



ICE AGE GRASS PULLER

The tip of the mammoth trunk as it would naturally hang. The lower part is the lip, well-adapted for grasping; the upper shows in cross sections the two air passages exposed when the tip was broken away from the main part of the trunk.

CHEMISTRY

Insulin Crystals Studied With Long-Wave X-Rays

THE CRYSTAL form of insulin, secretion of the islands of Langerhans in the pancreas which regulates the body's use of sugar, has been studied by means of long-wave X-rays.

Prof. G. L. Clark of the chemistry department of the University of Illinois has just reported his findings on this subject to *Physical Review*. X-ray photographs of crystals give scientists a picture of the internal arrangement of the atoms in the crystal. Such studies have been made of other crystals. One of the first to be investigated this way was the familiar sodium chloride, which is common table salt.

With the X-ray investigation and microscopic data, Prof. Clark found the crystal form of insulin to be monoclinic, with one angle between 88 and 90 degrees. The individual crystals frequently assume a pseudo-hexagonal form. There were 26 molecules per unit cell.

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PALEONTOLOGY

Only Mammoth Trunk Tip Ends Wanderings in Museum

Mummified Tissue That Once Adorned Center-Table Is Now Studied by Russian Scientists in Leningrad

THE TIP of the trunk of an ancient woolly mammoth, that wandered the wastes of Siberia in the long-past ages when Crô-Magnon artists made pictures and modeled statues of his cousins in the caves of southwestern Europe, has been acquired by the Zoological Museum of the Academy of Sciences at Leningrad after a curious and checkered history.

About eight years ago, a hunter belonging to the Tungus people in Siberia found a well-preserved mammoth trunk in the frozen soil on the bank of the Bolshaya Baraniha river in the Kolima district of Siberia. Vast areas of soil in that country have been frozen for thousands of years, and in this great natural refrigerator the remains of mammoths and other animals have more than once been found. But until the Tungus hunter found this trunk, no man since the Old Stone Age had ever seen the proboscis-tip of one of these ancient animals.

The mammoth trunk passed from hand to hand. Some one cut the tip off and kept it, throwing the rest away. The tissues had dried and hardened; it was in a fair state of mummification. After knocking about the country as a curio for several years, it came into the possession of a Mrs. Kondratiev, of the city of Sredne-Kolomsk. She kept it on her center-table for a while, and then sent it to the Museum in Leningrad. It was seen there recently by Dr. Eugene Golomshtok of the University of Pennsylvania Museum.

Dr. C. Flerof, assistant curator at the Museum, finds that while the trunk-tip has a general resemblance to that of the modern Indian elephant, there are certain significant anatomical differences, which may be considered adaptations to a different mode of living. The "lip," at the extreme end tapers gradually to form a finger-like appendix, without any abrupt contraction. This appendix is much longer and wider than that of any modern elephant species, and gives the entire tip a two-lobed appearance. Dr. Flerof considers it an organ excellently

adapted for grasping, enabling the animal to pluck large bunches of grass or moss with greater ease than would be possible to the Indian and African elephants of today, which feed mostly on leaves of trees and shrubs.

The original hairy covering has long since disappeared, but microscopic examination shows where hairs of two sizes were once rooted. There was no hair on the inner surface or on the appendix.

In addition to its paleontological interest, the trunk-tip confirms anew the keen power of observation of the ancient cave men, as well as their ability as accurate draftsmen. The bilobed structure of the tip as represented in European cave drawings has always puzzled archaeologists, and some of them were inclined to attribute this shape to inaccuracy in drawing. Now an actual specimen shows that these old Crô-Magnon artists were right.

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EUGENICS

Women Marrying Late Likely to be Childless

WOMEN delaying marriage to a late age are more likely to be childless than are women of the same age group who married earlier in life, if there is any parallel between the reproductive ability of laboratory mammals and the human species, Dr. W. L. Wachter, associate professor of biology at Lafayette College, told a meeting of the Eugenics Research Association.

In his study of laboratory mammals, Dr. Wachter found that in families tending to large numbers of offspring, a delay in mating made little difference, but where there was a natural inherited tendency to small families, delayed mating favored complete sterility. The loss averaged one third of an offspring per female in addition to the loss due to advancing age itself.

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