treasure, one of the most outstanding archaeological finds of the world, has been permitted to come to the United States by special act of the Mexican government.

Thousands of persons have been inquiring for the Mexican presidential train, of which the treasure car is a part and as soon as it was opened they thronged through its aisle marvelling at the beautiful and intricate prehistoric Mexican workmanship, expressed in gold, jade, turquoise, coral, pearls and red shell. The many scores of pieces are displayed in twenty-one large glass cases.

Accompanying the exhibit is Dr. Alfonso Caso, explorer of the famous tomb in Oaxaca where this treasure was found associated with the skeletons of nine Indians of an unknown nation. Only the richness and superb workmanship of the jewels certifies to the high position of their wearers in church and state of ancient Mexico.

With Dr. Caso are Senora Caso and Senor Daniel de la Borbolla. The latter, fluent in English and well acquainted with American ways, is Dr. Caso's "contact" with the American public, since Dr. Caso speaks little English and has not been in this country before, although he has traveled in Europe.

Another valued member of the party is Martin Bazin, a native of the high Mixteca. Broad-shouldered, rather short, lithe and silent in his movements, he is the jewels' watchdog. The guards in and around the car, and the detectives who doubtless mingle with the crowd, would seem to be superfluous when he is around.

The value of the Monte Alban treasure is a parodox. It simply has no price, from the artistic and archaeological point of view. Yet if a gang of should conceivably through all the safeguards with which the car has been surrounded since it left Mexico City and steal the entire lot, they would find that they had but small reward for their pains. All the gold used in all the ornaments sums up to an estimated weight of but eight pounds. Some of the pearls are large one weighs twenty-three carats—but they are all pierced and so of no value for modern jewelry.

The real value of the jewels lies in their beauty and their mysterious antiquity.

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MEDICINE

## Cancer Susceptibility Depends on Single Gene

JUST ONE GENE in the germ cells from which you grew—an almost infinitesimal thing about the size of one molecule—determined whether or not you are susceptible to cancer.

For it is that tiny, single unit among the many complex factors of heredity that makes the difference between cancer susceptibility and cancer insusceptibility, Maud Slye of the Sprague Memorial Institute and the University of Chicago has found.

The scientific research from which Miss Slye draws this conclusion is reported in the American Journal of Cancer. Her studies on cancer inheritance have been carried on for twenty-three years and involve over 116,000 autopsies.

Because of the difficulty of obtaining records of many human generations, Miss Slye has made her studies on generations of mice, which develop cancer just as men and women do.

Heredity alone is not the cause of cancer, Miss Slye points out. But through heredity a susceptible soil is prepared, she finds.

"An external factor acting with in-

ternal factors upon a susceptible soil is probably the cause of cancer," she stated in her report.

Prolonged irritation may be an external factor. Internal factors may have to do with function or faulty function of the endocrine glands or with other physiological conditions.

Another fact brought out by Miss Slye's studies is that insusceptibility to cancer is a dominant factor, while susceptibility to cancer is what is known to students of genetics as a recessive. This means, according to Mendel's law, that if a cancer susceptible mates with an insusceptible, their offspring will inherit the dominant trait of insusceptibility. In the next generation, however, one-quarter of the offspring will show the recessive trait of susceptibility.

However, such perfect genetic ratios cannot be expected except as relatively rare occurrences, Miss Slye stated. In the case of cancer it is probabilities, not certainties, that are dealt with. Age and many other factors enter into the situation and may interfere with or obscure the genetic picture.

Science News Letter, July 22, 1933

ETHNOLOGY

## Study of Croatans Reveals No Link with Lost Colony

THE ROMANTIC story that Sir Walter Raleigh's ill-fated colony on Roanoke Island survives today in the blood of the so-called Croatans has been dealt a new blow by science.

A study of these Croatans, 8,000 mixed whites and Indians who live mainly in Robeson County, North Carolina, has been made by Dr. John R. Swanton of the Smithsonian Institution. Dr. Swanton is an outstanding authority on Indians of the Southeastern states.

While labeling his conclusions tentative, Dr. Swanson says that the evidence strongly indicates that these mysterious North Carolinians belong predominantly to the Siouan racial stock. They have some white blood, but Dr. Swanton

finds no reason to believe that they have any connection with the lost colony established by Sir Walter Raleigh.

The Croatans have been a puzzle to census takers and other officials who have had to classify them. They have been recently called Cherokee Indians, and distant relatives of the Iroquois group. Dr. Swanton connects them most closely with the Cheraw Indians, a tribe of Sioux stock.

The name Croatan was given them through influence of Hamilton Mac-Millan of Fayetteville, North Carolina, in support of his hypothesis that they were descendants of the lost colonists. Croatan was the name of an island and

an Algonquin Indian town to which the survivors of the Raleigh colony were supposed to have gone. White, who visited Roanoke Island in 1590 found no trace of the luckless colonists except this name Croatan carved on a tree. From that clue the theories have been evolved.

The Croatans themselves, now farmers who make a fair living and send their children to school, can tell very little of their ancestry. They speak only English, and have entirely forgotten Indian speech which might aid in establishing their identity.

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ZOOLOGY

## Pronghorn Triplets Born In Yellowstone Park

THREE ANTELOPE babies are following one mother in Yellowstone National Park.

A ranger traveling off the beaten trail in the Lamar valley scared up out of its hiding place a tiny antelope. It took off at a great pace across rocks and sagebrush and was almost immediately joined by a mother and two other babies. There were no other adult pronghorns in sight and it is reasonable to suppose the trio belonged to one mother.

It is an interesting fact that antelope at birth and for some time thereafter have no body odor. A Yellowstone ranger recently had occasion to check this statement. A little pronghorn, less than six hours old, was found and handled. No trace of odor could be detected. Adult antelope have a very pungent and characteristic odor and this can easily be detected by anyone with a keen olfactory sense even from a distance. Absence of odor in the young, until they are able to escape from their enemies by their natural fleetness of foot, is a real example of natural protection.

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Among the palace treasures of Persia is mentioned a ten million dollar globe on which the seas are made of emeralds, countries are of rubies and other stones, and the frame is of gold crusted with diamonds.

A geologist points to the need of a durable, transparent waterproofing substance to protect Greek temples and other famous stone ruins from the disintegrative action of water.

PALEONTOLOGY

## Find Eggs That Were Fresh A Million Years Ago

Huge Fossils More Than Six Inches Long With Shells An Eighth of an Inch Thick Were Laid by Extinct Ostrich

**E** GGS laid by giant ostriches in drifting desert sands approximately a million years ago are being discovered in several regions of China. Eggs or fragments of eggs have been found at 21 localities, representing perhaps as many nesting areas of the fossil birds. The fossil eggs are of gigantic size, the largest being a little more than 6 inches long, or nearly 13/4 inches greater in their long diameter and 31/4 inches greater in girth than those laid by the ostrich of the present day. Not only are these fossil eggs much larger than any laid by the living species, but they also had much thicker shells, those laid by the early species in the oldest strata having been found to have a thickness as great as 2.7 millimeters—that is, a little less than one-eighth of an inch. It would certainly have taken some nerve on the part of the egg epicurean of that day to crack the shell of that egg on his breakfast table.

The ostrich living today is found wild in areas scattered from South Africa to Arabia. The extinct species which laid the eggs now attracting so much attention from geologists and paleontologists roamed over the oases and sands of eastern Asia in the day when the early loess was drifted about by desert winds and caught in the damp basins of vagrant lakes. Doubtless these great ostriches raced with the three-toed horses of that day, for both the bird and the progenitor of the later and fewer-toed horse were buried together in what geologists call the Hipparion red clays, and these date from about a million years ago.

Most of the fossil eggs were broken before burial, but two specimens are said to be in fine state of preservation, whatever that may mean—possibly a matter of taste, after all.

It is a curious coincidence that Chinese paleontologists, who now are finding the eggs of ostriches buried many hundreds of thousands of years ago, are of the same race and country to which we owe the art of preservation of eggs

by burial for long periods in the ground. Dried eggs have long been a product commercially exported from China. It is possible to dine in New Jersey and eat eggs dried by the Chinese. They are sometimes used instead of the fruit of our own native hen in the concoction of ice cream. What an egg-eating marathon might have been staged had there been some good American citizens scattered around those alkaline lakes in the ancient days of Struthio Anderssoni and the three-toed horse.

The fossil ostrich eggs, which are being discovered in China where modern streams have cut down into the deeply buried strata of wind-blown dust and clay, are much larger than the dinosaur eggs found by Roy Chapman Andrews and the American Museum of Natural History exploration party in Mongolia several years ago; but, on the other hand, they are not nearly so old by many millions of years. After all, when one stops to think of it, it is not a very far cry from a dinosaur to the ostrich, for the dinosaur comes close to being a lizard. So does the ostrich as it is a sort of feathered, toothless lizard. If you do not believe it, study the bird carefully and without prejudice after removing his feathers.

Since the ostrich which laid the giant eggs in the Chinese desert disappeared from the earth long ago, there have been several other large birds which have become extinct. Some of these have disappeared within the limit of human history. One, known as the Aepyornis, which lived in Madagascar until about 1,000 years ago, was a colossal bird, about 7 feet in height. Her eggs were considerably larger than those of any ostrich, past or present, being about one foot in length. Another famous bird was the Moa, of New Zealand, which was exterminated by the native Maori about 500 years ago. The egg of the Moa had a girth of about 6 inches, whereas the major girth of the eggs laid by the Chinese fossil ostrich was of the order of 18 inches.

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