

ANTHROPOLOGY

Four Neanderthals Found in Palestine Reveal Ancient Types

THE important discovery of four skeletons of Neanderthal man by archaeologists digging in the Cave of the Kids, near Haifa, Palestine, has been announced by Dr. George Grant MacCurdy of Yale University. One of the Palestine cave men, who lived some 75,000 years ago, was found clasping to his breast the huge jaw of a wild boar.

The skeletons just discovered are relatively complete, Dr. MacCurdy reported. Added to three skeletons found in the same cave a month ago, these four skeletons make a collection showing for the first time how different Neanderthals of Palestine were from the Neanderthals of Europe.

The remains of the men of Palestine were found by the Joint Expedition of the American School of Prehistoric Research and the British School of Archaeology. Dr. MacCurdy, director of the American School, was notified of the discovery by Dr. Theodore D. McCown, who is directing field researches of the American School.

"The skeletons were lying near the bed rock and in a stony matrix," said Dr. MacCurdy. "McCown is bending every effort to remove them safely from the deposit and ship them to London in time for exhibition at the International Congress of Prehistoric and Proto-Historic Sciences, August 1 to 6."

A tracing of one of the adult skulls has been received by Dr. MacCurdy, who compares it with Europeans of the same period of prehistory. Like the Europeans, this Palestine man had powerful musculature, massive, overhanging eyebrow ridges, and protruding upper teeth. But the Palestine man did not have a receding chin, and his forehead was higher than that of his contemporaries in Europe.

Dr. MacCurdy stated that the discovery of these skeletons "is destined to throw a flood of light on that particular species of fossil man. The specimens hitherto found in Europe have been so few and fragmentary that there was little evidence to suggest that the race or species might include a number of varieties. First intimation of marked variation came with the discovery of the skull at Broken Hill, Rhodesia, some

ten years ago. In 1925, Turville-Petre found a portion of the cranial cap of a Neanderthal skull in the Cave of the Robbers near the Sea of Galilee. But the fragment being small gave no indication of variation from the European type."

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PHYSICS

Experiments Explain Cosmic Ray Effects

MORE knowledge about the cosmic rays that bombard the earth from outer space was obtained through experiments conducted by Prof. Arthur H. Compton, University of Chicago Nobel prize physicist, when he and associates last summer climbed Mt. Evans in Colorado and made measurements of the

effect of these rays on chambers full of air, nitrogen and other gases.

Prof. Compton is now abroad making further experiments and his report has appeared in the *Physical Review*.

Cosmic rays break up a gas, such as air, into atoms that are negatively and positively charged and it is thus made to conduct electricity easier. Such ionization, as it is called, usually increases as the pressure rises, but for cosmic rays the conductivity of the gas does not become greater after the pressure is 140 times that of the atmosphere. Prof. Compton explains this by the hypothesis that the ion gas particles formed by the rays are so close together at high pressures that they reunite readily and thus destroy the enhanced conductivity. In his mountain experiments of last year, conducted jointly with Dr. R. D. Bennett of the Massachusetts Institute of Technology and Dr. J. C. Stearns of the University of Denver, Prof. Compton predicted and found a variation in ionization with temperature. He suggests that this temperature variation may be the explanation of what has been thought to be a real daily variation in the intensity of the cosmic rays.

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HONORING A FOUNDER

Visitors to the National Parks this summer will find in many of them plaques commemorating the work of the late Stephen Tyng Mather, who organized them as a single unified system and laid down the foundations of the policy that now guides their administration. These memorials have been made for the following parks: Yellowstone, Yosemite, Grand Canyon, Ranier and Zion; it is expected that all will be in place by July 4, Mr. Mather's birthday.