

BOTANY

Have a Green Christmas

See Front Cover

► CHRISTMAS, the holiday that ushers in cold, bleak winter, also introduces a jungle of plant life. Spiny holly with deep red berries, waxy mistletoe with tiny clear-white bulbs, poinsettias with red and green leaves touched by flashes of yellow flowers and the delicate ground pine all are Christmas reminders.

Although the first American Christmas wreaths were made of laurel, the favorite wreath green today is holly, seen on this week's front cover. Tradition has it that the wreath was brought to the United States by Irish immigrants in the 19th century as part of the observation of Advent. English hollies were taken to the West Coast by the early colonists. The cool foggy climate was highly suitable to the holly imports and in recent years tons of West Coast English hollies have been marketed, selling for as much as a dollar a pound.

"Raising holly is as much of a science as growing fruit," says Harry W. Dengler, forester at the University of Maryland. Although some West Coast holly still comes from individual farms and yards, much of it comes from orchards that range in size from half an acre to 100 acres. Growers carefully cultivate and harvest holly each year for the Christmas market.

American hollies are grown commercially

along the East Coast, particularly in Delaware, Maryland and Virginia. From these states more than one million holly wreaths may be shipped each year. The American holly is a sturdier type than the English species, which cannot be grown in the East because of the hot dry summers.

An interesting tradition is the farmers' holly auction held in Fruitland, Md. At several specified dates during the last weeks before Christmas the farmers load their cars and trucks with holly and drive into the railroad depot at Fruitland. Here an auctioneer sells each carload individually to holly dealers, restaurant owners and anyone who just wants to deck the halls at home.

A holly wreath on the front door, mistletoe hanging from the chandelier, balsam, cedar or fir boughs across the mantelpiece, ground pine at the base of the candelabra and a Christmas tree by the front window may color the landscape indoors whether the view outside is white with snow or gray with sleet and rain.

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How to Identify Christmas Trees

► A FEW persons will become amateur tree experts in neighborhood living rooms this Christmas.

Telling what kind of Christmas tree stands facing the family in holiday splendor is a real art. Most Christmas trees are evergreen youngsters that have not developed the recognizable cones and berries of older trees. The most important clue for identifying them is the needle or leaf of the tree.

Christmas trees are usually firs or pines. Actually the word fir was once "fyr" in Denmark and referred to the Scotch pine. That is now changed and firs are firs and pines are pines. The basic difference between the two is the way the needles are attached to the boughs. Fir needles are attached directly to the stem, while pine needles are held firm by a raised stalk.

A recent estimate shows the Douglas fir and the balsam fir tied for first place for Christmas tree popularity. The Douglas fir has dark yellow-green or blue-green needles that average about one inch in length.

The balsam fir has shorter dark green needles that are flat and rounded at the tips. Balsam fir twigs resemble crosses more than any other evergreen. One of the reasons the firs appeal as Christmas trees is the perfumed fragrance of the balsam.

The Scotch pine is a bushy long-needled tree not native to the United States. The needles are blue-green, twisted and grow in clusters of two.

The Eastern red cedar has dark blue-green scale-like needles one-sixteenth of an

inch long, which grow from slightly longer shoots. The tree may have a dark blue berry.

Small, artificially colored Christmas trees are likely to be black spruce grown in Minnesota. The stiff, curved needles are crowded onto branches. They are pale green, less than an inch in length and may have a sharp tip. Most Christmas trees are cut from the tops of 10- to 25-foot trees, so that the little Christmas trees may bear small, rounded cones.

These five trees are produced in the greatest number and will be seen commonly throughout homes in the U.S. this Christmas.

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SURGERY

Anesthesia Now Possible For All Needing Surgery

► NO PATIENT who needs surgery today is considered too ill for some kind of anesthetics.

Even heart patients, formerly believed unable to hazard the dangers of anesthetics for anything except emergency operations in the most desperate circumstances, routinely undergo anesthesia for direct surgery to combat their cardiopulmonary diseases.

Dr. Arthur S. Keats, professor of anesthesiology at Baylor University College of Medicine, Houston, Texas, told the Eighth Hahnemann Symposium on Medical Considerations in the Surgical Patient in Philadelphia that better drugs and anesthetics have brought about a dramatic change in attitude.

Improved mechanical aids such as pacemakers, cardiac monitors and respirators are now available in case of complications, Dr. Keats pointed out, adding that the vital factor of increased experience on the part of surgeons and anesthesiologists is perhaps most important.

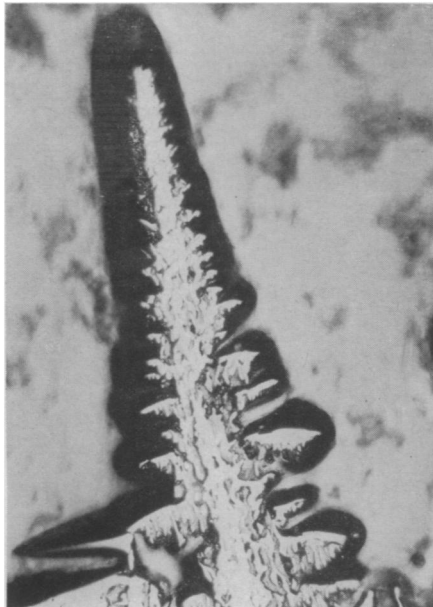
Dr. Calvin F. Kay, chief of the cardiac section, University of Pennsylvania, who also spoke, said that many successful cardiac surgical operations had been performed during pregnancy. Selected patients withstand surgery better than medical management alone, he explained.

Cardiac disease accounts for between four and five per cent of all the maternal deaths, Dr. Kay said, and ranks fourth in the causes of death in pregnancy. Rheumatic valvular disease is largely responsible, especially mitral stenosis, or narrowing of the mitral valve of the heart as a result of rheumatic fever.

The hazards increase to reach the first peak at about the 32nd week of pregnancy when the plasma volume is greatest, and then to a second peak during and shortly following delivery.

Dr. Kay said evidence is accumulating that death statistics in the medically managed pregnant heart patient "are much higher than they could or should be," adding that the pregnant cardiac patient requires very special attention and management.

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General Electric

NUCLEAR TREE—This snowy looking "fir tree" is actually a pin-point-sized crystal of uranium dioxide magnified many times. The crystal was produced inside a nuclear reactor at 4,000 degrees Fahrenheit in the Hanford atomic plant operated by the General Electric Company for the Atomic Energy Commission.