

Under the intimate illumination made possible by this mirror-bearing lens, the inner layer of a plant cell wall is shown to have a structure as though it were made up of a multitude of exceedingly fine rods, like a close-set pole fence. These are termed "Micelles," and are believed to be made up of bundles of carbohydrate molecules, which are too small to be visible by any microscopic treatment.

Living protoplasm shows a similar structure, of fine, closely parallel strands or fibers, with thickenings on them in places, in a more uniform background of



ULTRAMICROSCOPIC DETAILS

Of the structure of the inner wall of a plant cell, made visible for the first time by the new Spierer microscope lens.

dark substances. The two structural types are so similar in appearance that it is hard to tell them apart, Professor Seifriz says. However, he is not ready to commit himself to the opinion that the solid stripes of the non-living cell wall are due simply to a direct hardening or precipitation action of the fluid, living protoplasm. The settlement of this and other questions raised by the fine details made visible by the new lens, he says, must await further research.

Science News Letter, December 13, 1930

One of the dinner table accessories in wealthy Roman homes was a silver coal-pan to keep the bread and pastry hot.

Popularity of miniature golf courses has greatly stimulated use of cotton fabrics for awnings, chairs, umbrellas, and protective tarpaulins.

ANTHROPOLOGY

Peking Man Skull May Belong To Variety of Java Man

German Anthropologist Declares Measurements of Chinese Skull Like Java Cranium; Hrdlicka Disagrees

IS the famous Peking Man, two of whose skulls have recently been discovered in Chinese caves, merely a variety of the longer-known but more fragmentary Ape-Man of Java?

Prof. Franz Weidenreich of Heidelberg inclines to this opinion. In an article written for the German technical journal *Die Naturwissenschaften*, he compares the first of the two Chinese skulls with that of *Pithecanthropus*, and concludes that the measurements approach each other closely at all points. He declares that the skull is much more similar to the Java cranium than it is to a typical Neanderthaler, in both shape and size.

For this reason he would put Peking Man into the same genus and species with the Java Ape-Man, recognizing him only as a variety. This would involve a change of name, discarding *Sinanthropus pekinensis* proposed by Dr. Davidson Black and substituting *Pithecanthropus erectus*, variety *sinensis*.

Peking Man is not Java Man, nor any variety of him, said Dr. Ales Hrdlicka, anthropologist of the U. S. National Museum, when Science Service asked his opinion of Prof. Franz Weidenreich's theory that identifies the two species.

"The more we see of these Chinese skulls," said Dr. Hrdlicka, "the more apparent it becomes that we are dealing with a Neanderthaloid type. There is no use indulging in errant speculation in any other direction. Every feature that has been laid bare by the workers in China has so far but strengthened the evidence of Neanderthal connections. If Peking Man is to be given varietal rank, his new name should be *Homo neanderthalensis*, variety *sinensis* or *pekinensis*, but certainly not *pithecanthropus*."

In making his comparison, Prof. Weidenreich used only the measurements of the first skull, discovered a year ago. Data on the second skull, found only during recent weeks, were not available when he wrote. The first skull is now regarded as that of an

adolescent female and it would hardly be fair to compare it for size with the skull of an adult male Neanderthaler and then conclude that it differs from the latter in size and hence must be assigned to the inferior and presumably much older genus of *Pithecanthropus*.

"The Peking deposits are not yet exhausted," Dr. Hrdlicka continued. "They may yield any day archaeological and other evidence that will definitely clear the whole problem. Until then, it would seem, speculation as to the nature of the specimens can not be too careful, particularly when it comes to associating the remains with a prehuman or sub-human type, such as the *Pithecanthropus*, the locality of which is farther from that of the Peking finds than is that of the easternmost Neanderthaler.

"It might further be asked, if such relatively small differences in the size of the skull as those shown between the Peking skull and some other Neanderthaler, would be given such taxonomic value, how many species and genera would it not be possible to make from any existing human group, where one normal skull may be almost twice as large as another? Besides which there are Neanderthalers that are no larger than the Peking specimen."

Science News Letter, December 13, 1930

BOTANY

New Fungus Discovered In General Grant Park

A NEW species of mushroom, recently discovered in California, has been named *Cantharellus bonarii*. Despite the brilliance of its orange-yellow cap, it is not easily discovered, since it grows partially hidden in deep humus under pine and fir.

Elizabeth Eaton Morse, who studied and named the new fungus, tells of its discovery in the General Grant National Park by N. Nielson and F. Mitchell, who brought it to her for identification.

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