ANTHROPOLOGY

Christmas Rooted in Past

Christmas trees, mistletoe (with kisses), Yule logs, even Santa himself, all find their roots in the pre-Christian northland. Over 30,000,000 trees will be used in U. S. this Christmas.

By HORACE LOFTIN

➤ CHRISTMAS — the birthday of the Christ-child—has come to be the most universal and joyous of all Christian festivals. The first people to practice Christmas, finding no guide from the Gospels to the festival, turned to their old pre-Christian holidays for a model. For this reason, many modern Christmas customs are a mixture of pagan and Christian tradition.

Much of our own English-American Christmas has its roots deep in the pre-Christian era of the dark, barbarous North—the land of Thor and Woden. The Christmas tree, holly, mistletoe, the Yule log, even Santa Claus himself, can be traced back to traditions handed down from the early North Europeans.

Just when and where trees were first used in the Christmas celebrations may never be known, but trees were a vital part of nearly all of the pagan Northland's festivals. The May-pole, used to welcome the return of Spring, was originally a tree and was decorated much like the Christmas tree. Trees were always found in the rude northman's hut at New Year's, to drive away evil and bring good luck.

The early Church frowned upon the pagan introduction of trees into Christmas; but the joyful feeling of the common people at this great anniversary, the birth of their Lord, prevailed. As late as 1740, however, a German pastor described the Christmas tree as a non-Christian innovation.

First Used Here by Germans

General acceptance of the Christmas tree as a necessary part of Christmas did not occur until the 18th century in Germany. It spread to Scandinavia early in the 19th century. France and England adopted the Christmas tree after the middle of the 19th century. Tradition says that Christmas trees were first used in America by German soldiers hired by England to fight in the Revolutionary War.

In modern-day America, well over 30,000,000 Christmas trees are grown commercially each year, not to mention the thousands taken from the woods by individuals. Spruces, firs, Douglas fir, pines, red cedars and arbor vitae are the favorites of the American public.

Spruces lead in popularity in the United States. There are many kinds of spruces, but you can always tell the family by their short, sharp-pointed, prickly needles. Spruce

cones are small and hang downward from the branches.

Firs are perhaps prettier than spruces, but they are more expensive. The typical Christmas tree of Europe, firs have soft, blunt-pointed needles that are slightly curved, distinguishing them from spruces. Fir cones sit upright on the branches, like short, fat candles.

Douglas firs are not what their name implies, but belong somewhere between firs and spruces on the family tree. It is hard to list needle characteristics that can be used to identify them, but you can always tell Douglas firs by their cones. Between each of the scales of the cones there is a little three-pronged projection which is found on neither firs nor spruces.

Pines are easily distinguished from the above trees because pine needles always come in bundles of two or more, joined at the base by a thin paper-like tissue. Spruce, fir and Douglas fir needles are always attached singly to the branches.

White pines always have five needles in a

bundle. The large class of yellow pines have varying numbers of needles in each bundle, but two per bundle is usual.

All of the trees described so far have cones. The remaining two most popular Christmas trees in the United States, red cedar and arbor vitae, have berries instead of cones. Red cedar makes a handsome Christmas tree, but its small, delicate needles fall off too easily for it to be very welcome in the house. Arbor vitae, with its fern-like branches and small, scaly leaves, is known more as an ornamental than as a Christmas tree, although its popularity for the latter use is growing.

Other Pre-Christian Customs

Mistletoe, holly, ivy and other evergreens came into the Christmas tradition by way of pre-Christian customs, too. The delightful tradition of allowing license to kiss the unwary—or very wary—maid caught beneath the mistletoe has been traced back to very ancient fertility festivals. In the north of England where mistletoe was scarce, a tree limb hung with fruits and nuts was used in its stead.

While holly is in real danger of being seriously depleted by Christmas users, there seems to be no effective way to reduce the amount of mistletoe in the wilds. Mistletoe



SPRUCE IN SNOW—When the world was wrapped in snow and the winter sun hung low in the horizon, the rude northmen of pre-Christian Europe looked to evergreens as a promise of rebirth of nature at spring. The Christmas tree is now used to celebrate the coming of the Christ-child, symbol of the rebirth of the human spirit.

is a plant parasite that lives from the substance of host trees, doing them great damage and eventually causing their deaths. In many regions, especially the South, it is plentiful; but as it grows in the tree tops, it is extremely hard to harvest. About the most effective way to gather mistletoe is to shoot it down with buckshot. This means, of course, that its price remains very high, and that not enough is harvested to deplete the supply.

Holly, on the other hand, is a harmless, beautiful tree that is very vulnerable to the depredations of hunters. Holly trees are either male or female, and only the female trees bear berries. Many once-large stands of holly have been stripped of all their bright berry-bearing trees, leaving only the male trees with no chance to reproduce themselves whatever. These stands are doomed. Holly is being raised commercially in great quantities now. You will do a lot to save our disappearing wild holly if you buy only the commercial variety this Christmas.

The old English custom of burning the Yule log at Christmas is another hold-over from pre-Christian days. Throughout North Europe a mid-winter festival, the Yule feast, was celebrated to mark when the low winter sun began to rise once more in the horizon. This Yule feast was one of the most important of the northland, and the Yule log comes directly from it, even carrying its name.

Late December Festivals

In the Near East, Greece and Rome, and other Mediterranean countries, the pre-Christian people celebrated similar midwinter festivals, too. The Babylonian Zagmuk and the Greco-Roman Saturnalia were great festivals that fell near the end of December.

For this reason, many scholars think that early Christians, bent on converting the pagans, chose Dec. 25 as Christ's birth date to wean them from their old celebrations. Who can say for certain when Christ was born? There is no hint in either the Gospels or early tradition.

It is not unlikely that this was the case, as modern missionaries often supplant heathen traditions with Christian practices in their



work to win converts. The Christianizing of the Indians by the Spanish padres offers a good example of how this was done on a large scale. Many of the "saint's day" celebrations in Indian villages today really mark the dates of traditional Maya, Aztec or Inca fiestas.

Old Saint Nick has a touch of the pagan in his family tree, too. The North god, Woden, or Odin, dressed in a flapping hat and a fluttering mantle, and traveling constantly on a white horse to bestow gifts and punishments where they are called for, is seen reflected in the European idea of Saint Nicholas. On the continent, St. Nick wears a flapping hat, a fluttering mantle, and is mounted on his faithful white horse.

Hard Working Saint

The historical Saint Nicholas, by the way, lived in Asia Minor during the third century. In legend he is one of the hardestworking saints there can be. Besides his well-known Christmas duties, he is the patron of travelers, seamen and ships, and even thieves and pirates claim his protection. He watches over the small and humble, and keeps special care over unmarried girls.

Saint Nicholas was a traveler, and where he went he left small gifts for worthy folks. In the North, this tradition became blended into that of Woden; and soon there emerged old Santeklas who brings gifts to good children and switches for the bad.

The northern tradition of Christmas, then, represents the folk-way of the rude but joyous northmen before the tender story of the birth of their Christ-child. The merriment of the northern Christmas is their humble offering to the new-born King.

Science News Letter, December 13, 1952

MEDICINE

Heart Trouble May Be Disguised as a Cold

➤ ONE KIND of heart trouble may appear disguised as a seemingly unimportant cold. sore throat, or pneumonia or other infection, Drs. Mischa J. Lustok, Jules Chase and Joseph M. Lubitz of Marquette University School of Medicine, Milwaukee, warned at the meeting of the American Medical Association in Denver.

The heart trouble is called myocarditis, meaning inflammation of the heart muscle.

The Milwaukee doctors reported 45 such cases in a group of young men and women. Because these patients seemed sicker than they should with just a cold or sore throat, or did not get well as quickly as expected, or had unexplained heart findings, myocarditis was suspected.

When recognized early, much of the serious heart damage in such cases can be prevented, Dr. Lustok said.

Considering the great number of people who suffer from colds, sore throats and other infections, this complication is quite rare, Dr. Lustok pointed out.

Science News Letter, December 13, 1952

SENSATIONAL OPTICAL BARGAINS

YOUR CHANCE TO OWN A **VERY FINE INSTRUMENT**

IMPORTED MICROSCOPE

100, 200, 300 POWER

ONLY \$14 .95 Postpaid

Good optical qualities. Fine focusing. Certainly not the equal of a \$200 instrument—but definition is surprisingly clear and good . . in fact amazingly so at this price. Serviceable construction. The greatest microscope bargain on the market!

TRY IT FOR 10 DAYS . if you're not completely satisfied your money will be refunded in full.

Instrument comes packed in sturdy, hard wood case.

Rack & Pinion Focusing. Revelving Disc-Light, Adjustable Mirror.

Square Stage (2³/₄" x 2⁵/₈") with Slide Clamps

Stock No. 70,008 Q......\$14.95 Postpaid

MAKE YOUR OWN ASTRONOMICAL TELESCOPE



Bulld a telescope worth up to \$600.0 our kits include: PYREX MIRROR BLANK — PLATE GLASS TOOL — TEMPERED POLISHING PITOH — 8 ASSORTED EXTRA FINE ABRASIVES ALL IN SHAKER TOP CONTAINERS (Rouge also included) — FIRST SURFACE MIRROR FOR DIAGONAL — LENSES FOR 1"
F. L. EYEPIEGE — MAGNIFILE 70,006-Q 70,007-Q

Full Grown Performance in a Useful

IMPORTED 80 Power **BABY MICROSCOPE**

ONLY 5" HIGH

\$400



IMPORTED 20X
TELESCOPE AND TRIPOD
Machine threaded fittings
throughout.
Weighs 7 ounces. 6% "closed length. 13% open length.
Achromatic objective lens low
reflection coated on inside.
Makes excellent spotting scope.
Swivel-head tripod is collapsible. 9" high.
with Tripod)...\$12.95 Petrod

ble. 9" nign.
Stock #50,007-Q (with Tripod) \$12.95 Pstpd.
Stock #50,006-Q (without Tripod) . . . \$ 8.95 Pstpd.

IMPORTED! 50 POWER POCKET MICROSCOPE

Polished Chrome Diagonal Bottom. Easy to focus. Practical for examinations. Gives wonderful, sharp, clear magnification. A \$7 value. Weighs approx. 2 ozs. 4 %" long.

Stock #30,013-Q....\$3.49 Postpald

EDMUND SCIENTIFIC CORP. BARRINGTON. NEW JERSEY