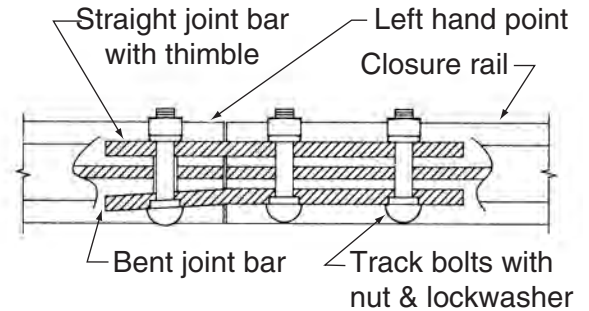
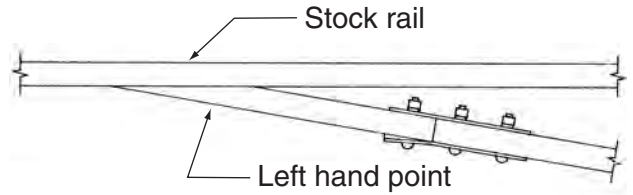
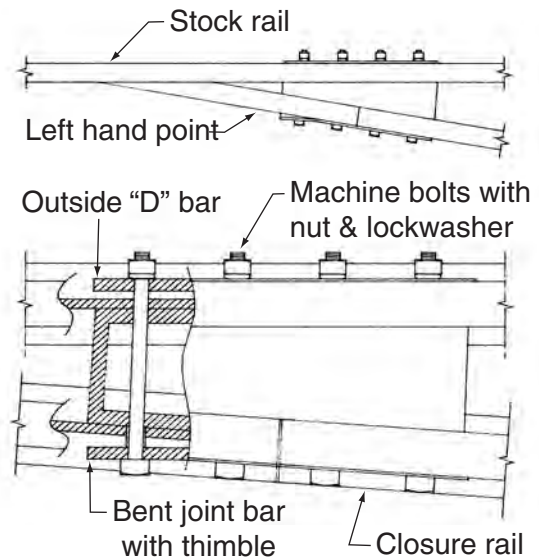


Design 990 Heel Joints are commonly used with narrow gage mining turnouts to prevent looseness at the heel of the switch point. Use of a pipe thimble permits the heel joint to be drawn up absolutely tight while at the same time allows the point to move freely. These heel joints are made of plain splice or angle bars only. A pipe thimble is welded to one bar, and the other bar is bent slightly. Normally three-hole bars are used when the switch is less than 5', and four-hole bars are used for switches that are 5' or longer.



Standard Heel Block Assemblies are used in many standard gage industrial switches. They hold the switch point firm at the heel, maintain proper spread, and keep closure rail and switch point in correct alignment. These assemblies consist of a block, bent-and-planed bar, outside bar, thimble and bolts. The block can be made of cast iron or steel, or of welded steel construction. The outside bar can be a "D-bar" strap or a standard joint bar. Square-head bolts are usually used with the D-bar and track bolts are used with the joint bar. A shoulder-bolt is sometimes used instead of the thimble and standard bolt.



Floating heel blocks perform the same function as standard heel blocks, but they do not bolt through the stock rail. This type of heel block assembly is very versatile because the same block can be used for switches of various lengths. The **Single Hole Floating Heel Block Assembly** shown at right consists of a block that bolts to the joint bars and fits up against the stock rail. A thimble is not normally used so the hole in the switch point does not need to be oversized. Another style of floating heel block is used for switches in continuously welded rail. This "cwr" style block bolts directly to the switch point rail with two bolts and no joint bars are required.

