

Why a Christmas Tree?

A look at the origins of "topping-out"

by Scott L. Melnick



Whether the custom began in Scandinavia or with Native Americans, topping out parties are today an important custom in the steel construction industry.

How did the topping out ceremony originate? More than a dozen readers wrote responses to that question in *Modern Steel Construction's* August 1995 editorial.

One of the most detailed responses came from James A. Newman, fabrication division vice president with AISC-member Art Iron, Inc., who sent an article that appeared in *The Ironworker* (December 1984) and an excerpt from which follows:

"No one seems to know exactly when or how it started, but the tradition of 'Topping Out' has become a cherished custom of Ironworkers whenever the skeleton of a bridge or building is completed. Topping Out is a signal that the uppermost steel member is going into place, that the structure has reached its height. As that final beam is hoisted, an evergreen tree or a flag or both are attached to it as it ascends.

"The nice thing about Topping Out is that no two ceremonies are exactly alike. For some, the evergreen symbolizes that the job went up without a loss of life, while for others it's a good luck charm for the future

occupants. For some, the flag signals a structure built with federal funds, but for others it suggests patriotism or the American dream.

"We do know that as early as 621 B.C. the Romans celebrated the completion of the Pons Sublicus over the Tiber River by throwing human beings into the water as sacrifices to the gods. In ancient China, the ridgepole of a new structure was smeared with chicken blood, as substitute for human blood, in hopes of fooling the gods. It was widely believed that evil spirits may have occupied the structure, and that is why, through the Middle Ages, the local priest or rabbi had a special blessing for new homes, ships, churches and public buildings.

"By 700 A.D. in Scandinavia, the custom of hoisting an evergreen tree atop the ridgepole was a popular way of signaling the start of a completion party. The roots of this custom may also be mixed in with fertility symbols. Saplings, eggs, flowers and sheaves of corn are long-standing customs in European home building, presumably as a wish to the newlyweds for a productive and long life together. While the Teutonic tribes may have tried to appease the tree spirits for killing trees and using up that lumber, the Germans in the Black Forest seem to have invented the Christmas tree custom to celebrate the nativity of Jesus Christ, and

hardly a structure goes up in Germany without an evergreen to signal the birth of a new building. The Swiss, also, lay claim to the custom of a fir tree to signal Topping Out.

"As iron and steel replaced timber as primary building materials, ironworkers naturally would carry on the custom of Topping Out. Strangely enough, none of the early photoengravings of ironworkers show the evergreen in Topping Out ceremonies. Perhaps, due to the exceedingly high fatality rates, such a symbol would not be appropriate.

"When the last strands of cable were laid for the Brooklyn Bridge a hundred years ago, the wheel operated by the ironworkers was decorated with American flags. By 1920, ironworkers were again draping their work with American flags, this time while driving the first rivet on the Bank of Italy in San Francisco. By the end of the decade, the tradition of flags in Topping Out was fully established.

"Why an American flag? Probably because the so-called 'American Plan' launched in 1919 did not include unions. In fact, the single largest potential employer of ironworkers, Elbert Gary, chairman of U.S. Steel, contended: 'The existence and conduct of labor unions, in this country at least, are inimical to the

best interests of the employees, the employers and the general public.' The American Plan—promising the destruction of unions, starvation wages, deadly hours, hopeless safety conditions and the dreaded 'yellow-dog contract' swearing never to join a union—suggested that unions were somehow un-American during the post-war Red Scare. Thus, the American flag became a natural symbol to protest the American Plan and to demonstrate the ironworker's loyalty to flag and country.

"The two traditions of flag and evergreen converged only a couple of decades ago, perhaps to balance out the final beam."

Going back another decade, *The Ironworker* reported the following in December 1974 issue:

"The symbol is rooted in an old Scandinavian custom. The Norsemen venerated the evergreens—cedars, spruces and pines. The trees were plentiful throughout the frozen reaches of northern Europe and thus provided building materials and firewood for the inhabitants of those wintry regions. In addition, the evergreens retained their color throughout the years and provided welcome relief from the dull hues cast by snow and ice.

"Those hardy Vikings challenged the seas of Europe and the New World in long ships of seasoned spruce, with tall masts carved from towering pines and steering oars of cedar. Returning from a particularly successful raid on hapless southern neighbors, Viking chieftains often constructed huge homes—called mead halls. Upon completion, these chieftains hoisted an evergreen tree to the ridge-pole in celebration. So, when the topping out beam rises aloft with its customary symbols, the flag and the tree, it offers a link with history."

Persian Origins on Bridges

Scott A. Bustrum, field operations manager with AISC-member Junior

Steel Co. provided information from his company records that he says originally came from Bethlehem Steel. In addition to talking about early Chinese and Roman customs, his data adds: "Bridges posed special problems and goaded the fears and superstitions of the ancients. Xerxes, the famed Persian military leader, blamed recalcitrant river gods for the collapse of a pontoon bridge over the Hellespont. To punish and shackle these gods, the water was given 300 lashes and a pair of manacles was thrown into the river."

Concerning the Scandinavian roots of the topping out ceremony, Junior Steel's information included that "In later times in these same Scandinavian countries, and also in the Black Forest, it was customary to fasten a sheaf of corn to the gable. The corn was believed to serve as food for Woden's [the chief Norse

god] horse and as a charm against lighting. In more recent times, garlands of flowers or sheaves of corn were duplicated in wood, stone or terra-cotta on Gothic buildings. Such agrarian decoration is perhaps a survival of the ancient custom."

Many others wrote in with similar answers. Curt Zeigler of Stewart-Amos Steel, Inc. and Ron Montes of Bay Drafting Service, both cited *Why Do Clocks Run Clockwise? And Other Imponderables*, a wonderful book by David Feldman, which contains essentially the same explanations presented in *The Ironworker*. Three readers, Adam S. Bangs, P.E., of Spars Engineering in Houston, Erol J. Aydar, P.E., of Hanover Engineers in Mechanicsville, VA, and Eric Bjorklund of Freese-Nichols in Fort Worth, TX, referenced Jack C. McCormac's "Structural Steel Design", which states:



"The ancient European tradition of tying a fir tree to the top of a newly completed roof lives on among American steelworkers. Either a small tree or a flag is ties to the completed frame when it reaches its top. At the Empire State, the first topping out ceremony was photographed when the main building frame was completed at the 86th floor."

Photo and caption from *Building the Empire State*, edited by Carol Willis, courtesy of The Skyscraper Museum, New York City, www.skyscraper.org.

"The Christmas tree is an old North European custom used to ward off evil spirits. It is also used today to show that the steel frame was erected with no lost time accidents to personnel."

Thomas C. Schaeffer, P.E., of Structural Design Group in Nashville quoted from *Reader's Digest*, which, in turn, was quoting from the book *Ever Wonder Why?*

"In ancient times, people would attach plants thought to be inhabited by good spirits to the top of their new structures. Builders still observe this superstition in a custom called topping out of the new building."

Kim Stanfill-McMillan, P.E., with the USDA Forest Service, wrote: "The Christmas tree atop the last beam is an old timberframer's tradition (sorry). Here is a quote from Tedd Benson's book entitled *Building the Timber Frame House—The Revival of a Forgotten Craft*: 'To signify a safe and successful raising, to pay respect to the wood that has given life to the frame, a traditional pine bough is attached to the peak of the building. Some of the old-timers mark this occasion further by breaking a bottle of rum at the ridge and delivering a few lines of verse composed for the occasion.'

"Usually a dance is held on the floor after the frame is raised, a tradition that also continues to this day. Steel erectors and others have borrowed the tradition of a pine bough, but since the scale of these buildings is often larger, the pine bough has evolved into a Christmas tree, which is more readily seen."

Renaissance Roots

A variation on the ancient theme was submitted by Sheila Shaw, former marketing director with Bread Loaf Construction, a design/build firm in Middlebury, VT. "The first known ceremony with the use of a tree wag in the Third Dynasty, about 2700 B.C., in Egypt. This first

appeared when the first stone building of Egypt, the Step Pyramid of King Zoer at Sakkara, was completed. The slaves placed a live plant on the top of the Pyramid for those slaves who had died during the construction so they too might have an eternal life.

"It later appeared in the early Renaissance Era, during the period of the Gothic Cathedrals. An evergreen tree was placed on the highest point to signify the completion of the building. A large festival, lasting sometimes for weeks, was held in the town for this honor. From the Italian Renaissance, it was carried through the countries of France England, and Spain, as they, too fell into the Renaissance Era."

Bread Loaf's account then adds information about Scandinavian and German traditions.

Gordon Wright, senior editor at Building Design & Construction magazine, sent along a copy of an article from Morse/Diesel's newsletter, which printed the history of topping out as presented by Scioto Erectors Inc. of Columbus, OH:

"Scandinavian mythology suggests that man originated from a tree and that the soul of man returned to the trees after death, giving each tree a spirit of its own. Man began constructing his shelter with wood. Before cutting a tree, he would formally address the forest, reminding it of the consideration he had always shown toward the trees and asking the forest to grant use of a tree for construction of his home. When the house was complete, the topmost leafy branch of the tree would be set atop the roof so that the tree spirit



Workers raise the topping out flag on the completed mooring mast of the Empire State Building (March 18, 1931).

Photo from *Building the Empire State*, edited by Carol Willis, courtesy of The Skyscraper Museum, New York City (www.skyscraper.org)

would not be rendered homeless. The gesture was supposed to convince the tree spirit of the sincere appreciation of those building the home.

"As time passed, the early conception of tree worship gradually changed. The individual tree spirits merged into a single forest god who could pass freely from tree to tree. Trees were no longer placed atop the home to appease the spirits, but rather to enlist the blessings of the forest god. The tree branches on top of the home insured fertility of the land and the home. Gradually, ribbon, colored paper, painted eggs and flowers were added to the tree as a symbol of life and fertility.

"The custom of placing a tree on a completed structure came with immigrants to the United States and became an integral part of American culture in barn raisings and house warnings."

Carpenter's Tradition

A similar explanation was presented by Frank Lundy, P.E., of Lundy Construction in Williamsport, PA, who explained, "This tradition may spring from the Carpenter's tradition of nailing a free tree branch to the ridge (rafter) board to entice the "wood spirits" to bestow good fortune on a house. If you look in the attic of older houses, you may find such a feature." Blair Hanuschak of Walter P. Moore and Associates in Atlanta sent along a similar explanation from the program given out during the topping out ceremony of the Florida Aquarium. And Robert J. Susz, building science engineer with Healthy Homes in Caledonia, NY, gave much the same explanation but added, "I believe the flag was first used when steel framing became popular. It was in dedication to good old U.S. made steel beams. The signing of the last beam or girder by the laborers has similar traditional roots."

Native American Origins

Some people offered different interpretations, however. Barry P. Chepren, of Frederic R. Harris in Carver, MA, wrote:

"At my first topping out party for a 10-story building in Tampa, FL, I asked the same question when a large pine tree was hoisted to the top of the building. The answer that I was given was that the tradition originated around the time when high-rise construction became necessary in most major cities. During this time, many of the contractors employed many American Indians on their construction crews. According to my source, American Indians believed that no man-made structure should be taller than a tree. This belief became enough of an issue at the time to prompt someone to place a tree at the top of a topped-out building. This practice caught on and is still performed today at most high-rise building projects.

"During the Vietnam War, many people perceived construction workers as unconditional supporters of U.S. government policies in Southeast Asia or "hawks" as they were called. This impression was made popular when the news media broadcast footage of clashes between war protesters and construction workers during a rally in New York City. Many construction workers as well as police officers began to wear the American flag on their hard hats and uniforms to show support for American soldiers in Vietnam. It is around this time I am told that American flags became popular at topping-out events.

Several other writers supported the Native American origins of the topping-out ceremony. The final word, however, may be a novel interpretation from Harvey G. Johnson at Bittner Engineering, Inc. in Escanaba, MI: "During World War II it was a custom for a submarine returning from a mission with all of its torpedoes used to tie a broom to the periscope to signify a "clean

sweep" or completion. How, or if, this ever translated to the tree/flag, I have no idea."

This article has been reprinted from the October 1995 issue of Modern Steel Construction. We have updated titles of persons quoted in this article wherever possible.