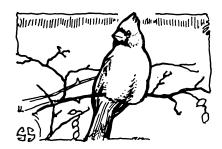
## NATURE RAMBLINGS

## 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. 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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