

## Neanderthals Ancestors

That Neanderthal man was a direct ancestor of modern man, and not merely a side shoot from the evolutionary stem, is held out as a definite scientific possibility by Dr. Ales Hrdlicka, noted American anthropologist. Speaking in London on November 8 on the occasion of the award to him of the Huxley Memorial Medal of the Royal Anthropological Society, Dr. Hrdlicka called in question the widely accepted belief that this ancient, low-browed race was a people apart from modern humanity, and was entirely exterminated by an invasion of the early Cro-Magnon race, leaving no descendants.

While emphasizing the necessity for much further excavation and search for materials to supplement the present collections of skulls, bones and implements, Dr. Hrdlicka indicated that even the fragmentary data now in hand suffice to cast considerable doubt on present widely accepted theories.

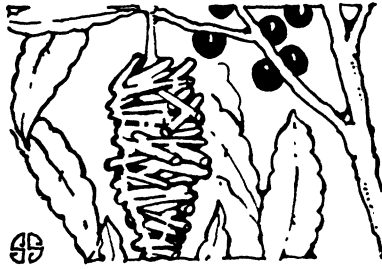
In geological sequence, in his relation to the animals among which he lived and which supplied his food, in his choice and use of shelters and caves, in his art and implements, and above all in his bodily structure, Neanderthal man fits into the evolutionary picture. In his beginnings, he grades off into the little-known races that preceded him, and at his end he grades off similarly into the better-known race that followed.

Even in the crucial matter of skull shape and proportion, Dr. Hrdlicka pointed out, Neanderthal man is not so sharply marked off from modern man as we commonly assume. The more typical skulls do display marked characteristics, such as a low, flattened top of the braincase, heavy eyebrow ridges reminiscent of the gorilla, a jaw very massive but lacking in chin, and a very primitive type of teeth. But among the collection can be found skulls that depart from the type. One shows a higher cranial arch, another has eyebrow ridges of a less apelike type, a third displays a remarkably "human" tendency in the shape of the upper jaw and palate, and so on. These departures from type, Dr. Hrdlicka said, indicate that evolution was actively at work in the race, and that it was not a fixed and static type which could not give rise to a new kind of humanity. It would be more proper, in his opinion, to refer to a Neanderthal phase in human devel-

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## NATURE RAMBLINGS

By FRANK THONE



### Bagworm

Now that the leaves have disappeared from trees and shrubs, you will find in your garden many strange fruits which perhaps you did not notice during the summer when they were better concealed. All manner of butterflies and moths are ripening in multiform chrysalis-cases suspended on twigs or tucked away in cracks in the bark. Many of them may well be left unmolested, for the insects that will hatch from them are both beautiful and harmless, but there are some which had better be destroyed whenever and wherever they are found.

Prominent among these is the curious cocoon of the bagworm. This will be found suspended freely by a loop of gray silk, not firmly fastened along one side to a twig or glued into a crack, like the majority of such objects. It is more conspicuously identified by the armor of short bits of stem which the larva worked into the walls while it was spinning itself in. These tiny logs offer resistance to the beaks of birds and to the attacks of other enemies, and thus increase the creature's chances of survival.

The bagworm is peculiar among caterpillars in that it spends its entire larval life inside its cocoon, instead of spinning itself in only when ready to retire for its winter sleep of metamorphosis. Its summer bag is thinner, and is usually ornamented with bits of leaves, but otherwise is the same sort of covering that serves in winter.

Bagworms are among the most destructive feeders on the foliage of ornamental and shade plants, and it behooves every householder to pluck off and destroy their cocoons before warm weather causes the winged insect to emerge and scatter another crop of eggs.

*Science News-Letter, November 12, 1927*

Thirty automobiles in France have Completed a three weeks' tour, using various substitute fuels for gasoline.

## Tail Tells Tales

Mesopotamia, the land of the traditional Garden of Eden, as well as the adjacent regions in Asia Minor, once had a cooler, moister climate than it has at present. The secret of this discovery was hidden in the curve of a sculptured tiger's tail, the significance of which was recently pointed out by a well-known German orientalist, Dr. Max Hilzheimer.

Dr. Hilzheimer points out certain peculiarities in a sculptured figure of an animal of the cat family, excavated from some very early Hittite ruins. At first it was thought to be a somewhat conventionalized lion, but in the absence of any mane and, even more to the point, in the total lack of a terminal tuft on the tail, its character was considerably in doubt. The matter was settled by the peculiar crook at the very end of the beast's tail, which tigers always show and lions never.

But tigers are forest animals, demanding a more humid climate than the land now affords; though lions find the semi-desert and even severely arid country between Africa and the Asian mainland habitable enough. This, plus the frequent occurrence in Mesopotamian art of such temperate and subtemperate animals as the European bison, the wild goat.

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## Prevents Blood Clotting

From the livers of dogs, Prof. W. H. Howell of the Johns Hopkins University has prepared an anti-coagulant that will keep a sample of blood in a practically normal condition for 24 hours.

Clotting is nature's protection against bleeding to death, but this tendency of the vital fluid to congeal after its exposure to the air offers serious disadvantages in blood transfusions and certain types of important experimental work. This new clot-preventing substance, which has been named heparin, is of great interest, therefore, to surgeons, pathologists and other specialists who deal with blood, particularly those who make the various blood tests used in detecting disease.

Heparin was obtained and used by Professor Howell in a crude form several years ago, but recent research has yielded this purified and potent form, the action of which is very much more powerful. One milligram of 100 cubic centimeters of blood will prevent the sample from clotting. Injected into the blood of persons in the

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### Tail Tells Tales

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the true long-horned buffalo and the aurochs or extinct wild ox, indicate a climate more like that found several hundred miles farther north.

That the earliest recorded inhabitants of this region, the Sumerians, were originally mountaineers of the North is indicated by the primitive signs in cuneiform writing, which they originated. Prof. Eckhard Unger of the University of Berlin has examined large numbers of their inscribed tablets, reading the riddle of their picture-writing. The basic signs, he says, are all indicative of a northern origin and mode of thought.

The animals with the simplest names are those of the north, such as dog and donkey. Lions, which they first met on the Mesopotamian plain, have no name of their own, but are called "big dogs." Names of such animals an antelope and gazelle are similarly derivative compounds. "East wind" is written "mountain wind." Their oldest gods are mountain gods.

Science News-Letter, November 12, 1927

Long before the day of medieval castles surrounded by moats, pre-historic men built houses on piles driven into lake bottoms for protection against beasts and enemies.

### Stops Blood Clotting

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same proportions, heparin will entirely prevent coagulation for about an hour. This property is gradually eliminated, however, Professor Howell has found, in about three hours' time, when blood from such patients will clot as usual.

The chemical analysis of heparin is not entirely complete, but it appears to be a carbohydrate. It seems to be perfectly stable, said Professor Howell, for specimens kept all summer in the Johns Hopkins laboratory remained unchanged and show no signs of deterioration either chemically or from the action of bacteria or mold. It has the additional advantage of being able to withstand sterilization and boiling without harm.

Science News-Letter, November 12, 1927

Indians of South America made surgical use of the powerful jaws of leaf-cutter ants by making an ant take hold of the two sides of a wound and drawing it together. The ant's body was then cut off, leaving an automatic clip.

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### Neanderthalers Ancestors

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opment rather than to a Neanderthal species of man.

The vexed question whether Neanderthal man appeared in Britain before or after the glacial period is now considered settled in favor of the earlier date, according to J. Reid Moir, noted English anthropological authority. Mr. Moir is chairman of a committee of scientists appointed to examine the clay beds at Hoxne, Suffolk, which have yielded large numbers of implements made by Neanderthal man.

The structure of the beds, as pieced together from many excavations, shows a thick layer of glacial boulder clay, indicating a long period of intense cold, above the stratum in which the most primitive man-made implements of this locality are found. Overlying this glacial layer was a second bed containing stone tools of the Old Stone Age, but of a more advanced type than the first. Then another deposit of the type laid down during cold times, and finally the present ground surface, beneath which were found relics of the New Stone Age. The intervention of two cold-period beds above the level of the earliest implements is regarded as conclusive evidence of glacial man in Britain.

Science News-Letter, November 12, 1927

Crime costs the United States about three billion dollars a year.

Owls from the United States have been shipped to one of the South Sea Islands to fight a plague of rats.

A seventeenth century writer commented that in some parts of Germany no young farmer was allowed to marry until he had planted a given number of walnut trees.

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