



CRO-MAGNON MAN—The newly discovered Stone Age Alaskans are the equivalent of Europe's Cro-Magnon Man, above, who was artistic and very much like the modern European in appearance.

No sign of human relics was found in this clay, showing that the site was uninhabited for a considerable period of time.

Flint Implements Found

It was beneath these layers of clay that Prof. Giddings discovered a large quantity of extraordinary obsidian and flint implements. So many miniature chipped flints were found and of such exquisite workmanship that the Eskimo guides immediately revised their legend of the dwarf. Unquestionably the dwarf had made many of the flints but, said the Eskimos, "there must have been a lot of little people—a whole race of them."

The flints lie in a bed of pebbles, indicating that this layer was formerly a beach. Since the layer is about 40 feet above sea level the land must have risen considerably through the ages. Geologists are busy studying the site to determine how long ago the beach was at sea level and how long ago the sterile layer of clay on top of it was deposited. It may have been washed in by the stream in time of flood and deposited as the waters went down, but this must have occurred many times to account for the lamination.

The implements found were made by striking off long flakes from the flint and obsidian cores. Some of these flakes were then chipped carefully. Distinguishing features of the chipping are the serrated or saw-tooth edges so finely done that the teeth along the edges are scarcely visible to the naked eye and fine diagonal flaking across the flat sides. Chipped microliths are found in Old Stone Age layers in Europe but the serrated edges of the Iya-

tayet specimens make them unique. No similar implements are known from anywhere else in the world.

Link with Cro-Magnon

Associated with these extraordinary microliths are the so-called burins which definitely link the site with European Cro-Magnon. Burins are microliths which have as an added feature a sliver knocked off one of the edges. The Iyatayet burins are identical with those made by Cro-Magnon Man.

The diagonal flaking on the microliths is found also in the Yuma points discovered in the Finney site in Wyoming but the Yuma points are much larger and cruder than the Iyatayet. Both Yuma and Folsom type implements are found associated with the Iyatayet microliths. Yuma and Folsom points may be as old as 25,000 years. The makers of the Iyatayet microliths were evidently familiar with the bigger Yuma and Folsom implements as well as with the burins found in the Aurignacian culture in Europe produced by Cro-Magnon Man. Thus Iyatayet may be the missing link between the ancient cultures of Texas and Wyoming and the Old Stone Age culture of Europe.

Europe's Cro-Magnon Man was tall and straight, very much like the modern European. He may have been white. He lived at the edge of the glaciers in western Europe, especially in France and Spain. Although he made fine flint implements, he is most famous for his art. On the walls of deep caves in southern France and Spain he painted beautiful pictures in an extraordinary realistic style of the animals he hunted. This beautiful cave art still is in a wonderful state of preservation. It was never equalled by the people who occupied this region of Europe after Cro-Magnon Man. What happened to this talented race remains a mystery. Did it move northward with the retreating glaciers and finally find its doom in the Arctic regions?

Questions Await Answer

The actual dating of the Iyatayet material will depend on the findings of the geologists. The key to the site is the layer of laminated clay. So far several things are certain. The microliths are older than anything found in Alaska before. They antedate the Ipiutak Eskimo culture of 2,000 years ago. The burins resemble those found in Aurignacian layers 15,000 to 30,000 years old. They may have been made that long ago either by a Cro-Magnon people or by another people who were familiar with the implements of these Old Stone Age people and the art of making them.

How old are these flints? Who made them? Is there any truth to the Eskimo legend of a dwarf or pigmy people? Will Cro-Magnon Man be found in the New World? These are some of the questions that Prof. Giddings will try to solve next

summer when he resumes excavating. Special effort will be made to locate dry caves, such as that explored by Dr. Larsen, in the hope of finding actual human bones in association with the flint implements.

More discoveries like those made at Iyatayet may solve the mystery. The University of Alaska, the University of Pennsylvania Museum and the Copenhagen Danish Museum, under whose auspices the discoveries were made, are planning to intensify their cooperative efforts to determine who were the earliest human inhabitants of the American continent.

Science News Letter, December 3, 1949

MINING

Tracer Bullet and Flint Metals Are Found in U.S.

► TRACER bullets for machine gun practice and the flints in cigarette lighters may soon be made from rare earth elements uncovered in southeastern California instead of from imported ores. These same rare earth elements are artificially produced by atomic piles in very high purity, but in limited amounts, and are used by scientists to study alloys for use at extremely high temperatures.

Discovery of at least five veins, three of which contain considerable amounts of fluocarbonate of cerium and lanthanum combined with thorium and uranium, was announced by the U. S. Geological Survey. This discovery makes the United States more independent of foreign sources, mainly Brazil and India.

Clarence Watkins and Herbert S. Woodward of Goodsprings, Nev., two of the owners of the property, discovered the deposit when the minerals were found to be radioactive by test with a Geiger counter.

Interest in the rare earth elements has been greatly stimulated by the fact that they are in the group of fission products produced by the splitting of uranium. Also elements, known as trans-uranium elements, that are not found in nature but are built by the addition of atomic particles to uranium, have the same structure as the rare earths and are of great theoretical interest to chemists and physicists.

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