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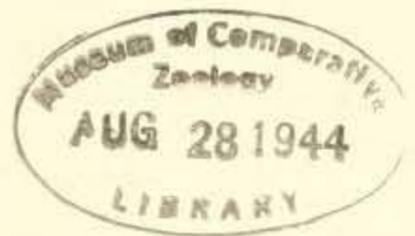
NEW OCCURRENCES OF FOSSIL TAPIR IN SOUTHERN CALIFORNIA¹

BY

28898

CHESTER STOCK

California Institute of Technology



Discovery of fossil tapirs in California occurs with such infrequency that new finds are worthy of special notice. This is all the more desirable since known occurrences within the state have made available only fragmentary remains. Unfortunately, the two specimens herein described are likewise incompletely preserved.

A single lower cheek-tooth (figure 1a) was found in April, 1943, by Howard Duncan while making an excavation for a cesspool on his property located at 1844 Palm avenue, National City, San Diego County. It was encountered at a depth 12 feet below the surface in decomposed granitic debris below a layer of hardpan. The specimen was deposited in the paleontological collections of the California Institute of Technology through the courtesy of Clinton G. Abbott, Director, San Diego Natural History Museum.

The geological formations in the area where the tooth was found include a terrace cover, Pleistocene in age, and the underlying San Diego deposits that are regarded as not older than middle Pliocene. The San Diego formation is both marine and continental in origin, and its upper strata, where they are weathered, can not always be readily distinguished from the superimposed Pleistocene beds. The latter comprise marine and littoral boulders, sands and silts. Thus the age of the tapir tooth, in the light of information available, may be Pleistocene. It is definitely not older than middle Pliocene.

The tooth, No. 3340 C.I.T. Coll., figure 1a, belongs to the left

¹ Contribution No. 370, Balch Graduate School of the Geological Sciences, California Institute of Technology, Pasadena, California.

side of the lower jaw, and is apparently a second molar. It resembles in size and in shape a tapir tooth (M/2?) described by J. C. Merriam (1913, pp. 170-173, figs. 1a-1c) as *Tapirus haysii californicus* from the late Cenozoic auriferous gravels of the Sierra Nevada, California. It is smaller than lower teeth in the type specimen of *Tapirus merriami*, described by Frick (1921, pp. 311-314, figs. 26-28) from the Bautista Pleistocene of Riverside County. Although the dimensions of the San Diegan tooth are slightly greater than those of Merriam's specimen, the ratio of crown width to crown length (19.2mm. : 28mm.) is more like that in the latter than in *Tapirus haysii*.

The transverse axes of the two principal crests on the occlusal surface diverge toward the inner border of the tooth. The crown shows little or no wear from occlusion with other teeth, but it has been damaged in the course of preservation. A tiny tubercle or rudimentary ledge is located near the inner posterior base of the metaconid. The paralophid is not completely preserved at the inner end. It forms a straight trending ridge, situated low on the crown. The cingulum in front of it is more feebly developed than in the tooth from the auriferous gravels. The posterior cingulum resembles that in the latter. Roots are not preserved in the San Diegan specimen.

A second occurrence of tapir was brought to the attention of the Los Angeles County Museum by Pat Escobar of West Los Angeles. An upper tooth was found in 1943 while digging a trench for a sewer for a housing project located between Lomita and San Pedro, Los Angeles County. The excavation is approximately 600 feet west of the intersection of Anaheim boulevard and Vermont avenue, and 150 feet south of Anaheim boulevard. With the tapir tooth and presumably found at the same site is a third upper molar of *Equus occidentalis*. According to Dr. W. P. Woodring, who examined the locality, the deposits whence the teeth are said to have come are probably upper San Pedro (Pleistocene) in age. The equine molar is similar to teeth of *E. occidentalis* found elsewhere in upper San Pedro beds. This species occurs in the asphalt of Rancho La Brea, and is one of the characteristic late Pleistocene mammals of the region.

The tapir tooth (left P4/?), figure 1b, is relatively narrow in anteroposterior diameter, and is rectangular in shape. The crown shows moderate wear. The enamel surface of the inner wall of the protocone is broken away and this defect tends to emphasize the rectangularity of the crown. In reality, however, the transverse diameter along the

protoloph is greater than that along the metaloph. The tooth does not exhibit the anteroposterior extent of crown seen in molar teeth of tapirs. In the presence of a relatively narrow V-shaped notch on the outer wall between protocone and metacone the tooth resembles more a fourth than a third pre-molar. The parastyle is a strong and distinct cusp, but the cingulum along the anterior border of the tooth is only weakly developed. At one point the thick enamel, forming the front wall of the protoloph, practically eliminates this ledge where it projects toward the anterior border of the crown. No ledge is present at the inner opening of the valley between protoloph and metaloph. Only the stubs of roots remain. The two inner roots are fused to a distance of at least one centimeter below the crown.

The upper dentition of *Tapirus*, near *haysii californicus*, described by J. C. Merriam (1913, pp. 172-175, fig. 2) from Cape Blanco, Oregon, includes, unfortunately, only the three molars. It represents a larger individual than that to which the upper San Pedro tooth belonged. In the front molars of the Cape Blanco specimen the anterior cingulum seems likewise to be a thin ledge. Measurements (in millimeters) of the tooth from the upper San Pedro deposits are: anteroposterior diameter, 21.1; greatest transverse diameter (approximately), 28.

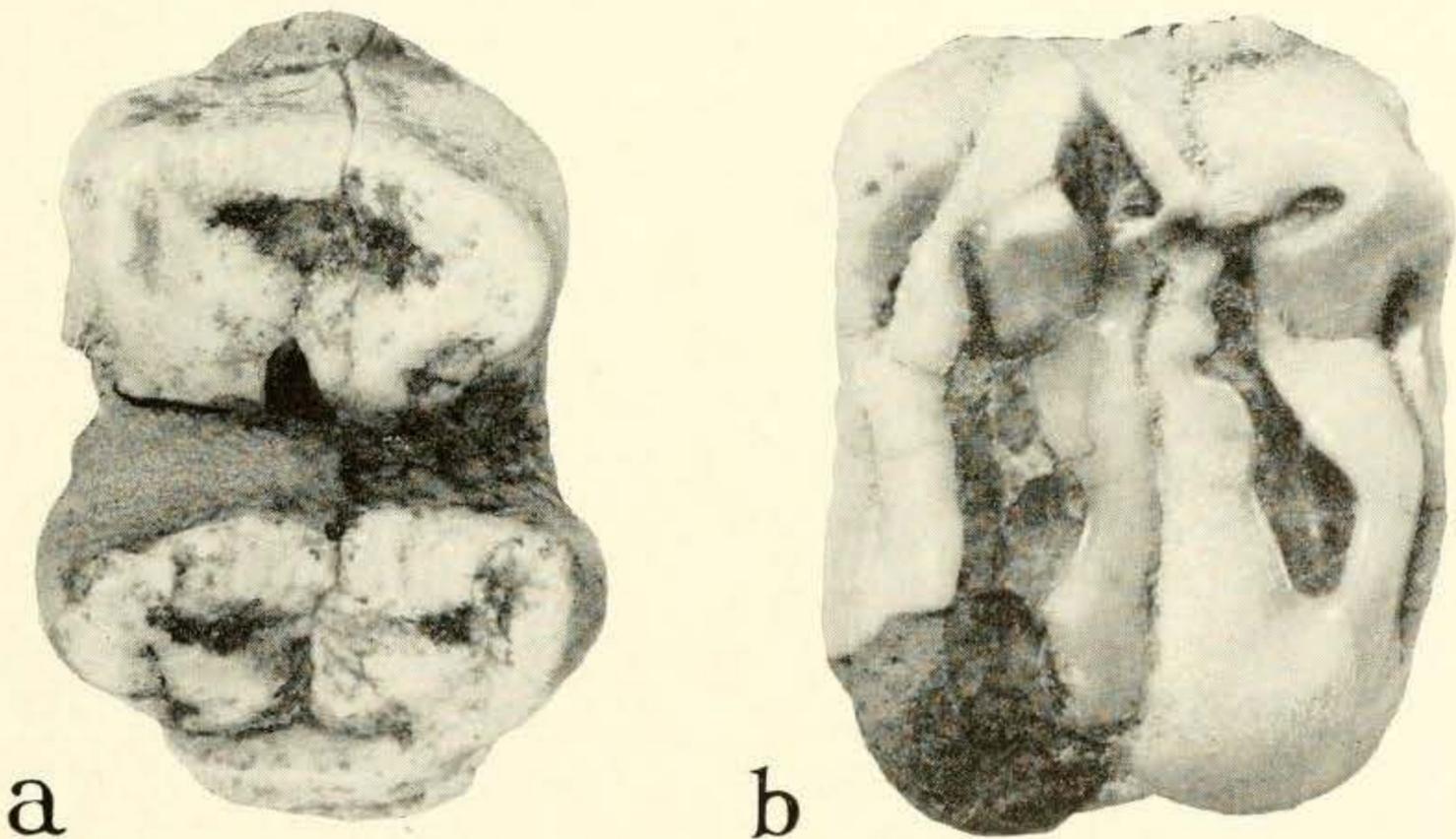


Fig. 1. *a*, *Tapirus haysii californicus* Merriam. M/2?, crown of tooth is stained but not worn; Pleistocene?, National City, San Diego County, Calif. *b*, *Tapirus*, cf. *haysii californicus* Merriam. P4/?, upper San Pedro Pleistocene, Los Angeles County, Calif. Occlusal views, natural size.

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