

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.

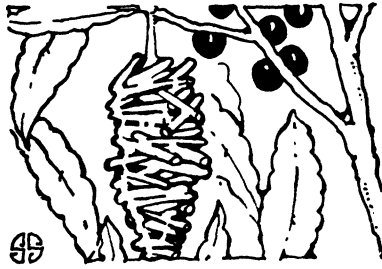
In geological sequence, in his relation to the animals among which he lived and which supplied his food, in his choice and use of shelters and caves, in his art and implements, and above all in his bodily structure, Neanderthal man fits into the evolutionary picture. In his beginnings, he grades off 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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