

ETHNOLOGY

Old Indian Custom—Boo

Present-day Hallowe'en masks look pale when placed beside masks American Indians used to call forth the proper "great spirit" needed for the occasion.

By MARJORIE VAN DE WATER

► THE YOUNG merry-maker who dresses up in a false face on Hallowe'en is following an Indian custom that was old when Columbus first came to these shores.

But the Indians took their masks more seriously than does the Hallowe'en reveler. The Indian masks were believed to give the wearer power to ward off or cure illness. On the other hand they were "poison" when neglected or mistreated in such a manner as to stir resentment of the forces they represent.

Masks are still used in ritual and ceremony by thousands of Indians. Scientific studies have been made of these customs, for they are a part of the earliest American culture. Among the most recent studies were those of the late Dr. Frank C. Speck of the University of Pennsylvania, published by the University Museum.

Even the "trick or treat" custom has its parallel among the Indians. Traditionally, among the Delawares, a feast and dance are given on behalf of the mask spirit. There the mask is used to scare unruly children who are taught to buy the "grandfather" off with gifts of tobacco.

Thanksgiving

Their Thanksgiving is celebrated with a festival. To announce when it is to take place, two messengers ride about dressed in corn husk clothing and wearing masks. These messengers carry a bag containing excrement and smear it on all those who do not immediately offer them a gift.

Masks are used or have been used historically by Indians all over the eastern United States from the land of the Eskimo to Florida, as well as the western parts of the country. Their use had particular importance among the Iroquois and Delaware Indians to whom the masking custom was highly religious and very important as a cure and preventive of disease.

Among the Iroquois people there are two masking societies, the False Face Medicine Society and the Husk Face Society. Many masks used by the Iroquois are painted red or black, have long hair, broken noses, distorted mouths and wry expressions. Small bags of tobacco are tied to them as offerings. These masks represent the spirit called "The Great One."

Here is the story of "The Great One":

The Creator finished the earth and banished evil spirits. Going west, he met the chief of the False Faces. They argued about whose earth it was and agreed to settle the title by contest.

To test their power, they summoned a distant mountain to come to them. The great False Face shook his turtle rattle and caused the mountain to move part way. The Creator summoned it to come, and it came directly up to them.

When his rival suddenly looked around, the mountain hit him in the face breaking his nose and distorting his mouth with pain. This is why the masks representing him are so grotesque.

The Creator assigned The Great One the task of driving disease from the earth, aiding travelers and hunters. The loser agreed that if humans make portrait images of him, call him grandfather, make tobacco offerings and set out a kettle of mush for him, they too shall have the power to cure disease by blowing on hot ashes.

Rim of the Earth

The Great One now lives on the rim of the earth and traverses the path of the sun. He carries a great staff and a turtle shell rattle. His face is red in the morning as he comes from the east and is black in the afternoon as he looks back from the direction of the setting sun.

But there are other spirits who are represented by another class of masks. These are little hunchbacked people who live everywhere in the forest. They are shy but cause mischief unless they are provided with gifts of tobacco and mush. They also have power to control sickness and cure the sick by blowing hot ashes on them.

Here is the story of these little "common faces":

As humans went about on earth hunting they carried native tobacco and mush. They were tormented by shy beings with long hair who flitted timidly behind trees. Sometimes a hunter found the ashes of his fire strewn about. It was discovered that a False Face came and scattered the coals as if seeking something.

That night the hunter had a dream in which the False Face requested tobacco and mush. The hunter supplied the request, and the Faces came and taught him their songs and method of treating the sick with hot ashes. In a dream they asked him to remember them each year with a feast, telling him they were everywhere in the forests bringing good luck to those who remember them.

The masks made of corn husks have another significance. They represent the spirits of agriculture and promise fertility and good crops. They are messengers of the three sisters—corn, beans and squash, the supporters of life. They visit the Indian

longhouse during two nights of the mid-winter festival accompanied by a great din. But these masks also have power to cure by blowing hot ashes.

Another unusual mask custom is that of the Cherokees in North Carolina. In addition to using the masks in medicine and religious ritual, the Cherokees use them in a traditional drama depicting the worst aspects of the white invaders from the east and symbolizing the diseases they introduced.

On a winter evening there is an all-night dancing program. Dancing starts with the decorous Bear Dance in which the dancers move contra-clockwise around the room to the accompaniment of singing and drumming.

Suddenly a band of masked strangers bursts into the room. They are dressed in slovenly fashion, draped in bed quilts or garbed in old ragged coats.

The strangers "do not speak Cherokee" so the host pretends to interpret what they say in whispers. He asks what they want. At first they want to fight; that is refused. Then they want women; likewise refused. Finally they want to dance and are told to join in the Bear Dance which is then resumed.

But the behavior of the strangers is completely rowdy. They do not dance properly but jump and cavort around awkwardly like an outlandish white imitation of Indian



GRINNING MEDICINE MEN—
Two models of Iroquois False Face Society dancers show how medicine men "dressed up" when the occasion demanded.



BAD MAN—In the eyes of the Indian, this mask represents a big, bad white man.

dancing. They seize women and make violent and offensive gestures. Finally they bolt out the door and the dancing is decorously resumed.

This ceremony was named by the English the Booger Dance. The masks used were originally of wood and were caricatures of white men or occasionally of Negro slaves. Today they are made of cardboard. All are grotesque to emphasize the unkempt, uncouth and diseased faces of the disreputable white man, seen through Indian eyes.

Another unusual type of mask used by the Cherokees is made of animal hide or fur, and represents the face of an animal. Such a mask, used as a hunting lure, is shown on the cover of this week's SCIENCE NEWS LETTER.

Science News Letter, October 27, 1951

MARINE BIOLOGY

Find Plenty to Eat In Gulf of Alaska

► **FIGHTING MEN** or others cast adrift in the Gulf of Alaska "never need starve to death." They could probably get along by eating the mussels found in masses of floating kelp many hundreds of miles from where the sea plant usually grows.

This is the conclusion of John D. Isaacs, assistant to the director of the University of California's Scripps Institution of Oceanography at La Jolla, Calif. He has just returned from a two-month survey trip exploring the eastern North Pacific, an ocean area never really studied before.

One of the most interesting features discovered, he reports, was the masses of floating kelp far out in the ocean. The kelp was covered with myriads of small mussels. To prove their point, four of the survey party made an entire meal of the mussels found on just one drifting stalk.

Science News Letter, October 27, 1951

DENTISTRY

No Wisdom Teeth in Future

► **IN ANOTHER** three or four generations, humans may not have any wisdom teeth. Meanwhile, more and more of us are having impacted third molars, as dentists term those last teeth in the mouth.

For their successful removal, a combination of X-rays and geometry is an important first step, Dr. Harrison M. Berry, Jr., of Philadelphia, reported at the meeting of the American Dental Association in Washington.

Just one X-ray picture does not tell whether the roots of the impacted tooth lie behind or in front of the neighboring tooth. Dr. Berry advises taking two pictures.

For the second X-ray shot, the X-ray tube is moved to the right and the rays are directed at an angle less than 90 degrees to the film. The tooth that is behind will seem to move to the right, just as a telephone pole moves to the right of the front one in the line when you step slightly to the right of the line of poles. With this guide, the dental surgeon does not need to go in blindly when he operates to remove an impacted wisdom tooth. He knows its location in the jaw.

AERONAUTICS

Universal Aviation Speech

► **INTERNATIONAL AIRPLANE** pilots, without knowing the part they are playing, are helping build an international "English" language for aviation for use between planes in the air and control towers in all parts of the world.

Control towers in many parts of the world are now making records of conversations between pilots and ground workers, the U. S. Civil Aeronautics Administration has announced. Out of these samples and certain scientific studies of words will be built a language which speakers of all languages can use in comfort, which will be positive and time-saving, and which will contribute to safe operation of aircraft anywhere.

English is more nearly a universal language in international aviation today than any other, and it will continue to be so under this plan. More English-speaking pilots are on international routes than all others combined because of the large number of American, Canadian, British and Australian planes in use.

Under plans of the International Civil Aviation Organization, which includes over 50 nation members, all international control towers are expected to have operators who understand English as well as their own language.

Member nations of the International Civil Aviation Organization, ICAO for short, have agreed that the English language should be the basis of the proposed "International Language for Aviation." They

Careful X-ray studies are also important, Dr. Berry stressed, before removing teeth that may have curving roots. Unless the operator knows where these are, he may break them and a piece of root tip may be left in the jaw. This can cause trouble later if it is infected.

Some people are "grinders" and others are "choppers" when they chew, Dr. Samuel Pruzansky, special research fellow of the National Institute of Dental Research, reported.

A "grinder" can move his lower jaw from side to side as well as up and down, while a "chopper" cannot.

The patterns of electric currents created by the facial muscles as people chew are being mapped by Dr. Pruzansky, using electromyographic equipment like that previously used to record electrical responses of leg and arm muscles in polio patients.

When the chewing muscle pattern has been determined in patients having difficulty in chewing because of polio or other illness, special exercises can be prescribed in an effort to overcome the difficulty.

Science News Letter, October 27, 1951

have agreed also that words with Latin roots should be given the preference in developing the phraseologies.

The new international aviation language being selected will be an easy-to-use but special kind of English. Pilots and ground workers in any country, whatever the local language, will be able to converse in correct English words and phrases exact in their aviation meaning.

Science News Letter, October 27, 1951

INVENTION

Boot Extending to Waist Patented as Slushguard

► **ONE-PIECE** "boots-and-bloomers" garment, on which the government has issued a patent, is designed to provide waist-high protection from automobile-splashed slush on winter streets or to protect the lower body in rainy weather. Patent 2,571,202 was awarded to Joseph Clyne, Bronx, N. Y.

The garment is made of water-proof material and has slide fasteners of the zipper type extending from each sole to the waist. The boot is the overshoe type to wear over ordinary foot-wear. Leggings fit snugly around the lower legs nearly up to the knees. Above are the bloomers. They are roomy enough to permit short skirts to be tucked inside.

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