

where the road running southwest from Caldwell crosses Snake River. The elevation is 2,500 feet. At the same locality were found remains of *Procamelus*, "*Mastodon* (not *M. americanus*)," *Castor* sp. undet.; *Olor*, sp. undet.; and an amioid fish *Pappichthys*. These occurred in soft lake beds forming bluffs facing Snake River.

In 1918 (Bull. Dept. Geol., Univ. Calif., vol. x, p. 527, fig. 3), Dr. John C. Merriam described, as a new species, *Equus idahoensis*, the type of which, an upper cheek tooth, his exploring party of 1916 had found near Froman Ferry, 8 miles southwest of Caldwell. This must be very near the locality mentioned by Lindgren and Drake. This tooth and a lower premolar are stated to have been discovered in the Idaho formation. At the same place were secured a part of a mandible of a saber-tooth cat, *Ischyrosmilus? idahoensis*. It is not improbable that all or some of the other horse remains found in that region belong to *Equus idahoensis*.

The most important remains of *Equus* recorded by Lucas are 2 fragments of upper teeth, a few fragments of a lower jaw, a lumbar vertebra, the tuberosities and bicipital groove of a humerus, a part of the distal end of a tibia, a few fragments of metapodials, a calcaneum, an external cuneiform, a vestigial metapodial or two, and the left half of one first phalange. Most of the bones indicate a horse of medium or large size. The fragments of teeth belong to two individuals, one older than the other but possibly of the same species. The older tooth is represented by the inner portion of the crown of a left premolar. The height is 63 mm.; the fore-and-aft dimension of the grinding face must have been nearly as great as that of the upper premolar of Merriam's *Equus idahoensis*. The protocone has the size and form of that figured tooth. It appears safe to refer the U. S. National Museum tooth to Merriam's species. The other fragment presents the outer face of a true molar whose size agrees with that of the premolar. It is not certain from which of the three localities mentioned by Lucas the teeth were derived; possibly it was from the locality, Froman Ferry, where Merriam's specimen was collected.

The first phalange, probably of a hind foot, measured along one border, is 86 mm. in length.

In the department of vertebrate palaeontology in the U. S. National Museum the number 11603 is given to the 2 teeth described above. To the external cuneiform bone, the upper end of a third metatarsal, and a second and a fourth metatarsal parts of one individual has been allotted the number 11604. To the other *Equus* bones is given the number 11610.

*Near Payette, Canyon County* (6)—At a point on the north bank of Payette River, 4.5 miles southeast of Payette, Doctor Merriam's party found a part of a supposed upper first molar and a complete lower hindmost premolar of a horse identified provisionally as *E. idahoensis*. The beds were referred to the Idaho formation (John C. Merriam, Bull. Dept. Geol. Univ. Calif., vol. x, p. 527).

*Opaline, Owyhee County* (7)—Doctor Lindgren (20th Rep. U. S. Geol. Surv., pt. 3, p. 99) reported that some bones had been found near Opaline and had been identified by Marsh as those of *Protohippus*. These are probably the same that are mentioned by Lindgren in the Silver City folio as having been secured at Sommercamp.