

NOTES ON UNEARTHING PARTS OF A
MASTODON SKELETON

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In the summer of 1925 while plowing one of his fields rather deeply, the plow of Mr. Noah Cover struck some solid object buried in the ground. He investigated and found that the object was the femur of a mastodon. In a similar manner he discovered half of the lower jaw, the lower portion of the skull, and some teeth and ribs. Most of these he turned over to the Peru Museum. Nothing further was done toward a systematic search for more of these fossil bones till Oct. 19, 1929, when a party of teachers and students from Manchester College spent a day in excavating.

Mr. Cover's farm lies about a dozen miles north of Peru and consists in part of old lake beds. Toward the west side of the farm was located, until recent years, a small lake covering perhaps twenty or thirty acres. To the northeast of



this was a larger lake that at one time was probably more than a mile in length, and, at places, half as wide. Connecting these two lakes was a narrow strip of water about a hundred yards in width at its narrowest place, and probably three or four times as long. Twenty-five or thirty years ago a ditch was dug through the lakes, completely draining them. Some fossil elk bones were recovered when the ditch was dug. It seems possible that animals in passing from one of these lakes to the other followed the shore-line of the strait connecting them, the ground on either side of this strait being somewhat higher, though the upward slope for the most part is very gradual. It was on the south-east side of this strait at about its mid-point that the mastodon bones were found. The soil at this point is typical of similar situations, being for the most part muck with here and there slight admixtures of heavier soil. It varies from two and a half to three feet in depth and is underlain by quick-sand of unknown depth. Our facilities for going into this were inadequate and we did not attempt to dig into the quicksand except in certain places.

The plan of attack was to start in the vicinity of the place where bones had previously been found and to work over the soil to as great a depth as seemed advisable and over as great an area as possible. The first bones found were located at a depth of about a foot, and others were situated at depths varying from this to about three feet below the surface. In all an area of about fifty by eighty feet was gone over thoroughly. In this space were found ten complete, or nearly complete, vertebrae, sixteen ribs, thirty-two bones from the feet, toes etc., and a large number of fragments of various sizes. The largest parts found were a complete pelvis and one tusk with a diameter at its base of seven inches and a length on its greater curvature of ten feet and two inches.

When found the pelvis showed several cracks, so that it could not be removed entire, and the tusk was cracked square across about one-third of the distance from the base. Another break developed at about the middle of the longer piece of the tusk and it required careful handling to prevent its breaking up into a multitude of fragments. Careful wrapping, first with many turns of twine, then



with burlap, combined with great caution in handling, brought the tusk safely to its present resting-place. None of the larger leg bones were found, and only a small piece or two of the skull, a considerable part of this having been found previously.

With a single exception all of the bones were found in the mucky soil, that exception being a small bone found at a depth of a few inches in the quick-sand. At several places considerable digging was done in the quick-sand, but wholly without result with this single exception.

The bones were not arranged in any orderly fashion as one might expect if the animal had mired and perished; but they were scattered over an area several times that which the mastodon would have covered, and somewhat promiscuously, as if carnivorous animals had feasted on the flesh and had scattered the bones; or as if the mastodon's body might have been partially or wholly afloat while the bones dropped here and there as the body disintegrated. But the first hypotheses seems hardly tenable, as there are no tooth marks observable on any of the bones, and the second conjecture may be as wide of the mark.

Most of the bones found were in an excellent state of preservation in spite of the fact that they had lain where they were found for probably several thousand years. The weathering of the soil had undoubtedly brought uneven pressures to bear on the pelvis and the tusk and this accounts for the fractures found in them; but in spite of this, their condition was remarkably good when one considers the time element.

Two of the longest ribs give hints of a story that one wishes he might know in its entirety. These two ribs were once broken at about their mid-point and afterward repaired; but the nature of the repair is such as to indicate that the animal was comparatively old at the time and made a rather poor recovery. What was the nature of the accident or the battle that resulted in this injury can only be guessed at.



Whether other parts of the skeleton not found as yet, are hidden near where these have been found, is unknown. Though but one tusk was found, diligent search was made for a considerable distance around the resting place of this one, but to no avail. The one found was perhaps six inches above the quick-sand, and the sand was excavated to a considerable depth, but no trace of another tusk was found. It may be that the missing parts of the skeleton did not fare so well "at the hands of the elements" as did the parts that have been recovered.

The accompanying illustrations show: (1) The Pelvis as it lay after being completely uncovered but before being moved. (2) One side of the pelvis held by Mr. Cover. This will give some idea of its size, Mr. Cover being an average-sized man. (3) The tusk after the soil had been removed from over it.

