

has discovered. One lobe of the maxillary antrum bears the same relation to the second molar tooth that is found in the human jaw, and is different from the structures found in ape jaws.

These extinct, extremely man-like apes of South Africa created something of a sensation when their skulls were first discovered, a few years ago. They cannot

be considered as in any way ancestral to man, because when they lived there were already fully developed, distinctly human races elsewhere in the world. They more probably represent a side-branch of the ancient family tree, descended from the hypothetical but still undiscovered, common ancestor of apes and man.

Science News Letter, February 15, 1941

ANTHROPOLOGY

Leading American Scientists Have Heads Not "Nordic"

Academicians Are Full-Grown and Sturdy, Middle-Aged Or Elderly, Have Wide Heads and Dark Hair if Any

MYTHS of "Nordic superiority" fare ill at the hands of Dr. Ales Hrdlicka, eminent physical anthropologist of the Smithsonian Institution, who has just completed a study of the heads of 150 of America's leading scientists. Far from being long-headed blonds, Dr. Hrdlicka's group of outstanding American scientists tend to be wide-headed, and their hair (so far as they have any left that isn't gray) is decidedly dark.

The group included in the study were chosen from the membership of the National Academy of Sciences. This body, sometimes referred to as the Senate of American science, elects to its membership only persons of proved accomplishment and reputation in the various fields of science. Naturally, most of its membership is middle-aged and elderly—few men less than fifty years old are elected.

High average age of the members accounts in part for the predominantly

dark hair color, Dr. Hrdlicka explains. Everyone's hair grows darker as he grows older. It also explains the qualification of his statement, that a high proportion of the Academy members have (or had) dark hair.

Fifty members of the group studied were of foreign birth or immigrant ancestry. The remaining 100 were "Old Americans," that is, of families who have been three generations or longer in this country. These "Old American" scientists tend to have larger and wider heads and darker hair than the average "Old American" men in the general population. They also have decidedly less prominent cheekbones.

Another myth that suffers from this study is that of the "highbrow." Eminent scientists don't average more prominent foreheads than do other men, the measurements show. Neither do scientific leaders have massive heads on stoop-shouldered, pindling bodies: the general physique of Dr. Hrdlicka's 150 is full-grown and sturdy. This, it is pointed out, is largely a matter of nutrition. Men with their brains and training get good jobs and keep them.

Seven per cent of the group have decidedly back-sloping foreheads—another traditional "sure sign" of inferior intellect. This, Dr. Hrdlicka explains, has nothing to do with the brain content of the skull. A sloping forehead is usually due to larger-than-ordinary sinuses over the eyebrows, giving a wider base rather than a narrower top. Even when the slope is due to other causes, however, it does not necessarily mean any inferiority of the brain.

One member of the Academy, says Dr. Hrdlicka, has the head of a Stone Age

man. This does not mean, however, that he is a beetle-browed Neandertaler—far from it. His head is like that of the Aurignacian people, who left remarkable paintings and sculptures in the caves of southern Europe. Aurignacian men had larger heads and bigger brains than moderns. The type still crops up occasionally, Dr. Hrdlicka states, in Scandinavia and among certain groups of American Indians. They may be considered a survival of, or perhaps a reversion to, the earlier type of our common ancestry.

Science News Letter, February 15, 1941

ASTRONOMY

Jupiter Passes Saturn For Last Time Until 1961

FOR many months the two planets, Jupiter and Saturn have been shining brightly in the southern and now the southwestern evening sky, with Jupiter the more brilliant. After Jupiter passes Saturn, on Feb. 20, they will not be together again until the early part of 1961.

This has been determined by Dr. Samuel Herrick, Jr., of the astronomy department of the University of California at Los Angeles, who announces the results of his calculations in the current leaflet of the Astronomical Society of the Pacific.

Jupiter moves around the sun every 5.20 years, at a speed of 8 miles per second. Saturn, farther out, takes 29.46 years to encircle its orbit, with a speed of about 6 miles per second. About every 20 years Jupiter overtakes Saturn in their never-ending race.

Because the earth is in motion, however, the paths of the planets are quite complicated. Our planet travels at 18.5 miles per second. Regularly, therefore, we overtake the outer ones, and as we go past they seem to go backwards for a time. Astronomers call this "retrograde" motion. A similar retrograde movement of a freight train is observed by a passenger on an express train that passes it.

Last August, Jupiter passed Saturn. Then the two planets began their retrograde movement; there was another conjunction in October. Now both are again moving to the east, or forward, and the final passing of the series happens on Feb. 20 at 11:00 a.m., Pacific standard time (2:00 p.m. E.S.T.). Such a passing three times in a row is called a "triple conjunction."

When Jupiter passes Saturn in 1961, says Dr. Herrick, this will not occur, for the backward motions will not oc-

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