

Steam Donkey Exhibit Improved at the Museum

By Steve Greif and Lionel Youst

Some significant progress has been made this winter on one of the Coos History Museum's premier outdoor exhibits. Several volunteers were led by **Lionel Youst**, a local historian from Allegany, who grew up around logging operations in Oregon and Washington. Under Youst's directions, volunteers have installed a short "skid road" in front of the Dolbeer spool steam donkey on the museum's south plaza and laid in-place a 12-foot long, 3000 pound log partially on those skids. The log was placed in a dramatic way that makes it look like it is being dragged in from the museum's west bioswale.

Youst purchased new cable and hooked it up the proper way onto the spool of the donkey so that visitors will have a better understanding of how the system worked. Unbelievably, he also found and purchased never-before-used "log dogs" on Ebay, in their original 1925 packaging. Recently-retired Marshfield High metals/woods instructor **Tom Hull** did the welding to fabricate a chain bridle for the dogs, which were hammered into the log and connected to the cable. This was the method used during the days of bull team logging, before there were such things as chokers to hook onto the logs, and continued to be used with the spool donkeys during the transition from animal power to steam. This may be the only museum exhibit anywhere which accurately depicts that early method of logging.

The Douglas Fir log was donated and cut by **Tom Huppi** on his property up Coos River and delivered to the site by **Mick Green**. **Mike Vaughan** "sniped" the log in front (a method used during the days of bull teams and ground-lead donkeys to prevent the log from digging into the ground as it was pulled forward). The log was then set in place by **Dick Jamsgard** using one of the Hysters from the Oregon Coast Historical Railroad Museum. **Steve Greif** assisted on the project. New outdoor signage will eventually be constructed to more fully explain the exhibit.

The vertical spool steam donkey was first patented in 1882 by its inventor **John Dolbeer** of Dolbeer and Carson Lumber Company in Eureka, California. It was intended to be used to aid in logging the huge California redwoods. Its purpose was to provide a flexible and cheap source of power to enhance the energy available from the bull teams (oxen) that were then the sole motive power used to yard logs on the hills of the Pacific Coast. By the turn of the century, Dolbeer spool steam donkeys were in common use for both yarding and loading logs at logging camps throughout the west. They worked side by side with the bull teams, as evidenced by any number of historic photographs from the period. The Dolbeer vertical spool steam donkeys were one of the first manifestations of the industrial revolution to show up in woods. In its elegant mechanical simplicity it provides striking contrast to its predecessor, the yoked oxen, and to its successor, the more sophisticated drum donkeys that eventually replaced the bull teams entirely. It perfectly represents the transition between the ancient use of cattle for motive power, to the development of huge steam engines which peaked by the late 1920's. By the end of the Second World War, steam in the woods had been completely replaced with diesel-powered machines, which provide the motive power in logging to the present day.

The machine owned by Coos History Museum was built in 1902 by Marschutz & Cantrell of San Francisco under a Dolbeer patent and shipped to Simpson Logging

Company in North Bend. It was first used at the Simpson camp on Blue Ridge and subsequently at various camps on Coos River and Daniels Creek. It was sold to Emmet Pierce Logging Company in 1904 and used on the Coquille River, then, in 1905, Pierce sold it to **Jack McDonald** who formed a partnership with **William Vaughan** under the name of McDonald and Vaughan Logging Company (re-formed as Coos Bay Logging Company in 1917). It remained in use by Vaughn and the Coos Bay Logging Company at its Old Town Mill in North Bend (the successor to the original Simpson mill) until 1950. It was the last such spool donkey in use in the state and perhaps in the nation.

In 1950, William Vaughan donated the steam donkey to the Coos County Historical Society. A new log sled was then built and donated by the Menasha Corporation of North Bend in 1994. The exhibit stood outside the museum in North Bend until moved to its current location in Coos Bay in 2015.

The museum's spool donkey is rare and one of only four such steam donkeys remaining in Oregon. One is at Collier State Logging Museum near Chiloquin (Klamath County), one is at Camp 18 Logging Museum near Elsie (Clatsop County), and another was recently obtained by the Tillamook Scenic Railroad at Tillamook. The spool donkey at the Coos History Museum is the only one built by Marshutz & Cantrell. It has a six-inch bore and twelve-inch stroke (6 X 12). It has a 30-inch flywheel and six-inch pinion gear powered by steam from a 36-inch boiler. The gypsy capstan is 16 inches high, which makes it significantly larger than the other spool donkeys in the state.

The museum's machine has much significance to local history. It represents the continuity of the Simpson and Vaughn presence in the area -- two names going back to the beginning of the lumber industry on the Bay. The exhibit also represents the transition between animal and machine power and does it vividly and clearly. In the spring, hundreds of 5th grade students annually visit the Coos History Museum through the education program under the guidance of CHS Education Director **Amy Pollicino**. The students will enjoy counting the rings of the log to determine its age and more fully understand the physics and vocabulary of old-time logging.