

ARCHAEOLOGY

Ancient Peruvian Cup

► ANCIENT PERUVIANS drank from a rare and distinctive vessel from which the liquid issued from the bottom, Dr. S. K. Lothrop of Peabody Museum, Cambridge, Mass., reports in *American Antiquity* (Jan.).

One type of "paccha," as this unusual drinking vessel is called, was made from human skulls. Skulls of important enemies were preserved as trophies from very early times in Peru, and it was apparently such skulls that were used as ceremonial drinking vessels.

Atahualpa, while a prisoner of the Spaniards, startled them by producing a human head with a gold cup sunk in the top. The teeth of the skull were closed over a tube of silver.

Atahualpa had been in battle a few days before his capture. He had killed many people and had captured his own brother and with him his golden drinking cup. It was the brother's cup that he had placed in the top of the brother's skull. He then sucked his chicha through the silver tube between the brother's teeth.

Other types of pacchas were made of wood and of pottery. Some of the pottery vessels were very elaborate. One portrays a man seated below a pottery jar with a short spout at the base so placed that it will pour liquid into the man's open mouth. The liquid runs through the man's body and then through the long base on which he is seated, finally emerging from a hole at the end.

It is probable, Dr. Lothrop believes, that these elaborate pottery vessels may be replicas of others made of a combination of materials as Atahualpa's was.

Wooden pacchas are painted and carved with elaborate scenes, flowers, birds and animals. The chicha flows from the base of a bowl into open zig-zag channels cut in a long tongue which terminates in a spout and the drinker's mouth.

It has been suggested that the basins and zig-zag channels cut in the rock in various parts of Peru are really permanent pacchas dedicated to the use of the dead buried in the neighborhood.

The wooden pacchas must have been extremely difficult to manufacture and were rare. Dr. Lothrop has seen only six. Two are in the national museum in Madrid, two in the British Museum and two in the Peabody Museum. He has seen photographs of one other in the museum at Berlin.

A more commonly used drinking vessel among the ancient Peruvians was the kero, or quero. This was shaped like a wide-mouthed vase, not unlike our glass tumblers.

Science News Letter, February 18, 1956

GEOLOGY

Northernmost American Shore Washing Away

► THE NORTHERNMOST LAND under the United States flag is being washed away, Prof. G. E. MacGinitie of the California Institute of Technology reported to the Smithsonian Institution.

The shoreline of Point Barrow in northern Alaska is receding southward at a rate of about seven feet a year, Prof. MacGinitie said.

Based on the evidence of an Eskimo village that has disappeared, Prof. MacGinitie says it is probable that the Point Barrow shoreline extended at least 500 feet farther north 75 years ago. The recession is due to northeast-sweeping ocean currents and the wind tides on very low-lying land, he explained.

If it were not for these currents and tides, the land might be building up rather than washing away.

As director of the Navy's Arctic Research Laboratory at Point Barrow for more than a year, Prof. MacGinitie learned the Arctic Ocean is slightly less salty than other seas because of the many rivers draining into it, and that ice itself has much less effect on light than might be supposed.

"Within a tent in January," he reported, "even when the ice is five feet thick, a greenish glow comes through it from below. The snow cover itself reflects light but at the same time glows with transmitted light and much light enters through it into the ice and water below."

Science News Letter, February 18, 1956

BIOCHEMISTRY

Weed-Killer Suggested in New Cancer Research

► A NEW TOOL in cancer research may be a chemical now used as a weed-killer and cotton defoliant.

Dr. Werner Heim, Dr. David Appleman and H. T. Pyfrom of the University of California at Los Angeles College of Agriculture have discovered that weed-killing amino-triazole has the same effects as cancer on an important but little understood body enzyme.

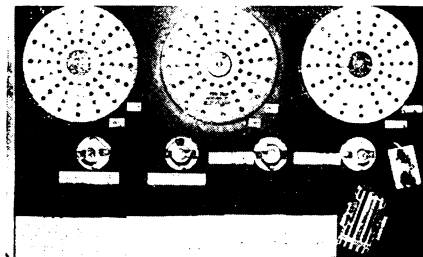
This enzyme, known as catalase, occurs in red blood cells and in the liver and kidneys.

When amino-triazole was administered to experimental animals, catalase levels in the liver and kidney were greatly decreased. Blood catalase, however, remained at a normal level. This is the same effect on the enzyme as that produced by cancer growing anywhere in the body.

This identical action of amino-triazole and cancer on catalase promises new clues to the biochemistry of cancer.

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