

The following is transcribed from an article published in the *Cañon City Avalanche* on June 21, 1877, found on microfilm at the Royal Gorge Regional Museum and History Center in Cañon City, Colorado.

[CORRESPONDENCE.]

Ed. Avalanche: -- In response to your statement of last week, that a more detailed account would be given of the late discovery of immense fossil bones in this vicinity, I send following as the result to date of my exhumations with some descriptive statements to illustrate effort made to identify same.

The bones were found about nine miles north of Cañon City, imbedded in a thin stratum of fragile shale of bluish color. This shale, according to Hayden's survey, belongs to the upper part of the Jurassic formation – this being the middle period of the Mesozoic time, or Reptilian age. This age as its name indicates, was characterized by the existence of great reptiles among which the Saurians or Lizards were most prominent. The Dinosaur, (terrible lizard) ranking the highest. The latest edition of Dana's Geology describes this tribe as follows: "They were reptiles of great size all now extinct, having some mammalian and many bird-like characteristics

1. The long bones have a medullary cavity. 2. The pelvic arch and the hind feet are nearly the same as in birds. 3. The sacrum consists of at least four vertebrae, a mammalian feature. 4. Cervic (neck) vertebrae convexo concave, as in mammals. 5. The lower jaw in some species has lateral motion for trituration. They include the Megalosaur, Hylaeosaur, Iguanodon, Hadrosaur and others. Several of these conditions are found in the bones already taken out, sufficiently so to prove that they belong to that species of the Dinosaurs called the "Iguanodon" as stated last week – the long bones being hollow, the pelvic arch resembling that in birds, and the sacrum consisting of four vertebrae united in one. This species was first made known by Dr. Mantell, of England. The individual found by him had a femur or thigh bone thirty-three inches long and a humerus or second leg bone of the fore leg nineteen inches long. The hind feet were three toed like birds – the fore legs shorter than the hind legs, and the head comparatively small. It was an herbivorous animal, standing high above the ground biped-like, being able to lift itself on its hind legs for the purpose of cropping branches of trees, or at other times as a quadruped grazing upon the luxuriant sedges and reeds, few types of which, if any exist at the present time. Along the borders of marshes, estuaries or streams in or about which it lived. The individual mentioned above was estimated to have been twenty-eight to thirty feet long. Comparing the dimensions [sic] of those bones with what I have would make the latter animal from sixty-three to sixty-five feet long upon the supposition that it is an Iguanodon. That my surmise is possibly correct, I would state that a dissection of an ordinary swift, or lizard five inches in length shows many features in common with the fossil. I am still prosecuting the work and think that with proper care and perseverance I shall be able to secure the larger portion, if not nearly the whole skeleton. Some of the bones, especially the thin ones, are badly broken and hence require much time and patient labor to properly arrange. Another difficulty in the way of successfully prosecuting the work is that many of the bones are removed a hundred yards or more distant,

evidently soon after [unclear text, possibly "the animal died, it was preyed upon"] by some huge carnivorous animal. I have already obtained the following bones, viz: tibia, three foot on inch long; femur, six feet; hip bone, three feet three inches; sacrum, three feet one inch; shoulder blade, five feet five inches; thirteen caudal vertebrae, several dorsal vertebrae, and several ribs; a small part of the jaw bone containing six teeth, and other bones which I am at present unable to identify. I propose soon to send portions east to some one thoroughly versed in paleontologic science, that if possible, positive knowledge of species and name may be had.

O. W. Lucas.

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