

In the Francis A. Hood Museum, at Alma College, Alma, Michigan, the writer saw, in 1914, a fossil horse tooth which had been found at Carson. It was a lower right molar or premolar. The length was 37 mm., the width, 20 mm., the height, 60 mm. This tooth is large enough to be referred to *Equus giganteus*.

*Astor Pass, Washoe County* (6)—Astor Pass is situated west of the northern end of Pyramid Lake and furnishes a way of access to the region about Honey Lake. In 1915 (Univ. Calif. Bull. Dept. Geol., vol. VIII, pp. 377-382, pl. xli, text-figs. 1, 2), Dr. John C. Merriam reported the occurrence of vertebrate fossils found by Professor J. C. Jones in a railroad cut in gravel deposits, 4 miles west of the north end of Pyramid Lake. The horse remains consisted of only an upper fourth premolar. Doctor Merriam had at his hand also a part of a maxilla containing 3 premolars and 2 molars found at Astor Pass and presented by William Hood. Dr. Merriam was in doubt whether these teeth belonged to *Equus occidentalis* or *E. pacificus*.

To the present writer, on account of the size of the teeth and the complication of the enamel, the specimen seems to belong to *Equus pacificus*, as this species is figured by Gidley (Bull. Amer. Mus. Nat. Hist., vol. XIV, p. 117, fig. 11).

With the remains obtained by Professor Jones were a tooth of *Felis atrox*, an astragalus of a camel, possibly a *Camelops*, a vertebra of a bird and some vertebrae of a fish.

## CALIFORNIA

(Map 10)

*Samwel Cave, Shasta County* (1)—In 1906, Dr. E. L. Furlong published a paper (Amer. Jour. Sci., ser. 4, vol. XXII, pp. 235-247, figs. 1-3) on the exploration of Samwel Cave, situated in the east bank of McCloud River, about 16 miles above its mouth. Apparently the cave is in township 3 west, range 35 or 36 north. A considerable number of species was discovered, among them a horse referred to *Equus occidentalis*. Under the geology of the region will be found a description of the cave and a list of the species secured.

*Baird, Shasta County* (2)—In 1904, Dr. W. J. Sinclair reported the explorations made in Potter Creek Cave, near Baird (Univ. Calif. Publ. Amer. Arch. Ethnol., vol. II, pp. 1-27). Among the numerous species secured, *Equus occidentalis* and *E. pacificus* were identified. A description of this cave and a list of the species found in it will be given on a succeeding page devoted to the geology of the region.

*Long Valley, Lassen County* (3)—In the U. S. National Museum (Cat. No. 1596) is an upper left hindmost horse molar which was reported found on Long Valley Creek, by workmen making a reservoir, probably near the town of Long Valley. The tooth is worn down to within 20 mm. of the root. The length of the grinding surface is 30 mm.; the width 25 mm. It may be compared with catalogue number 687, from Sinker Creek, Idaho. This is worn down to about the same length, and the dimensions corresponding to those just given are 32 mm. and 28 mm. In both of these teeth the enamel has a very simple arrangement. Perhaps in less-worn teeth it might be more