

*cineum* (Pursh.) A. Gray, *Pentstemon* sp., *Artemisia frigida* Willd., *Brauneria pallida* (Nutt.) Britton, *Grindelia squarrosa* (Pursh.) Britton and Rusby, *Astragalus* sp., *Psoralea floribunda* Nutt., *Erigeron* sp., *Kuhnistera purpurea* (Vent.) MacM., *Lithospermum* sp., *Ratibida columnaris* (Sims.) D. Don., *Antennaria campestris* Rydb., *Verbena hastata* L., *Verbeña bracteosa* Michx., *Helianthus scaberrimus* Ell., *Carduus altissimus* L., *Boebera papposa* (Vent.) Rydb., *Solidago* (two species, unidentified), *Aster* sp., *Solanum carolinense* L., *Rosa arkansana* Porter.

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#### PALEOLITHIC MODELERS IN CLAY

THE discovery, on July 20 last, by Count Bégouen and his two sons, of a new French cavern with paleolithic mural decorations has already been noted in SCIENCE.<sup>1</sup> This cavern, called Tuc d'Audoubert, situated near St. Girons (Ariège), was visited by the writer five days after its discovery, but did not even then yield up all its secrets. We noted certain small openings leading apparently to other galleries then closed against us by deposits of stalactite and stalagmite. At Geneva in September Count Bégouen informed me that he had entered one of these and found additional parietal engravings. In a communication to me dated October 23, he announces that at the end of still another long and difficult upper gallery, reached only after breaking away stalagmite pillars, he and his sons have found two clay statuettes intact, representing the *Bison*, male and female 63 and 61 centimeters long respectively. In an antechamber as well as the upper gallery these Magdalenian artists also left their footprints on the soil superimposed on footprints of the cave bear, whose skeletal remains were strewn upon the cavern floor. All the canines were missing, however, from the jaws, having evidently been removed as Magdalenian trophies. A perforated tooth (*Bovidæ*) and several flint implements were found on the cavern floor.

The artist races inhabiting southern Europe in later paleolithic times were sculptors of real merit. They worked laboriously in stone,

ivory, bone, and horn with excellent results and without the use of metal tools. That paleolithic man had realized any of the possibilities of clay as a plastic medium has always been denied. Absence or presence of pottery has been universally invoked as a chief factor in distinguishing paleolithic and neolithic horizons. The clay figures found by Count Bégouen are unbaked, to be sure; but they prove that only the accident of firing stood between the Magdalenian races and one of the great inventions of all time. These figures were never wholly separated from the matrix out of which they were fashioned. They seem to stand out of a clay talus slope that flanks a fallen rock, the male following the female. For the present no attempt will be made to remove them from this shrine.

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#### THE PROGRESS OF MOUNT ROSE OBSERVATORY, 1906-1912

MOUNT ROSE OBSERVATORY, although the youngest of the meteorological observatories in America, has an environment so unique that its staff has not only obtained a series of problems of prime importance to pure science and to agriculture but has also found such abundant material that rapid progress has been possible in their solution. A brief statement of plans and progress at this observatory may, therefore, not be without interest to workers in the meteorological field.

Mount Rose is a peak of the Sierra Nevada Mountains at the western edge of the Great Plateau. The observatory on the summit, which is 3,292 meters above sea level, at present is the highest meteorological station in the United States, and was established privately for the purpose of ascertaining the winter minimum temperatures at the summit of the Sierra. Later it was made a department of the University of Nevada and the Agricultural Experiment Station and through these institutions has received financial aid from the state and from the Adams Fund of the Office of Experiment Stations.

<sup>1</sup> August 30, 1912, p. 269.