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ARCHAEOLOGY

Family Portraits Before Pottery

► **MEN WERE** creating and treasuring portraits of their loved ones before they learned to make pottery dishes.

Archaeologists have discovered a jumbled heap of such portraits in the ruins of the ancient city of Jericho, left there by the makers some 3,500 years before Joshua brought the walls tumbling down. The people who created the portrait heads lived in the New Stone Age, probably 6,000 years before Christ.

The human skull itself was used by the prehistoric artist as a base for the portrait which was modeled in plaster.

The features were reproduced "with extraordinary fidelity and a high degree of artistic skill," Dr. Kathleen M. Kenyon, director of the British School of Archaeology in Jerusalem, reports in *Archaeology* (March).

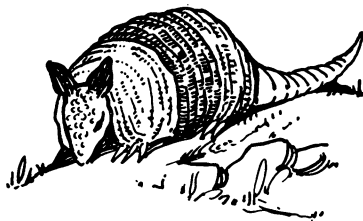
"One feels one is actually looking at the faces of men who died some seven thousand years ago," Dr. Kenyon says.

The suggestion that the skull heads were family portraits comes to archaeologists from a modern parallel in New Guinea. There, the people make similar portraits from skulls. In some cases the skulls are those of venerated ancestors, in others the heads of enemies preserved as trophies.

"The Jericho heads," Dr. Kenyon states, "may have had one of these purposes, and the care given to the modeling suggests that they were ancestors rather than enemies."

No pottery was found in the level where the heads were discovered. Evidently the people of the day had not yet learned to make dishes.

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Armadillo

► **WHEN THE** Spaniards first climbed up on the plateaus of Mexico they found creatures in coats of mail, no less wearers of armor than Cortez himself.

To these the intrigued conquerors gave a lasting name, "Armadillo," a Spanish word which translated as a whole English phrase: "Little fellow in armor."

The armadillos in the United States, a nine-banded family, are the country's only armored animal and the only representative of the edentates, zoological division that also includes the sloth, the ant-eaters and the aard-vark. The last-named, an African ant-eater, has gained fame by being the first full word in Mr. Webster's dictionary.

Since the time of Cortez, the armadillo has worked north from Central America, crossing the Rio Grande into Texas about a

CHEMISTRY

Special Protein Wanted

► **WANTED:** AN animal which can eat molasses and ammonia and produce beef-steak. This goal of chemists was presented to the U. S. Beet Sugar Association meeting at Mackinac Island, Mich., by Dr. Henry B. Hass, president of the Sugar Research Foundation.

Meat, three to 30 times as expensive as sugar, supplies the body with amino acids, which are essential to growth and health. Some of these can be produced artificially by chemicals, but two of them, lysine and tryptophan, have not been produced by any cheap artificial method, Dr. Hass said.

If these two could be produced by some yeast or enzyme from surplus sugar crops or the wastes that accompany production of sugar, "it will be possible to feed the people of the world adequately for the first time in human history," Dr. Hass believes.

Noting the chemical products already on the market from sugar crop by-products, Dr. Hass points to a potential "sucrochemical

industry" from this source, just as the petrochemical industry has sprung in recent years from chemical development of petroleum products.

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hundred years ago. They may now be found from New Mexico eastward to Louisiana and as far north as the Oklahoma Panhandle. In somewhat different form, as baskets, their shells may be found in curio shops everywhere.

In ancient times, South American armadillos grew to monstrous size, as long as 16 feet, and perhaps looked at the world with more aggressiveness than their descendants do today.

But now, from large leathery ears to the tip of a tail which resembles a series of telescoping funnels, Mr. Armadillo measures no more than three feet. He is a confirmed pacifist liking nothing better than to be left alone; yet his strong odor and the groaning, grunting and snuffing with which he roots for food are often his undoing.

As protection against his greatest enemies, man, coyotes and mountain lions, nature has given him a thick, bony cuirass and surprising speed. When attacked or alarmed, he may bounce straight up into the air several times, then race away; or he may roll himself up into a ball and wait for the enemy to tire of the siege and go away. This is a last resort. Instead, he will try to dig a quick burrow with strong front claws. But he often gives himself away by leaving his long bony tail above-ground.

The night-prowling animal crosses shallow streams by walking on the bottom. For deeper crossings he huffs and puffs up his insides until they are tight as a balloon and nearly as buoyant. Then he swims, holding his long slender snout above water.

The armadillo's offspring invariably arrives as quadruplets, all of the same sex and developed from a single fertilized egg.

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AGRICULTURE

Big, New Watermelon Available Next Year

► **THE CHARLESTON** Gray, a big, new watermelon resistant to melon diseases and sunburn, will be available for planting next year, officials at the U. S. Department of Agriculture have revealed.

Government bred, the melon weighs from 28 to 35 pounds, and is a long, light green fruit with a thin rind. The melon, adapted to the Southeast, is crisp and flavorful.

More than 25,000 pounds of seed are expected to be made available for planting during 1955.

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