

order to draw a picture of things as we see them, the artist must preserve the normal proportions of these two kinds of sight in his drawing. If visual defects prevent his doing this, he may paint beautiful pictures of the impressionistic type, or he may paint those which look "queer" to normal eyes.

Dr. Mills first became interested in the effect of eyesight on art when an artist came to him for treatment. This man produced paintings which were remarkable for fine use of color, but the drawings were sometimes distorted. This turned out to be due to astigmatism, but unfortunately, when glasses were supplied that corrected the astigmatism, the artist had trouble in getting

the color effects with which he had previously had so much success.

Short-sightedness, a condition found particularly among the educated classes, is especially frequent among artists, and has much effect upon their drawings. In short-sighted individuals, the acuity of vision with the central part of the eye is decreased, and they are forced to use that of the edges of the eye. This, thinks Dr. Mills, accounts for the work of Cezanne, Renoir, Gordon Craig, and George Grosz, the cubist. Pissarro had repeated abscesses of the cornea of the eye, and Van Gogh and Gauguin had mental diseases, which accounts for the eccentricities of their drawings.

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trading materials used by the white men were found. Therefore Dakota Sioux Indians must have built it. They were the only inhabitants there during that period.

To further substantiate this conclusion, Mr. McKern pointed out that the pottery and arrow heads found in the mound correspond with those found in known historical Sioux Indian village sites.

Near the mound, the expedition found vestiges of an old Sioux village. The area is now under cultivation, but the expedition found pieces of pottery, small stone implements, arrow heads and general village refuse.

The mound on the shores of Spencer Lake is 70 feet in diameter and 13 feet high. In the pit and four layers of burials the diggers found bones of 175 Indians. The burials were secondary, that is, bodies had been placed in trees or on scaffolds until flesh decayed and then the bones were gathered and buried in the mound. This was an ancient custom among certain tribes.

Identifying these Mound Builders is a valuable contribution to study of early residents of this region. It is, however, scarcely a start toward piercing the darkness that envelops prehistoric peoples of the state.

"Men have inhabited Wisconsin for thousands of years, yet science knows virtually nothing about them before 300 years ago and very little prior to 200

ARCHAEOLOGY

Find Indian Mound Built Since the White Man Came

Skull of Horse Imported by White Man Dates Important Find in Wisconsin; Left by the Dakota Sioux Tribe

A HORSE'S skull, hidden for two centuries in an Indian burial mound in Burnett County, Wisconsin, has established the first known case anywhere of mound building by the Dakota Sioux Indians.

Discovery of an Indian mound built since the white man's coming to America is a rare archaeological event. Almost all of the remarkable Indian mounds found up and down the Mississippi Valley are the work of prehistoric Mound Builders, whose ancestral relationships to well-known historic Indian tribes are very hard to trace.

The horse's skull was unearthed by a University of Wisconsin-Milwaukee Public Museum expedition which recently returned after two months of exploration among mounds in Burnett and Barron counties.

Announcing the discovery, the director of the expedition, W. C. McKern, curator of anthropology at the Milwaukee Museum, said it was the most important archaeological development in Wisconsin in seven years. The mound in which the skull was found is the only one ever excavated in the state that can be traced definitely to a particular Indian tribe, Mr. McKern said.

Mr. McKern based his conclusions on the horse's skull.

The mound could not be older than

250 years, Mr. McKern said, because previous to that time the Wisconsin Indians had no horses. It couldn't be less than 200 years old, he reasoned, because no trinkets, beads, or other



HORSE GIVES PROOF

If any romantic Americans still cling to a belief that Mound Builders were mysterious ancients—not Indians—this horse's skull should convince them to the contrary. The skull has been dug from an earthen mound in Wisconsin shown on the facing page.



MODERN MOUND

Bones of 175 Indians, their pottery and arrowheads, were found in this mound and reveal that Dakota Sioux were among the mound building tribes. They continued the custom into historic times.

years," Mr. McKern said. "Mounds in northwestern Wisconsin are treasure beds of information about those who once lived there."

The last previous great archaeological discovery made in Wisconsin, Mr. Mc-

Kern said, was the revelation seven years ago that Indians of the Hopewell culture, so called from the famous Hopewell Mounds in Ohio, built mounds as far north and west as Wisconsin.

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COMPARATIVE ANATOMY

Rudiments of Speech Center In Brains of Highest Apes

Orang-Utan, Gorilla, and Chimpanzee Show Distinctive Furrows in Cortex But Not Developed as Are Man's

BRAINS of the three highest apes, orang-utan, gorilla, and chimpanzee, show beginnings of a part of the structure that controls speech. It is not found in the brain of any other kind of ape or monkey.

This is among the results of an exhaustive study of the large collection of primate brains at the U. S. National Museum, carried on by Dr. Cornelius J. Connolly, professor of physical anthropology at the Catholic University of America (*American Journal of Physical Anthropology*, October).

The Museum collection of brains, accumulated during many years by Dr.

Ales Hrdlicka, afforded Dr. Connolly unique opportunities in his study. Many earlier generalizations about the brain structures of ape and monkey species had been founded on the examination of a single brain, whereas Dr. Connolly was in most instances able to compare several brains of any given species. He was thus in position to correct a number of pre-existing errors.

The power of speech is believed by many neurologists to be centered in a particular part of the forebrain cortex known as Broca's area. It is marked off from the rest of the brain by definitely located furrows or depressions which

anatomists call the inferior frontal sulci. These particular furrows or sulci appear first on the forebrain of the orang-utan, which is in some respects a less-evolved ape than the gorilla and the chimpanzee. The speech area is of course found in the latter two apes also, and in them it shows somewhat greater development.

The possession of rudimentary speech centers by the three great apes must not be taken as an argument that they possess the true mechanism of speech, Dr. Connolly warns. No conclusive evidence has ever been produced, he says, that these animals have even the beginnings of speaking ability. So far as present scientific knowledge goes, man is the only talking animal in the world. And in man's brain, it might be mentioned, the speech area is much more highly developed, with structural features not present in the highest apes.

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ARCHAEOLOGY

Incas Had Pet Bulldogs Designs on Vases Show

THERE were bulldogs in ancient America, kept as pets by the Incas of Peru. (*Antiquity*, September.)

German archaeologists have proved this by vases, which they unearthed in Peru, adorned with realistic figures of dogs. The animals have the large head, divided lips baring the teeth, the dished-in nose, all reminiscent of the English bulldog, and the stiff batlike ears of the French dwarf bulldog.

The American breed developed entirely separately from the European bulldogs, and has become entirely extinct.

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DENTISTRY

Glass for False Teeth Is Strong, Good Color

PROGRESS in the use of glass as a base for false teeth is reported by Dr. Frank Lott of Toronto to the American Dental Association. (*Journal*, October.) Prime advantage of the glass base is its more natural color which matches satisfactorily the gum tissues of the majority of patients. The color is lasting, another advantage. The glass is strong enough to stand considerable pressure, as in chewing, and when it does break from being dropped when the patient has his false teeth out of his mouth, it is easily repaired. Dr. Lott hopes that this disadvantage can be overcome by shatterproofing.

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