

pupil, and sometimes in little dots or small triangular spots in the peripheric zone.

16. The four varieties of pigmentation, which serve for the notation and classification of intermediate eyes, are yellow, orange, chestnut and maroon.

17. Eyes of an incomplete maroon color, in other words, those whose surface is not entirely covered with maroon, are subdivided as follows: 1. *Maroon circle*, where the maroon is grouped around the pupil. 2. *Irisated maroon*, where the pigment enters besides a portion of the peripheric zone, and leaves only exposed on the surface of the iris, small triangular or crescent shaped spots, either of greenish yellow or of dark slate-blue color.

18. This distinction between *circle* and *irisated* is also applicable to other pigmentations, but as a descriptive information only, without calling for subdivisions.

19. To resume: The sub-divisions finally obtained appear in the following classification, in which a place is found for eyes of every description:

1. Impigmented (that is, the iris is entirely without the yellowish-orange matter).
2. Pigmented yellow.
3. Pigmented orange.
4. Pigmented chestnut (incompletely).
5. Pigmented maroon in circle.
6. Pigmented maroon irisated.
7. Pigmented pure maroon.

This scale of colors must be learned by heart, so that it may be recited without hesitation, from top to bottom and vice versa. It is important to be closely posted on the meaning of each of these expressions.

20. The yellow pigment is very much alike to pulverized sulphur (pale yellow).

21. The orange is not exactly the color of the peel of that fruit but rather what the painter calls, yellow ochre.

22. The chestnut resembles burnt sienna, or the shell of a dry dusty chestnut.

23. In practice, and in the absence of a comparative scale, the varieties of pigmentation of the eye are classified by concentrating the observation on the following points:

1. The yellow is distinguished from the orange by the manifest absence of reddish tints or by a very scarce pigmentation.

2. The orange from the chestnut, by a more vivid shade, not tarnished with black.
3. The maroon is distinguished

from the chestnut by a more velvety, more abundant and deeper pigmentation.

Science News Letter, November 22, 1930

PALEONTOLOGY

Seek More Evidence That Man Knew Extinct Animals

Will Search For New Clues in Gypsum Cave Where Bones of Sloth Were Found With Charcoal Possibly Left by Man

WITH high hopes of uncovering further data bearing on the last phases of the Pleistocene or ice age period in America, and especially on the association of man with animals now extinct, the joint expedition of the Southwest Museum of Los Angeles and the California Institute of Technology has resumed its exploration of Gypsum Cave near Las Vegas, Nev. The work is in charge of Curator M. R. Harrington of the Southwest Museum.

This is the cave which yielded, last spring, numerous bones of the ground-sloth *Nothrotherium* together with enormous claws with horny covering still intact and even masses of coarse tawny hair of the same animal; also bones of two species of American camels and at least one type of native horse. All these are well known Pleistocene or ice age species except the smaller of the two camels which seems to be new. This was a tiny variety related to the South American llama, with slender limbs like those of a gazelle.

Even more important was the finding, in every room of the cave, of evidence indicating the association of man with these extinct animals, in the form of charcoal, burnt sticks, flint dart-points and crude wooden dart-shafts decorated with painted designs. These objects were found in the same deposits as the bones of the extinct animals, in some cases at lower levels and in one instance a patch of charcoal, probably the remains of a campfire, was found beneath two layers of ground-sloth dung about eight feet below the present surface.

Near the surface and far above the campfire were implements left by the Paiutes, the Pueblos and the Basket-makers, these last the earliest people hitherto known to have inhabited the southwest.

The finds were considered so important that the Carnegie Institution of

Washington made a grant of money to the Southwest Museum.

It is hoped that during the present season evidence will be found bearing on the question now puzzling to archaeologists and paleontologists—whether man really existed in America twenty or thirty thousand years ago, the time usually assumed for Pleistocene, or whether some of the Pleistocene animals lived on until more recent times.

The scientists hope to find human bones in the older deposits from which it may be determined whether these early Americans were of the primitive type associated in Europe with the low-browed Neanderthal cave man who flourished in the Pleistocene period.

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ENGINEERING-PUBLIC HEALTH

Dust Avalanche Falls on London

THE world was shocked by the recent avalanches at Lyons, France, which resulted in many deaths, but last year thousands of tons of dirt, in the form of dust and soot, fell on London. A similar condition is true of any large city where considerable soft coal is burned.

Last year an average of 239 tons fell on each square mile in London. Even this is much less dirt than the Britishers have had to breathe, wash from their faces and clean out of their houses.

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Alkaline Earths

The metals of lime, magnesia, and other elements of Group II of the Periodic Table will be described in next week's

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