

STONE EAGLE—This picture shows archaeologists and their assistants at work on one of the stone eagle effigy mounds found in Georgia, but not elsewhere east of the Rocky Mountains.

ARCHAEOLOGY

Georgia Eagle Mound

Quartz arrow point and human bone fragments have been discovered in the unique stone effigy mounds, only found east of the Rocky Mountains.

➤ AN ARCHAIC quartz arrow point and calcined human bone fragments may hold the key to the age and meaning of the unique eagle effigy mounds, made of stone, found in Putnam County, Georgia. No other stone effigy mounds have been reported in the United States east of the Rocky Mountains.

The single artifact and the human bones have been found by an expedition sponsored by the 4-H Foundation in cooperation with the Georgia Historical Commission and the University of Georgia's department of anthropology.

Archaeologist in charge is Dr. Vincenzo Petrullo. Dr. Arthur A. Kelly, member of the Historical Commission and head of the department of anthropology, is serving as consultant.

Other types of stone mounds are found along the Piedmont belt from Georgia to West Virginia and Pennsylvania. A few have been reported from Ohio. Some of them are large, sometimes as much as 70 feet long and 30 feet wide and up to eight or nine feet high. Most of them are smaller and often the smaller ones are found near a large one.

Up to now no artifacts or other direct evidence that they were constructed by the aborigines has ever been found by an archaeologist, although treasure hunters have reported finding human bones from several of them.

In Putnam County, two eagle effigies

were found. These two are constructed of quartz boulders around a core of quartz outcropping. Both are over a hundred feet long and about 120 feet across the wings and are found in ridges about 13 miles apart.

Hundreds of tons of rock had to be moved before the arrow point and human bones were found. The arrow point was found between the neck and the wing of the eagle beneath some six inches of burned soil, ashes and charcoal.

The human bones were found, scattered over a square yard, between two boulders on the opposite side near the tail in a bed of burned soil and charcoal and stones. The burned bones may well represent a human sacrifice.

Carbon dates are not available as yet, but the absence of pottery in the mound and the surrounding area suggests that the mound may have been constructed in the archaic period.

"Present indications are," Dr. Petrullo said, "that these stone mound effigies were ceremonial objects probably representing the totem of the tribe. The area immediately surrounding the effigies was kept clear of any debris, which would explain why we do not find any potsherds or other artifacts.

"Possibly all of the stone mounds represent a religious complex, the nature of which is still a mystery."

Science News Letter, September 18, 1954

PSYCHOLOGY

Slot Machine Used To Study Mentally III

➤ AN ESPECIALLY rigged slot machine can be used to study the behavior of mental patients, Drs. Ogden R. Lindsley and B. F. Skinner of the Massachusetts Department of Mental Health and Harvard University told the American Psychological Association meeting in New York.

The two scientists watched how patients worked the slot machine, pulling levers to get candy, cigarettes, or even just colored pictures. The patients were at the machine one hour a day until they had put in about 70 hours.

The machine was set to pay off in two different ways. On one schedule, the patients were paid off by time, getting a reward each ninute. On the other schedule, the machine paid off on every twentieth pull of the lever.

The scientists found, after watching the patients, that they could predict how the patients would work the machine.

When they worked for pay by the minute, each patient had his own stable rate of work. Some worked so slowly that they did not even make one pull a minute. Others regularly pulled 140 times a minute.

Others regularly pulled 140 times a minute. On the "piece-work" schedule, a break in the rate of work followed each reward from the machine.

The behavior of a mental patient at a slot machine is very similar to that of a laboratory animal—a rat, pigeon or dog, the scientists observed. The break in rate following pay on the "piece-work" schedule is particularly characteristic of the lower animals, they reported.

This shows, they conclude, that the behavior of mental patients is controlled to some extent by the physical environment, it is not based entirely on signals from their dream world.

Science News Letter, September 18, 1954

ARCHAEOLOGY

African Antiquities Destroyed by Officials

ARCHAEOLOGICAL MATERIAL of great historical importance in Africa is being destroyed before it can be studied, Sir Mortimer Wheeler, secretary of the British Academy charged at the British Association for the Advancement of Science meeting in Oxford, England.

In Tanganyika, the beautiful palace masque of Kilwa island was robbed of ancient Persian tiles and wrecked by a former government official. At Bagamoyo, carved woodwork, including ornamented doors, were removed and sold in the 1940's without a thought for its historical importance. At Sadani and Moweni, sixteenth century carvings were destroyed and tombs broken up for lime. Great palaces in Zanzibar were destroyed, one of them to make room for a modern school, he said.

Science News Letter, September 18, 1954