet below the surface, in a cutting through the river bank, while upon the surface stumps of huge trees were seen. Nothing seemed more natural than to suppose this buffalo had lain entombed for a long period of time, during which the deposits over it had accumulated and immense trees matured upon the soil which covered the imbedded remains.

Before venturing an answer to the question "How many thousands of years do you think this 'critter' has been buried?" after special attention had been called to the size of the trees which grew above it, I looked up the high banks and at once saw how the entombment might have taken place in recent times. A land-slide explained the mystery. Beneath this the buffalo had been buried, and as the trees carried down had been but little disturbed, they continued to flourish as if no change had occurred in their position. My questioner was pleased, and quaintly remarked to standers-by "that the buffalo aint so very old after all."

LARAMIE DEPOSITS.

The question which now presents itself is: To what period in geology do these deposits belong? Regarding this there seems to be a diversity of opinion, some locating them in the upper Cretaceous; others as lower Eocene; in other words, at the summit of the Secondary, or base of the Tertiary rocks. There is no doubt that there is a striking contrast between these fossils and what we find farther

east. In fact, among those found there is no resemblance to the Cretaceous which came under my examination.

From a comparison with fossils found elsewhere it would seem that these remains belong to what is known as the Laramie series of rocks, which are considered as a transitional group between the Cretaceous beneath and the Tertiary above.

These rocks were likely formed before the Rocky Mountains had made their appearance, as their arrangement and condition seem to indicate that the great changes which brought these mountains into existence, took place after their position.

BOW RIVER NEAR THE 12TH STATION.

Having completed my observations at Calgary, the next place which engaged my attention was along the banks of the Bow River, about 100 miles west of Medicine Hat. I had been told by an enthusiastic passenger on the way that in the banks of the river at this place, it was a common thing to find petrified fish. To obtain such was worth any collector's effort.

For several hours I wandered along the river banks at this lonely spot, east of the Crowfoot Crossing, thoroughly examining the escarpment from the water edge to the prairie level, 150 above the river. Not a trace of extinct life was discovered in the gravel and clay of the banks. Had I been fortunate enough to have left the train at the Blackfoot Crossing farther west, I certainly would have been better rewarded, for at that point a coal seam appears, near which there are no doubt objects of paleontological interest.

But here I had followed the instructions of one of the uninitiated in geology and learned, as I have on several occasions before, that such guides are not to be relied upon. They always see fossils in a magnified form and are never at a loss to identify them as belonging to existing types. They find fish in rocks which were formed long ere fish came into existence; backbones in formations deposited in seas which had passed away ages before vertebrates appeared; petrified wasps' nest in periods which had long preceded the creation of insects, and even mastodon teeth long anterior to the appearance of these gigantic forms upon the earth.

After a wearisome search, disheartened and greatly disappointed, I resought the track, which is not far from the river.