

ARCHAEOLOGY

Stone Age Love Scene Found in Cavern of France



STONE "TEDDY BEAR"

Perhaps children of the man and woman pictured in the love scene played with this bear, or it may have been a charm used in dangerous magic.

counted and measured for science. The stimulus for the wink in the case of these subjects was not a co-ed but a hammer coming down against a piece of glass at about the level of the eye.

Not all the winks are the same size, it was found. At the first hammer blow the eye automatically winks rather vigorously, but if this blow is quickly followed by another the size of the second wink is reduced. The longer the interval between the hammer blows, the bigger the winks. This holds for as long as six seconds between blows. This recovery time required by the wink mechanism before it gets back to normal is called by psychologists the refractory period.

The refractory period, it was found, is followed by a period of abnormally large response.

Attempting to keep from winking makes the effect of the refractory period even more noticeable. But when the subjects were told to wink voluntarily each time the hammer fell, there was no sign of a refractory period longer than one second. Practice increased the length of the refractory period for the automatic winks and shortened it for winks on the voluntary level.

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WHAT appears to be a Stone Age love scene between a cave man and his lady is the latest discovery of Stone Age art from caverns of southern France. Yes, the cave man is pursuing the woman. He has no club, but a harpoon point has been shot into her leg.

This scene recorded in art some 20,000 years ago is the discovery of a French archaeologist Count René de St. Périer, reported in the scientific journal *L'Anthropologie*. Exploring the recesses of the Grotto of Isturitz, in southern France, the Count has found two important art objects from the Magdalenian period of Stone Age human history.

One object is a little brown bear sculptured in sandstone, and so cleverly sculptured that it is hailed by the archaeologist as a gem of realistic art. The other object is a long piece of bone, with pictures engraved on both sides. On one is a bison hunt, and on the other a man and woman of the Old Stone Age.

In order to depict the man and woman on the long, narrow piece of bone, the artist placed the woman entirely

above the man. That is, so they appear when the bone object is held vertically. The French archaeologist, who has studied his prized discovery carefully, suggests that the artist meant the figures to be understood as standing side by side.

The woman's head is broken off. She wears a necklace and an anklet.

The man has bobbed hair, and wears a necklace and bangle. His head, shown in profile, has a receding forehead. Both the figures have their hands upraised in a gesture of supplication.

The French archaeologist interprets the harpoon in the woman's leg as a symbol of conquest. The man's attitude, he points out, does not appear hostile.

What the rites of courtship were 20,000 years ago in Europe, is lost knowledge. The Count de St. Périer comments that the engraving of the man and woman is "a document which should be preserved in the hope that some day new discoveries will permit further raising of the veil which hides the mental processes of the Stone Age people."

Science News Letter, May 28, 1932

ENGINEERING

Engineers to Refrigerate Concrete in Hoover Dam

THE HOOVER DAM, like other modern structures, is to have a mechanical refrigerator. But this will not be for conventional reasons.

The contractors pouring the colossal mass of concrete in Black Canyon must contend with a peculiar habit of Portland cement, of importance only with very large blocks of material. Cement has a considerable amount of latent chemical energy which is released during the setting operation. The silicates and aluminates of lime, of which Portland cement is composed, generate heat when they combine with water. In this respect they act like old-fashioned quicklime, only not so fast and not so hot.

In ordinary jobs, such as sidewalks or concrete walls, the release of heat is

of no consequence, as the mass is small and the structure is readily cooled by contact with earth or atmosphere. In the vast block of Hoover dam the heat will not have a fair chance to escape without special assistance. Without refrigeration the inside portion of the concrete would harden at steaming hot temperatures. The outside would set in a cool state. In due time the hot core would cool, shrink and crack. Studies of the heat given up by cooling concrete have been made in the past, but no structure of large concrete mass is believed to have had refrigeration.

An elaborate and very expensive system is planned, whereby chilled water will circulate through numerous pipes in the freshly poured concrete.

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