

COAL CAR HISTORIC RECONSTRUCTION

Douglas Fir Was The Best Choice

May 20, 2008

After some discussion, staff of the Renton History Museum and the Northwest Railway Museum concluded that Douglas fir, a locally available wood, was probably the most likely wood that Pacific Northwesterners would have used to construct the mine car. Doug fir would have been widely available to carpenters and inexpensive for the constant quick repairs needed as the car aged and was damaged by the constant bumping and jostling in and out of the mines. Bill and his crew have begun carefully cutting the boards to fit the iron fittings of the car, because it is the metal pieces that dictate the length and width of the car itself. Once the pieces are cut, they will be fit together in what Bill calls “sequential reassembly”; like a puzzle, each piece has to be assembled in the right order to maintain the structural integrity of the whole car.



The center board fitted into the metal end piece.

In looking at numerous historic photos, Bill determined that there were several styles of finishing the ends of the bottom boards that fit into the metal end pieces. Some were square, which seems to have left open the possibility for injuries to miners caught in the wrong place as two cars bump together. Others are more rounded, an engineering choice that would both minimize human injury and mechanical wear to the boards themselves. We opted to go with the latter, assuming that early twentieth-century engineers are as logical as we are.

Bill also noticed an interesting wear pattern around the holes for the bolts that held the wood to the bottom iron cross-piece. This concave wear probably resulted from years and years of coal dust, water, and car jostling. Washers will cover this wear when the car is completely reassembled, but this hidden deterioration is another indication of the hard use these cars got in the mines.

Assembly will continue over the next couple weeks, as the CRC staff and volunteers painstakingly piece the car back together. It will be exciting to watch the reconstruction as life returns to the coal mine car!



Wear caused by years of hard use is visible around the edges of all three bolt holes shown on this metal frame piece.