

ANTHROPOLOGY

Neandertal Man in Africa

Fragments of human fossils discovered in a cave in North Africa prove that this extinct race was not confined to Europe and Asia, as previously believed.

See Front Cover

➤ NEANDERTAL hunters, the low-brows of the Old Stone Age, prowled North Africa while Ice Age glaciers held most of northern Europe in their cold grip. Evidence of the presence of Neandertal man in Africa has been discovered in a cave near the north-western corner of that continent by an expedition under the direction of Dr. Hugh Hencken, director of the American School of Prehistoric Research at Cambridge, Mass.

The cave is one of a group known as the Caves of Hercules, because of their proximity to the traditional Pillars of Hercules, on the Strait of Gibraltar. Human fossils were limited to several teeth and part of the upper jaw of a Neandertaler. These, with similar fragments found at Rabat in French Morocco by French scientists, constitute the first proof that Neandertal man ever lived in Africa. Previous finds of this extinct race have been confined to Europe and Asia.

Another race of prehistoric hunters who occupied the cave during the Ice Age have been given the name Aterians. With beautifully flaked weapons of flint they hunted such game as elephant, rhinoceros and giraffe, now wholly unknown in this part of Africa. Reason for their presence some 75,000 years ago is that while the glaciers occupied much of Europe the climate of North Africa was much more humid than it now is, so that vegetation capable of supporting such big game could grow in what eventually became semi-arid and even wholly desert land.

Neandertalers and Aterians were not the first human occupants of the land. Dr. Hencken and his colleagues found crude stone handtools indicating the presence of a primitive human population as much as 150,000 years ago, during a warm interlude in the Ice Age when sea level was 60 feet higher than it now is. No skeletal remains have been found of these earlier peoples.

The Aterians were eventually displaced by a new invasion from the East, some 5,000 or 6,000 years ago. These

newcomers were no longer hunters, but a farming and pastoral people, believed to be the ancestors of the Berbers now found in the area.

On the cover of this week's SCIENCE NEWS LETTER are shown Prof. Carle-

BIOCHEMISTRY

Steps in Photosynthesis

➤ ALL chemical steps in photosynthesis, fundamental food-making process in green plants, are now believed to be known, thanks to the use of radioactive carbon as a tracer element, Dr. Melvin Calvin, University of California chemist, reported in a lecture at Western Reserve University in Cleveland.

Working with Dr. Andrew Benson, Dr. Calvin recently identified the last two intermediate compounds prior to sugar formation as phosphoglyceric acid

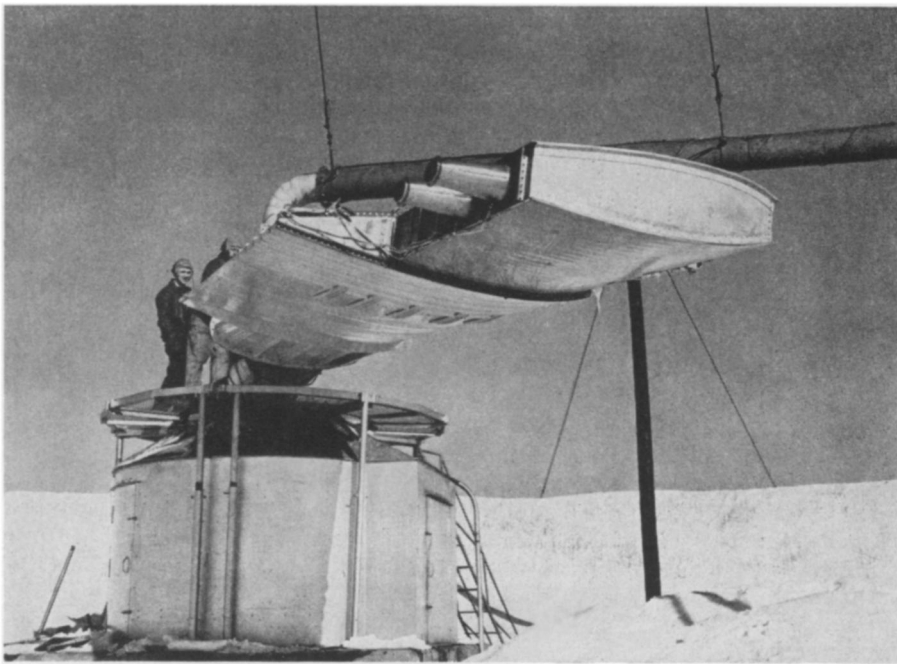
ton S. Coon of Harvard, a member of the expedition, and his Arab assistant, Mustapha. They are digging for remains of Neolithic man in one of the caves.

The American School of Prehistoric Research occupies quarters on the Harvard University campus, and its director, Dr. Hencken, is also curator of European archaeology in the University. The work of the School in Europe, Asia and Africa has been supported in part by grants from the Viking Fund and from the American Philosophical Society.

Science News Letter, April 17, 1948

and triose phosphate. The latter is itself a simple sugar.

Last year, the Berkeley scientists demonstrated that intermediate products in photosynthesis include amino acids, which are building-blocks of proteins; other organic acids such as succinic, fumaric and malic; and neutral sugars. Compounds unidentifiable at that time turned out to be the two reported by Dr. Calvin now. He said that the biggest problem now confronting scientists in



HELICOPTER JETS—Jet propulsion for helicopters uses small jet engines on the rotor blades that give lift and forward motion to the aircraft. They are being tested for the U. S. Air Force by General Electric engineers at Schenectady. The first Air Force rotary-wing aircraft to use a jet power plant is the McDonnell Little Henry, flight-tested in May 1947.