Ancient Haitians Feared Hurricanes

Archaeology

Figures of Hurricane God Unearthed on Island

PREHISTORIC Indians who lived in thick settlements in the tropical, storm-swept island of Haiti feared the hurricane more than anything else in the world, and so they worshipped a hurricane god with special power to stay the winds. Little figurines of bone and shell, unearthed in an ancient cemetery on the island, are visible proofs of the hurricane god's cult. They were discovered by Herbert L. Krieger, ethnologist of the Smithsonian Institution.

Mr. Krieger has just returned from an expedition to the Dominican Republic in eastern Haiti, where he made the most striking discovery of old skeletons and pottery so far unearthed in the West Indies. These represent the type of Indians met by Columbus on his second voyage to America.

For hundreds of years, inhabitants of the village of Andres on the southern coast have walked along their streets without realizing that they lived over a cemetery. The first clue was found by Thomas Howell, a sugar grower, who unearthed a few bones. Mr. Krieger arranged to uncover the past history of the village, and his trenches led through the streets and even under the houses.

Beneath one native kitchen floor he found the skeleton of an Indian, crouched in sitting pose, as Indians often were buried. In front of him were four food jars and on each side of him a huge water jar.

The remarkably large number of 150 skulls was found. All of these are of the Arawak Indian tribe, a group whose naturally broad heads were further flattened by pressure and binding in childhood. The quantities of pottery buried with them are strikingly like the household wares made by mound-building Indians in the southeastern United States. Several double-decker clay jars were pronounced by Mr. Krieger to be like jars made by the Iroquois tribe. This bears out the folklore of the Iroquois which says that they once lived in the southeast.

The estimate of Spanish explorers that the island had a million Indian inhabitants may not have been overdrawn, Mr. Krieger's discoveries indicate. The Arawak lived in fishing and farming communities, and one mound of discarded shells and kitchen refuse was piled for a mile along the Caribbean shore.

Mr. Krieger believes that he has settled the question of the mysterious Cibone Indians who were described by Spanish chroniclers as cave dwellers and people who could not speak. These legendary Cibone were in reality some of the Arawak Indians, who lived in caves, for excavations into cave homes revealed traces of the Arawak culture, and even the most deeply buried layer of specimens contained a stone axe typically like those of the Arawak.

The collection of evidence obtained has been divided between the National Museum of Santo Domingo and the U. S. National Museum.

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Microscopic Movies

Microscopy

MOVIES showing microscopic cells 3,000 times larger than they actually are and bringing out slight variations in shade which are unnoticed by the eye looking through a microscope have been taken at the Rockefeller Institute of New York, Dr. Heinz Rosenberger reported recently to the Society of Motion Picture Engineers.

Dr. Rosenberger said that during the past few years scientists have been able to increase more than 10 times the magnifying power to which movies can be applied. Among the interesting discoveries made by these pictures is an undulating membrane surrounding white blood cells which is much larger than the cells themselves.

This membrane was invisible to the eye making examinations through ordinary microscopes, but it was brought out by the photo emulsion which often reveals differences in shades too fine to be detected by the eye. Dr. Rosenberger pointed out that the usual stains used to outline cells cannot be employed with the camera. When subject to the great light necessary in taking the pictures the stains cause the cells to act abnormally and to die fast.

"Difficulties of high magnification photography increase very rapidly, by arithmetical progression," Dr. Rosenberger said. "Suppose we are looking at the moon through a telescope. When it is a low powered telescope the moon will move slowly across the field of vision, due to the rotation of the earth. With medium power telescopes the moon will apparently move very much faster across the field, while with high powered telescopes one can hardly follow its rotation."

The same applies to microscopes, it was explained. As magnifying power increases the objects apparently move faster and make necessary more frequent exposures. When exposures must be made more often the time of exposure is decreased and the intensity of light required is increased. More light means that the delicate objects being photographed will be more readily injured. Difficulty of holding the focus and reducing vibration effect is also increased with high magnification.

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Mould Kills Bacteria

One of the moulds (a Penicillium) has been found to kill cultures of some bacteria, notably pus-forming cocci and diphtheria bacilli. This interesting news comes from Dr. Alexander Fleming of the Laboratory of the Inoculation Department, St. Mary's Hospital, London.

The mould is similar to the common fungus that sometimes spoils oranges and other fruits. Even when cultures are filtered, the resultant liquid which is called "penicillin" is effective. It can be kept for some time if it is neutralized, but if not it loses its power after from 10 to 14 days at room temperature. It does not affect all bacteria, for instance the thyroid group are resistant to its action; on the other hand, staphylococci, streptococci and diphtheria bacteria are killed rapidly.

Penicillin is not toxic to animals even when given in enormous doses, and it is also non-irritant. Is is therefore possible that it may turn out to be a useful antiseptic for combating infections caused by certain pathogenic bacteria.

Bacteriology

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