

and objects of human art, mingled with remains of fishes, reptiles, and mammals, washed by the river from the banks, composed of eocene and post-pliocene deposits.

"Teeth of an extinct species of horse, however, undoubtedly belong as true fossils to the post-pliocene formations in the vicinity of Charleston. These are usually, hard in texture, stained brown or black from the infiltration of oxide of iron, sometimes well preserved, but more frequently in a fragmentary condition and water-worn. Generally they are not larger than the teeth of the more ordinary varieties of the domestic horse, and sometimes are quite as simple in the plication of their enamel, but usually are more complex and sometimes exceedingly so.

"One figured represents a first superior molar tooth, neither larger nor more complex in structure than the corresponding tooth of the recent horse. This specimen, which is dense and jet black in color, was obtained by Prof. Holmes from a stratum of ferruginous sand, two inches thick, exposed on the side of a bluff, on Goose Creek, about twelve miles from Charleston.

"Having expressed a desire to see the locality from which the tooth just mentioned was obtained, Prof. Holmes afforded me the opportunity of doing so. The bluff is about thirty feet high; its base is formed of a pliocene limestone, about fifteen feet thick, and composed of the debris of marine shells; above this is the stratum of ferruginous sand, of post-pliocene age, containing numerous pebbles and rolled fragments of bone all blackened like the tooth obtained from the same position. Overlying the latter stratum, there is a layer of stiff blue clay, about two feet in thickness, and above this there are about twelve feet of sand and earth-mould.

"A similar blackened tooth was obtained from the same formation at Doctor's Swamp, John's Island.

"Another figure represents a remarkably well preserved specimen of a lower molar above referred to from Georgia, where it was discovered by J. H. Couper, in association with equally well preserved remains of other extinct animals. The tooth is brown in color, and it neither differs in size nor form from its homologue in the recent horse.

"In the collection of fossils of Prof. Holmes, there is the specimen of an upper first large molar, labelled from Texas, represented in figure 5. The tooth is of the largest comparative size, and exhibits the highest degree of complexity in the folding of its enamel; in both of which characters it differs in such a remarkable degree from the corresponding tooth, represented in figure 5, from the post-pliocene formation of South Carolina, that it appears hardly possible that these two teeth should belong to the same species of horse.

"A remarkably well preserved specimen of an upper molar-tooth, jet black in color, and an incisor, yellow and quite friable in texture, both belonging to the extinct horse, from North Carolina, have been submitted to my inspection by Prof. Emmons.

"Among the most interesting of the fossils discovered by Prof. Holmes, in the post-pliocene beds of the Ashley River, are two molar teeth of a species of the equine genus *Hippotherium*. These are the first remains of the latter discovered in America, and they indicate the smallest known species.