

SUPPOSE Columbus had not kissed the Queen's hand and sailed. Suppose America had never in the

Let the archaeologists, inquisitive of past racial glories, guess at what might have happened in a twentieth century redman's world.

centuries since been discovered by

white men. Just suppose.

Civilization might now be centered in the Iroquois, one of the barbarian groups far northward of the centers of culture that arose in the tropics long before invasion of the conquering whites

Prehistoric America had Indian tribes which may be compared to the intellectual, artistic Greeks. It had powerful, aggressive tribes like the conquering Romans. And it had cruder tribes to the north like the barbarian tribes of northern Europe.

The drama in which these Indian groups were playing their roles was cut short when the white men came adventuring and conquering into the New World. Consequently, the third act of the great American drama will never be completed, except in imagination by those who like to speculate as to what would have happened if Columbus and De Soto and the rest had delayed their coming, thus leaving a longer chance for the Indians to work out America's destiny.

Until now, it has scarcely been worth while to speculate, because there were few clues to the migrations and trends of the American tribes. But knowledge of prehistoric

What Would Have Happened—

If America Had Not Been Discovered

By Emily C. Davis

Like the art of Middle America is this figure carved in a copper plate. But it was found in the prehistoric Indian mound settlement at Etowah, Ga.

America is advancing steadily as a result of excavations into old Indian sites and explorations into unpenetrated regions of the continent. It begins to be possible to piece together some of the clues, so as to reconstruct the early acts of the drama and even to guess at a plausible ending.

The suggestion that ancient America appears to parallel ancient Europe rather remarkably was made recently by Dr. A. V. Kidder, archaeologist of Phillips Academy, Andover, and director of archaeological researches for the Carnegie Institute of Washington. Dr. Kidder pointed out that the Mayan Indians who lived in Central America and Yucatan developed there a culture which was the finest in America, very much as the Greek was the highest culture of Europe.

These Mayas, starting as a primitive group, several thousand years before Christ, established the foundations of a resplendent civilization. By the first century A. D. they were building impressive stone temples and government buildings, around which the thatched huts of the people spread out in great cities. Indian artists adorned the white limestone and stucco buildings with beautiful exotic sculptures and paintings, and engineers built wide stone highways, probably for ceremonial use, leading to important places of worship.

Their scientists were clever enough as astronomers and mathematicians to devise a calendar system better than

the Roman calendar, and almost as precise as our own at present. Their scholars worked out a system of writing in pictures and symbols, so that dates and other important records could be painted or carved. Squads of workmen, who probably could not read the learned writing were kept busy cutting dates into tall stone monuments, for the Mayas believed strongly in keeping permanent records of time. All this was done without any imported assistance from Europe, Asia, or North Africa, where nations climbed up on one another's shoulders and profited heavily by one another's inventions.

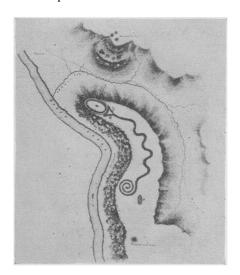
North of the Mayas, in the highlands of Mexico, were other Indian groups who built fine stone cities, and among these Dr. Kidder singles out the Aztecs, whom he compares to the About the time of the Romans. Middle Ages in Europe, the Greeklike Mayas had risen to the heights of their glory and had begun to degenerate, while the Aztecs were absorbing from the luckless Mayas much of their hard-won culture, as the Romans borrowed Greek art and elegance. There was less aesthetic sense among the fighting Aztecs than among the Mayas, but they enjoyed luxury and display.

When the Spaniards came to Mexico in the sixteenth century, the Aztecs were the most impressive masters of the land, who met Cortez, and who were soon reduced to the status of laborers, forced to fill bottomless coffers with gold for the Spanish treasury. The Spaniards burned Aztec books, destroyed temples, silenced forever priests and scholars who alone held the keys to the learning that had been amassed through so many cen-

turies. And this is somewhat as if the ancient Roman civilization had been cut off sharply at the close of the Republican period, Dr. Kidder has suggested.

The parallel is that republican Rome succeeded in conquering provinces and multiplying its slaves and prisoners, but the vanquished people were not brought into the Roman organization as self-respecting colonials until the founding of the Empire. So, the Aztecs had extended their sway over many neighboring Indian tribes in Mexico, but they had not made the subjugated people a part of a unified empire when their progress was cut off. If they had organized their subjects, they might have presented so powerful an attack before the comparatively small band of Spanish adventurers that the invaders would have fled discouraged. As it was, however, the Spaniards found it easy enough to make allies of the tribes who hated their Aztec masters. Had Rome been interrupted in her program of colonization and empirebuilding at such a point, the course of world history would have been different. The Aztecs were interrupted.

The parallel between what happened in Europe and what seems to have been happening in America may be carried further. In Europe, the course of migration and the spread of knowledge and conquest turned northward, from the centers of civilization in the Mediterranean country to the barbarian lands of Gaul and Britain. The simpler northern tribes of Europe took over as much of the



Did Ohio Indians, like the Mexicans, venerate the serpent? They built this strange mound with an egg-shaped altar at the snake's mouth in Ohio. It is 1,254 feet long.

knowledge of the declining Greek and Roman world as they could assimilate. They held the heritage and transmitted it. In America, the picture is not so clear, but Dr. Kidder and some other archaeologists incline to the opinion that the same northward wave of culture was under way in the New World. The theory implies that the people who are the central stock of a civilization pass on many of the ideas they develop to the people who are living off on the fringes of the civilization. When the central civilization fails, the fringe people are able to preserve the inventions and the knowledge of the decadent race without being in such close contact with them as to become infected by their physical or moral downfall.

There is evidence that some of the ideas from tropical America did spread northward. This does not mean that the Mayas or the Aztecs ever conducted a campaign of conquest among the distant "barbarians" as the Romans did. Nor does it mean that missionary Indians from the tropics travelled up into the Mississippi Valley to teach the mound-building tribes how to record time or how to build securely in stone. If Mayan groups worked their way north, it was probably at some early time when the Mayas themselves were only groping toward progress. But what is more certain is that in the days of Mayan and Aztec glory there were traders who came up from the South bringing goods for exchange.

There was an impressive amount of this trading up and down and across the wilderness of the Americas. Indian mounds in the Mississippi Valley, for example, have yielded articles made of materials that must have come from hundreds, even thousands of miles distant. When we know that mound builder chiefs in Ohio wore beads made of marine shells from the gulf region, breastplates made of copper from the Great Lakes country, obsidian knife blades from the Rockies, glittery decorations of mica from the Appalachian highlands, it is plausible enough to assume that Mexican ideas and goods would be carried abroad.

Evidence of the Mexican trade in northern America is to be seen only in obscure, fragmentary glimpses. But these clues are increasing and overlapping so that they can scarcely be ignored. Considering the clues, Henry B. Collins, Jr., of the U. S. National Museum, agrees with Dr. Kidder's theory that the prehistoric north bor-

rowed rather heavily from the more advanced south.

Mr. Collins has found in the Indian mounds of Louisiana ear-plugs which surely owe their inspiration to the jewelry of the Mayas or Aztecs, if the plugs themselves were not imported from the Aztec country. These ear-plugs are of stone, copper-coated, and made like big collar buttons. They are the typical sort of ear ornament worn by chiefs and priests in countless carvings and paintings in the old tropical cities. The same fashion in earrings spread to Ohio, and to mound-building tribes of other states.

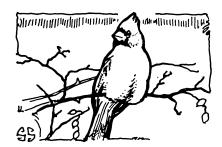
In the Indian mound settlement at Etowah, Georgia, have been found mysterious copper plates decorated with human figures too much like the art of Middle America for the resemblance to be ignored. They are a puzzle, but they fit into a picture of the northward spread of American culture. On the copper plates are engraved the figures of warriors or chiefs wearing costumes such as Aztec or Mayan dignitaries would wear, and the whole design is too reminiscent of the southern art for the resemblance to be accidental.

In the southeastern states have been found pottery and shell objects decorated with rattlesnakes wearing horns or feathers on their heads. Now, there were snakes aplenty in the woodlands of the states, but serpents were not commonly represented in Indian art north of Mexico. To represent this particular kind of snake with this unusual headdress on pottery implies almost surely that the thought was borrowed from Mexico, where the Feathered Serpent was a favorite deity. The Snake Dance of the Southwest is another possible link in the chain of evidence regarding the spread of the serpent cult northward from its base.

There is a link between Mexico and the states still more fundamental, Mr. Collins suggests, and that is the mounds themselves. Through two-thirds of the United States are scattered thousands of earthen hills piled up many centuries ago by Indians who wished to erect burial hills for honored dead, or who wished to make high foundations for their wooden temples or lookouts. In America the mound-building custom would reasonably appear to have had a single origin and to have spread from that. In Middle America, the Mayas and perhaps their primitive ancestors began building great stone mounds or pyramids, and on these (Turn to page 62)

NATURE RAMBLINGS

By Frank Thone



Cardinal

Clad in the brightest red of a Prince of the Church, but maintaining a most un-ecclesiastical sprightliness, the cardinal is the most colorful and cheering of the birds that haunt the snow-filled woods. Normally wintering just a trifle to the south he comes up to visit northerners with gratifying frequency, and indeed is believed by some ornithologists to be slowly extending his permanent range into the North. In any case His Eminence in Feathers is most welcome.

The cardinal has a smooth liquid voice when he chooses to sing, and he occasionally does so even in the winter. But his cold-weather call is mainly a ringing, metallic, rather thin note, sounding a good deal as though some one were striking a long, slack wire with a light hammer. He repeats it a good many times: "T'sing-t'

The cardinal belongs to the grosbeak family, as might be guessed from his thick stout bill, and like all grosbeaks he is a very valuable destroyer of vermin. Some of the worst of agricultural pests are his favorite dishes, and he is given a clean record so far as behavior toward crops is concerned.

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Approximately 200 different tribes occupied the United States at the time of Columbus' voyage to America.

Government engineers are seeking to develop a lightweight concrete for floors of long-span bridges.

An air-cooling system like that used in theatres will be tried out on a steamship sailing between Egypt and Italy.

If America Hadn't Been Discovered—Continued

high places they put their stone altars and later their impressive temples.

A great cone of earth covered with lava blocks is one of the notable features of Mexican antiquity. This mound, on which once stood an altar, was recognized for what it is only within the past decade, for it was hidden beneath grass and brush. Study of the figurines and pottery buried about the base and the layers of soil and lava that accumulated there have led to an estimate that the mound is several thousand years older than the Christian era. In other words, it appears that the Indians of Mexico were building ambitiously the great high places as far back as that. How old the mounds in the states may be is not even estimated.

Mr. Collins concludes that when this custom of building mounds surmounted by religious structures of stone or wood is found in two regions of America, among the tropical inhabitants and the scattered mound-building tribes of the states, and when you find that other Indian tribes had no such custom, the most likely explanation is that the practice was spread with the wandering of early, migratory tribes.

A further resemblance between the Mexican pyramids and the mounds found in the states is cited by this archæologist, who says that some mounds in Florida and Georgia have long approaches leading up to them, and at the distant end of the approach there is sometimes a well or artificial lake. All of which closely resembles the plan of Mayan temples, most particularly the plan at the famous Temple of the Sacred Well as Chichen Itza.

In the Southwest, contact with the people farther south brought in to the Pueblo settlements ornaments and that most important innovation, corn. It is supposed that corn was first domesticated in the highlands of Mexico, by crossing of the plant teocentli with some unknown wild plant. With this important event, several thousand years before Christ, America became a cereal-growing country, with a standard crop to be planted, guarded, and harvested. Perhaps that early start with corn gave Mexico the opportunity to gain headway in its culture and partially explains its remarkable achievements in those early milleniums. The corn seed spread from tribe to tribe and in the course of time reached the northern limits capable of its growth—again the northward swing of progress.

When the white men reached America, they found the Mayas a broken race and the mound builders only a remnant of what they had been. The Eskimos in the far north had had their day of being fine artists and ambitious workers and had settled down to a lower artistic and economic level. Was the Indian world burnt out?

Mr. Collins suggests that the Iroquois in the northeast were likely candidates to carry on the heritage. The Iroquois appear to have worked their way northward from the southeastern United States, for they show many similarities to southern customs and until recent times were represented in the south by the Cherokee, who spoke a related language. Like the Mayas and Aztecs, the Iroquois had advanced conceptions of government and they could provide leaders: for, too late, they organized the Iroquois league of nations. They might, if given time, have become the barbarians of the northern fringe who would have taken up the culture and built on it.

But perhaps the time for the northern barbarians to become important was a good way off in America when the white discoverers abruptly ended the drama. Before the Iroquois could become so powerful, the Aztecs might have been expected to salvage more of the Mayan culture and to organize their subject tribes for more ambitious conquest. And in South America, the Incas of Peru meanwhile had built up to its height an organization of many tribes which might conceivably have become a continental force if time and circumstances had allowed them to spread. Aztecs, Incas, Iroquois, if they had met in friendly trade or in battle there would have been stirring events ahead for America.

The migrations and the ups and downs of these prehistoric Americans are not merely of interest to us Americans today, in Dr. Kidder's opinion, but they are of practical concern to us. The great problem of history, he explains, is to understand the cycles through which races pass. If we could trace the causes which brought Greece and Rome up to power and then down to destruction, or if we could trace the simpler, clearer cycle of birth, growth, and decline of the Mayas or the Pueblos in America, Americans might better stave off the period of failure which American civilization may expect some day to face.

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