

ARCHAEOLOGY

# Prehistoric Ellis Island

## On Alaska's Northwest Tip Scientists Are Digging Up Evidence of America's First Big Immigration Problem

By EMILY C. DAVIS

**T**HE ELLIS ISLAND of prehistoric America is being rediscovered.

With that sentence, you are whisked off to the northwest corner of Alaska. And you are way back in imagination in a time before the New World cared how many immigrants, refugees, or summer visitors landed on its shores.

Nobody cared then, unless one group of roving newcomers trod on the toes of another group; and there followed a personal battle. But now, archaeologists are investigating those early unofficial arrivals, and with far more persistence than any immigration official ever trailed a stowaway.

Fortunately for scientific detectives, the frozen ground of the Arctic has preserved quantities of evidence where one type of pioneers settled. These are the Eskimos.

Eskimos may not have been first to discover America. Probably they weren't. The first straggling groups of Asiatic hunters, who crossed Bering Strait from Siberia and kept moving until they and their children spread over North and South America, left very little behind them, anywhere, except stone blades and the bones of game animals they polished off.

But the Eskimos, by choice, or necessity, settled down in the Arctic and stayed right there living an Ice Age existence. No following the sun for them. They specialized in making a living in the North, and invented some remarkable gadgets for comfort and efficiency.

### "New York"

One of the biggest settlements of prehistoric Eskimos is now being investigated by an archaeological expedition. Here, comparatively speaking, was a New York of early America, north of the Arctic Circle at Port Hope, about 200 miles north of Bering Strait where most of the early immigrants came over.

To dig out this New York of the Arctic, young Helge Larsen of the Danish National Museum has come all the way from Copenhagen to join forces with F. G. Rainey of the University of Alaska. The settlement they are excavat-

ing is a sand pit that is being washed away rapidly on one side while the other is being built up. From the advancing sea they are rescuing buried homes and trash heaps that reveal a strange pioneering life in the New World.

Raiding the Arctic icebox in this way is no easy adventure. Even in mid-summer the ground is so hard that excavators can dig only a few inches down in a day. Then they strike literally frozen earth and have to wait until the summer air thaws the exposed layer.

Objects recovered have to be "defrosted" speedily and with expert care so that they will not warp or fall apart. But from this cold storage the investigator, if he is careful, brings back wood, leather, and feather articles that have been preserved for centuries.

In ancient Eskimo settlements that have not frozen up, the rubbish heaps and houses yield none of these perishable antiquities. Even ivory may disintegrate, if not saved by freezing, and then little more than stone lamps and stone tools can be salvaged.

### Against Time

Digging against time each summer because the ground freezes solid for winter by mid-September, and working in company with chill wind, rain and mosquitoes, scientific explorers are nevertheless wresting so much evidence from the frozen North that the prehistoric Eskimo can no longer be rated a forgotten man.

The surprising revelation that the oldest articles dug up in the Alaskan Arctic are the most beautifully made and decorated is the result of summer after summer of digging by Henry B. Collins, Jr., of the Smithsonian Institution in Washington.

Mr. Collins now divides Eskimo prehistory into four periods. The Golden Age of the Eskimos came first. These people were prosperous and happy in the New World, and they made even everyday harpoon heads and knife handles beautiful. Using fossil ivory they carved delicate scrolls and circles, achieving a fine art of their own.

Then came an Eskimo depression. The era that could produce Eskimo Raphaels and Michelangelos was over. People had

less time for carving beautiful designs, and they became satisfied with plainer harpoons and knife handles. Eskimos never again rose to their ancient heights of artistry and inventiveness, says Mr. Collins. Modern Eskimos turn out cribbage boards, paper knives and toy animals with skillful fingers for the tourist trade, but they do not create like the old masters.

Finding that the oldest Eskimos were living specialized lives, adapted for Arctic efficiency, at a very early time, Mr. Collins has concluded that they brought a good deal of inventive genius and art talent from the Old World with them.

### Began in Siberia

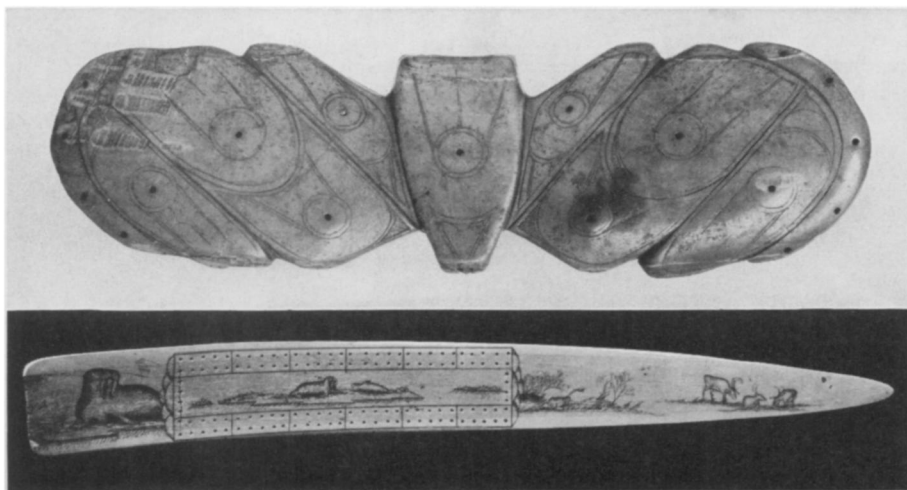
To understand the Eskimo immigrants into prehistoric America, it is necessary, he believes, to trail them back into Siberia. They began to be Eskimos over there. As added reason for thinking this, Mr. Collins says that all the basic features of their living, such as toboggans, harpoons, lamps, skin boats, and semi-underground houses, are found in the Far North across Asia and even as far away as Europe.

How the prehistoric groups of immigrants found their way to the New



### NORSE INFLUENCE

*This little doll made by the Eskimos is dressed in Norse clothing.*



### LOST ART

*Eskimos today turn out handy pieces of work for tourists, such as the cribbage board shown here, but they cannot duplicate the delicate and graceful art work of the ancient Eskimos (above).*

World has been explained by scientists, and even tried out by chance in native fashion by a schooner captain, who had to make the crossing. The immigrants, who had no idea they were doing anything so adventurous as crossing from an Old World into a New, must have come mainly via Bering Strait. The Strait is narrowest at Cape Prince of Wales, and with the Diomed Islands as stepping stones, the 50-mile gap could easily be navigated by people in simple boats. In winter, it could be crossed by wanderers afoot, over the ice. Modern Eskimos have done it if they had to.

It was this crossing that Capt. Max Gottschalk of Nome tried in a native manner. He left East Cape, Siberia, in early spring, with a sled loaded with food and with sixteen dogs, heading for Cape Prince of Wales by journey across the ice. He thinks back on it now as a perilous trip. At times the ice was paper thin. Currents carried him with the floe 70 miles up the coast beyond the place where he intended to land.

### Ancient Perils

On Little Diomed Island, he picked up a white man who wanted to hitch a ride to the mainland. Twenty-five miles out on the floes, this fellow traveller fell through. Capt. Gottschalk quickly wrapped him up, put him in the sled and took him back to the island village. But the shock of the fall and the 20 below zero cold were too much for him, and he died there.

Going on alone, Capt. Gottschalk completed his journey, which had taken over nine days, and had duplicated no doubt

the same struggles and dangers that beset many of America's ancient arrivals.

There were emigrants leaving America, as well as people who wanted to come in, even in prehistoric times. Some archaeologists, who are investigating this, think the two-way traffic may have followed different routes. Mr. Collins believes that while most of the immigrants arrived via Bering Strait, there was a return route to Asia farther south over the Aleutian Islands, which swing out in a long chain from Alaska toward Kamchatka.

### Two-Lane Traffic

As clues to this ancient west-bound traffic, Mr. Collins says that over in Kamchatka the natives used stone lamps and wore labrets as lip ornaments and made houses that were entered through the roof. And these, he declares, were fashions used earlier in America, so they must have been ideas exported to Asia by some of the early emigres.

But why not suppose that these American emigrants had gone back across Bering Strait, the way they or their fathers came? Because, explains Mr. Collins, these fashions that occur in Alaska as far north as the Aleutian Islands and also on the opposite shore in Kamchatka, were not found, originally, further north either in Asia or America.

As archaeological detective evidence goes, it makes a good case for two distinct traffic lanes.

In the course of centuries, some Eskimos wandered eastward across Canada. Some reached Greenland, becoming its first Eskimo inhabitants. Dr. Therkel

Mathiassen, who is the chief archaeologist of the Danish National Museum, has worked out in remarkable detail the succession of happenings in this land far from the Alaskan base.

These Eskimos who settled in the East were the first New World natives to meet white men. The New World's first wars of conquest were fought in the Arctic a hundred years and more before 1492, it has been learned by excavations. Norsemen attempting to get a foothold in Greenland had to fight it out with the Eskimos, and when the battle became serious, the Eskimos won.

This forgotten story of American warfare was one of the discoveries made by Dr. Mathiassen, when he excavated an Eskimo village on an island off north-west Greenland. He found with the Eskimo things, relics belonging to Norsemen. Some of these were a carved Eskimo doll represented wearing medieval Norse dress, and a bone chessman converted into a top. And a piece of a churchbell, used as a hammer! The Norsemen, declared Dr. Mathiassen, certainly did not break up their churchbells voluntarily so that Eskimos might make hammers and eardrums out of the pieces.

### Peace at First

Like the Indians, the Eskimos did not start fighting white men in earnest, at first. Eric the Red discovered Greenland in 985 A. D., and Norse colonies were soon planted there. But it was over 200 years, strangely enough, before these white settlers in Greenland saw their first Eskimos.

Dr. Mathiassen explains this by saying that Eskimos stayed in the more northerly regions of Greenland, where the land was suited to their ice hunting and travel by dog sledges.

But then, Eskimos sighted white men. Advancing to investigate this curious invasion, they were presently involved in battles. By the fourteenth century, the war was in full swing, with Norse settlers being massacred and their homes burned with vengeful thoroughness.

Whether the European colony was actually wiped out by determined and victorious Eskimos, or whether some survivors turned Eskimo, marrying with the natives, is being fought out with words, in scholarly circles today.

Some scientists are strongly convinced that the ill-fated colony lost touch with the homeland in Europe, became malnourished on Eskimo food, caught the Black Death raging in Europe, and thus weakened could not meet the Eskimo attacks. Other scientists think that some

white men and women survived the first international war on American soil and turned Eskimo, and that their survivors may be seen today among the fairer Eskimos of Greenland.

Explorer Vilhjalmur Stefansson in his new book, "Unsolved Mysteries of the Arctic," declares that "the question of whether the European colony disappeared by extermination or amalgamation threatens to become an absurdly nationalistic issue." Most Danes favor the extermination theory; Norwegians favor amalgamation.

Stefansson himself provides ammunition for the amalgamation faction. He argues: A plague would have weakened Eskimos no less than the Norse settlers. Malnutrition would hardly have stricken Norsemen if they fell back on the diet on which Eskimos thrive; but on the contrary a mixed diet of imported food, and meat handled in the European manner, might have brought about diet deficiencies. And long-ago observers who reported that the Norse had been wiped out may have misunderstood what they saw. One party saw, in fact, merely a deserted farm of the settlers, and believed them dead; whereas, it may have been that they were off hunting caribou or catching salmon. But the silence of the farm seemed ominous, and the party sailed away to report general tragedy.

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*Science News Letter, August 19, 1939*

#### PUBLIC HEALTH

### League of Nations Helping Chinese To Fight Plague

**T**HE CHINESE Government is getting aid from the League of Nations in its fight against plague, cholera, malaria and other epidemic diseases, the League's Health Organization announces.

Experts in the fight against plague and cholera are now working in the northwest and center of China, reports Dr. M. D. Mackenzie, who has just returned from China where he has helped arrange for League assistance to the Chinese Government. The League has established a transport service to provide these experts with the stores they need for the fight against plague and cholera.

Health conditions on the road to Burma, China's lifeline at present, are under the supervision of a League expert who is serving as technical adviser to the Chinese Government. Malaria is particularly malignant in regions traversed

by this road and constitutes a serious menace to the transport workers, the road menders and the regions to which the road leads. Much of the work of the medical and engineering experts has been concentrated on this road, at the request of the Chinese Government. One of the League engineers is responsible for supervising the upkeep of the road, particularly during the rainy season which lasts from June to November.

Considerable quantities of medical and

sanitary stores have been provided by the League for China's anti-epidemic campaign. Besides quinine, these include several tons of chloride of lime for disinfecting wells in cholera-infected areas, several million doses of cholera and smallpox vaccines, equipment for 30 mobile bacteriological laboratories, and the necessary drugs for treating cholera, dysentery, relapsing fever and similar epidemic ailments.

*Science News Letter, August 19, 1939*

#### ENGINEERING—AGRICULTURE

## New Soviet Tractor Performs Twenty-Two Operations

**A** NEW kind of electrical tractor that cultivates hotbeds mechanically with increased yields is being demonstrated on a large hotbed area of agricultural exhibition grounds in Moscow.

Invented by Vagan Mkrtchian, the new hotbed combine performs 22 different operations, according to a Tass report.

It is a small machine that looks somewhat like an old-fashioned limousine. It moves along the hotbeds from one row to another, opens their glass frames as it approaches and closes them again when it moves on. The operator manipu-

lates several levers in his cab, and the machine performs the various processes of cultivation and sowing in the hotbeds.

It brings soil to the hotbeds, scatters and levels it, marks out the rows, sows vegetables, waters them, weeds, adds fertilizers, sprays chemicals, pollinates plants, etc.

The design of the machine is very simple. Its metal frame is equipped with levers which open and close the glass frames, thus ventilating the hotbeds. Special tanks are mounted for water, mineral fertilizers and spray liquids.

In autumn and early spring when no



#### NO BREAKAGE

*This tractor in the greenhouse is on legitimate business. It is mechanizing the cultivation of greenhouse plants in the Soviet.*