

## ANTHROPOLOGY

# Eight Indian Types Found in Cemetery Used 1,000 Years

## First Study of Millenium of Human Life in Fair-Sized American Town Reveals Interesting Facts About Its People

**N**O LESS than eight different physical types of distinct racial affinities are represented in the skulls of Indians in a single graveyard, is the conclusion of Dr. E. A. Hooton, anthropologist of the Peabody Museum of Harvard University.

This is the first time that science has had the opportunity of examining a thousand years of human life in a fair-sized American town, as represented in the bones of successive generations of inhabitants.

### Bones Studied 10 Years

For ten years Dr. Hooton has been studying bones obtained from the most remarkable prehistoric graveyard of the Southwest, at the pueblo known as Pecos in New Mexico. Pecos was inhabited by Pueblo Indians for a thousand years, from about 800 A. D. to 1838 A. D. In those centuries, generations of inhabitants left veritable hills of trash, consisting of ashes, dinner bones, broken clay dishes, worn-out flint tools, all mixed in with a binder of earth. And in among that refuse, thousands of dead were buried, in as many as nine different levels.

From his examination of 1,254 burials, men, women, and children, the anthropologist has made long statistical tables of measurements, which are included in his first thick report on the "Indians of Pecos" just published.

Various types of people came into the prehistoric American melting-pot in waves of immigration, according to Dr. Hooton's theory. The earliest came over Bering Strait, probably soon after the glacial retreat, and these were a people already racially mixed and having a primitive hunting and fishing culture. They were a blend of three racial strains: the Mediterranean, the pseudo-Australoid, and a Negroid strain, not to be confused with the Negro.

Somewhat later, Mongoloid groups followed the same route. These were capable of the higher Indian civilizations which developed in certain favored regions of prehistoric America. And

last of all came the Eskimo, who were Mongoloid with some non-Mongoloid strain in their heredity.

These, Dr. Hooton concludes, made up the family tree branches of the American natives of pre-Columbian times. If men reached the New World in Pleistocene, that is earlier, times, he believes that the early arrivals were so few as to leave almost no trace of their culture.

Studying signs of disease in the bones of Pecos inhabitants, Dr. Hooton concluded that the most common bone disease was arthritis. Poker-back, a severe arthritic condition of the vertebrae which stiffens the spine, was found in more than 13 per cent. of the individuals over 18 years old. Practically another four per cent. had arthritis of other bones and joints. Clear evidence that the Pueblos had sinus and mastoid troubles, and possible indications of cancer and tuberculosis of the spine were found in a few cases.

Whether or not syphilis was a disease of prehistoric America still remains in doubt, Dr. Hooton's study indicates.

## EMBRYOLOGY

# New X-Ray Method Reveals Sex Before Birth of Baby

**W**HETHER to trim the baby basket in pink or blue, always a vital problem to young married couples, can now be determined as early as three months before the birth of the expected child through the use of a new X-ray photographic method developed by Dr. Thomas O. Menees, of the Blodgett Memorial Hosital, Grand Rapids, Michigan, who exhibited his photographs to the American Association for the Advancement of Science in Cleveland.

This new method of ascertaining the sex of the unborn baby many weeks before birth is expected to relieve the

anxiety of prospective parents who under present circumstances are impatient to know whether their offspring is a boy or girl.

Three crania which were thought to be possibly syphilitic specimens were examined by Prof. Herbert U. Williams, of the University of Buffalo, who has been studying skeletal material for some years in the hope of tracing the origin of syphilis. Prof. Williams concluded that the pathological changes in the crania probably were signs of syphilis, but he also said that he could not be positive that any single dried bone specimen is syphilitic. Prof. James Ewing of Cornell Medical School also examined the three crania and handed down the opinion that they were not syphilis cases.

"It is unfortunate that qualified experts should have disagreed in the three cases under discussion," Dr. Hooton commented, "since all of them are undisputably prehistoric—a statement which cannot be made concerning most remains of American Indians thought to be syphilitic."

"Towards the end of Pecos' long habitation, the physical deterioration of its people became apparent," the anthropologist concluded. "Teeth became poorer; rheumatism and other diseases identifiable from the bones were commoner. Stature decreased slightly, and the population blended into comparative homogeneity. Similarly, arts and industries declined, and finally disease and raids of predatory plains Indians reduced a town of 3,000 or 4,000 inhabitants to a mass of tumbledown ruins from which seventeen forlorn survivors departed in 1838."

*Science News Letter, January 31, 1931*

No hope is held out that the new method developed by Dr. Menees, or any other known method, can be used to assure the mother giving birth to a child of the sex most desired by the parents. The sex of the child is determined at the very beginning of its prenatal life and seems to be dependent upon chance.

Dr. Menees has made several successful diagnoses of sex of unborn babies. The method consists (*Turn to page 74*)

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of injecting into the surroundings of the unborn baby a small amount of concentrated solution of strontium iodine. This practically harmless chemical has the property of being relatively opaque to the X-rays, and the fleshy parts of the baby as well as its tiny bones can be identified on the X-ray photograph. The effect of the injection fades after two or three hours and en-

(Continued from page 71)  
tirely disappears in a day. Dr. Menees calls the method "amniography."

More important to the physician and to the mother is the fact that amniography can be used to ascertain in doubtful cases whether a Cæsarian section will be necessary in order that the child may be safely born. It will probably be used much more frequently for this purpose than for ascertaining sex.

*Science News Letter, January 31, 1931*

ARCHAEOLOGY

**Expedition Seeks Indians Who Met Ponce de Leon**

**D**OWN the east coast of Florida, and into the depths of the Everglades, an expedition is about to seek prehistoric Indians. The region is "unknown Florida" from an archaeological point of view. The tribe that is sought is paradoxically famous in history and yet almost unknown scientifically.

The expedition, consisting of Matthew W. Stirling, chief of the Bureau of American Ethnology, and his brother, G. M. Stirling, of the Peabody Museum of Harvard, left Washington last week.

Parts of Florida are dotted over today by mounds left by the Calusa tribe, Mr. Stirling said. These Indians were the tribe that met Ponce de Leon and disappointed the Spaniard by giving him no aid in the quest for a fountain of youth. The Calusa themselves must have given an impression of physical vigor, for bones that have been found show that they were muscular and husky in type. The jaw bones of these Indians are even larger than Eskimo jaws, Mr. Stirling said.

Despite individual strength and tribal power, the Calusa were exterminated soon after white men came into Florida. The early explorers left practically no information about these unusual natives, and today archaeologists are beginning to re-discover them by unearthing their graves and their possessions.

The Stirling expedition will start from Cape Caneveral on the east coast of Florida and work southward, searching particularly for mounds that may represent villages mentioned by Spanish and French chroniclers. Historic sites here would be of great value to archae-

ology, Mr. Stirling said. At such places it is possible to trace the changes in Indian life that came by contact with the white man, and to sort out the real native factors.

Then, traveling into the Everglades, the archaeologists will try to locate old mounds that modern natives have reported. Excavating will be started at one or more promising sites here or on the coast, it is expected.

Some ethnologists have hoped that a remnant of the Calusa might have survived in the Everglades, mixing there with the Seminoles who came down to Florida about the eighteenth century, Mr. Stirling explained. But if that happened, he added, the Calusa stock would be absorbed by the Seminoles by now, so that the type could no longer be identified. Some Calusa words might have survived if the two tribal groups met, and language specialists may yet be the ones to find evidence that a remnant of the prehistoric tribe lived on in the heart of Florida when their land was "discovered."

*Science News Letter, January 31, 1931*

**G. Stanley Hall**  
Said:

"As for years, an almost passionate lover of childhood and a teacher of youth, the adolescent stage of life has long seemed to me one of the most fascinating of all themes." His description of

**Adolescence**

is

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