

Sand Store

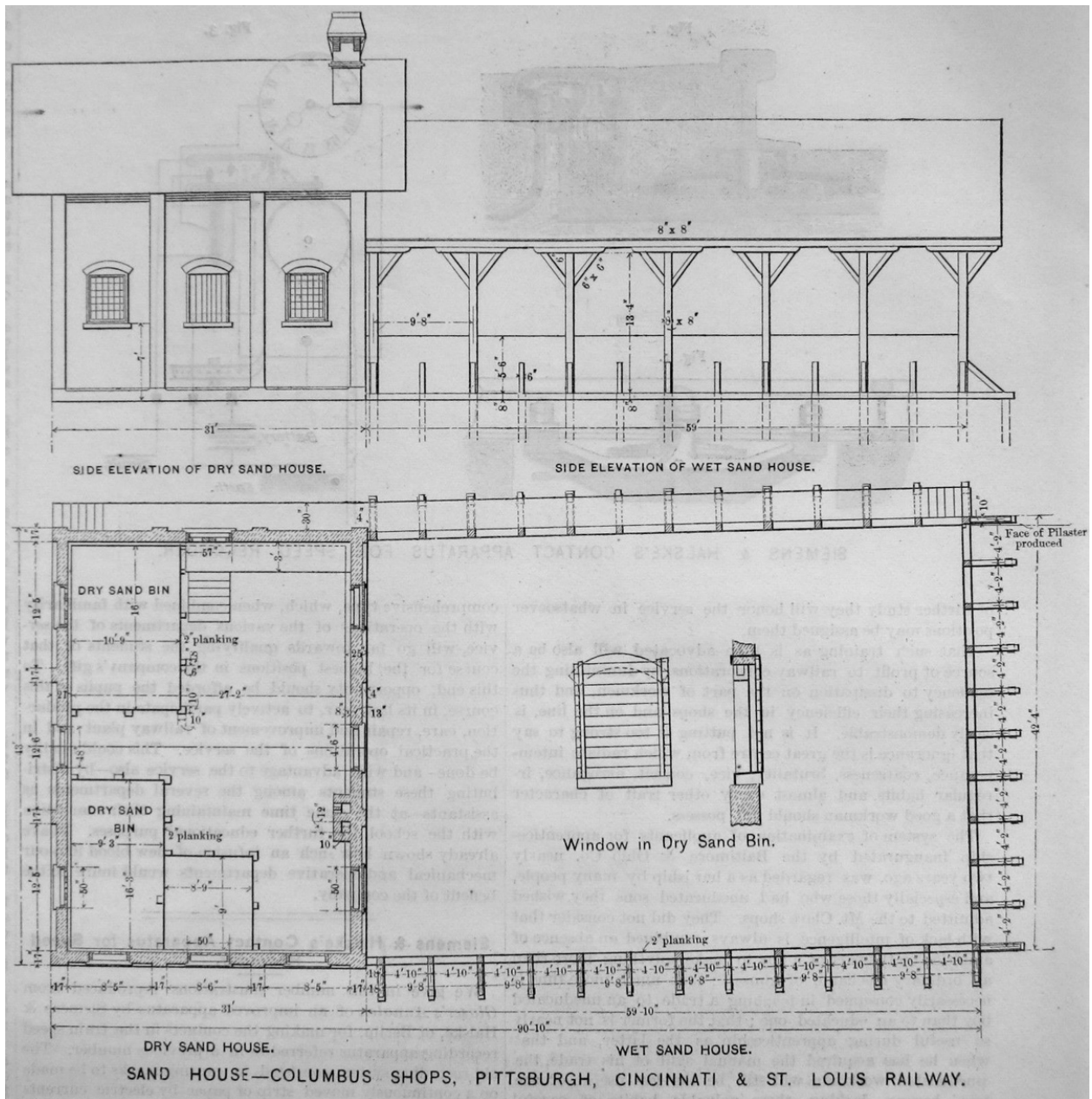
Pittsburg, Cincinnati & St Louis Railroad

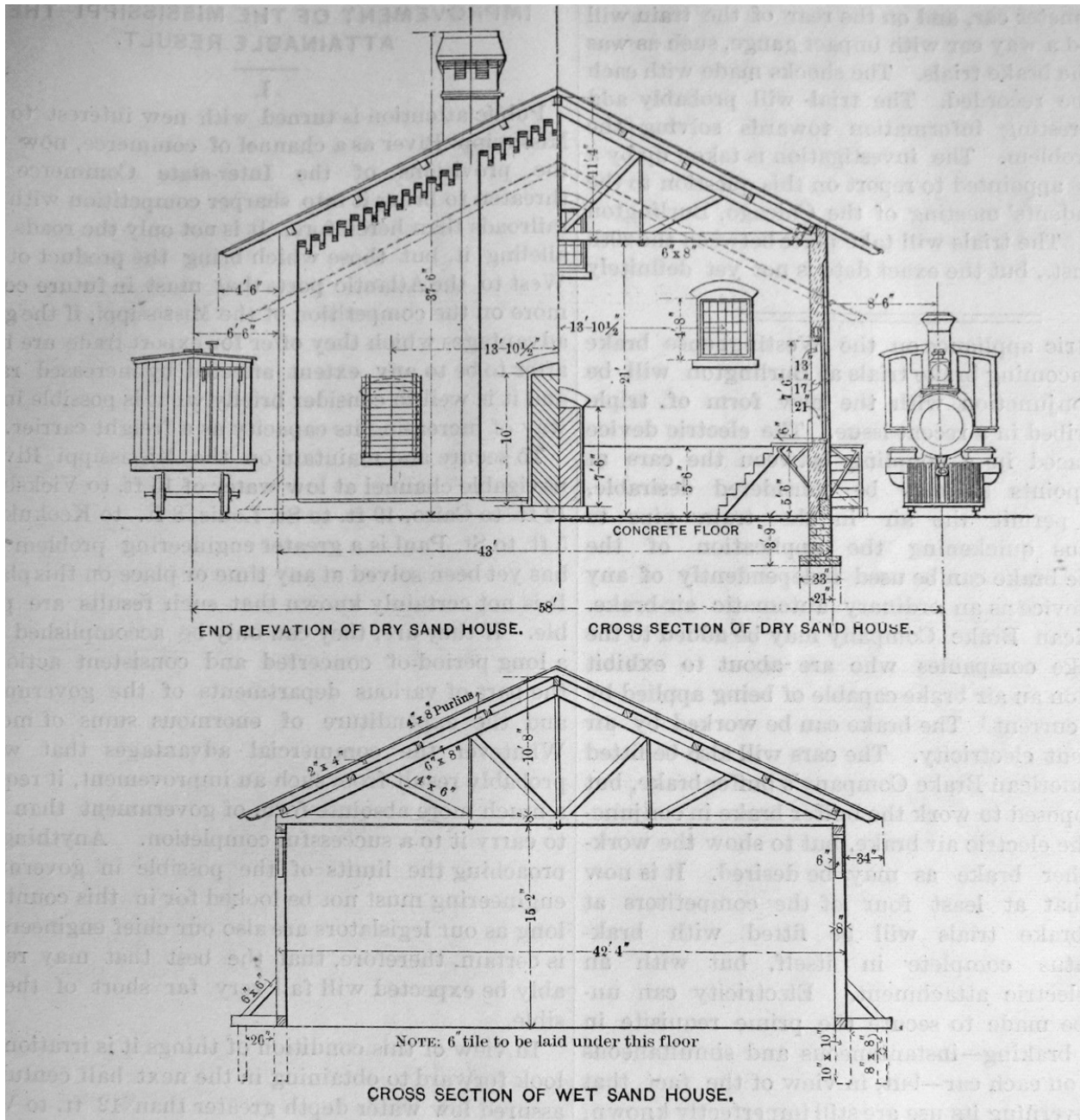
The Railway Gazette, April 22, 1887 – The accompanying illustrations represent the method adopted for drying sand for use on locomotives at the Pittsburgh, Cincinnati & St. Louis shops at Columbus. The methods adopted differ in several essential particulars from those generally used. The wet sand is stored under a roof, and is consequently protected from being further wetted by rain. The sides of this building are formed of stout planking for a few feet from the floor, so that the sand can be piled some four feet deep. Movable shutters are provided above the fixed sides and can be opened in fine weather, so as to admit sunshine and air to dry the upper surface of the sand. In wet weather the shutters can be closed. The floor is formed of loose bricks set on edge, with tile drains underneath. Provision is thus made for naturally drying the sand before any artificial heat is applied.

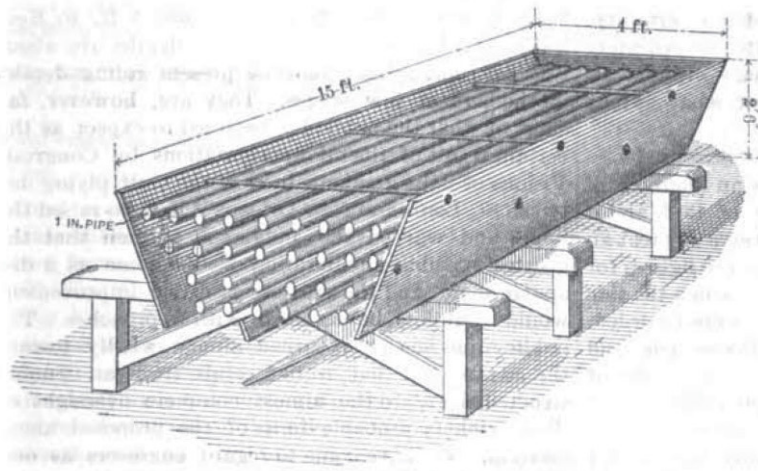
In the usual method of heaping the sand in the open air it is simply shoveled into the furnace or heater as wanted, and the wettest portion of the sand is liable to be taken. At Columbus the upper and driest part of the sand is used first and is taken through suitable openings into the adjoining stove for dry sand. The wet sand store is large enough to hold a supply for the four winter months, during which the average consumption is about 17 car loads per month. Each car load weighs about 15 tons, so that the total capacity is about 1,000 tons of sand.

The dry sand store is built of brick, with a cement floor. It contains space for two sand dryers and bins for dry sand. The sand dryers consist of a wrought-iron hopper tapering smaller toward the bottom. The hopper is traversed by several rows of steam pipes, placed in rows 2 ½ inches apart, as shown in accompanying illustration. The wet sand is thrown on the top of these pipes and while it sticks to the pipes while wet, gradually falls through as it dries.

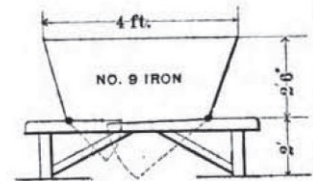
A platform runs along one side of the dry sand house. The engines come alongside this platform and receive their sand. The platform is sufficiently long to enable two engines to receive sand at one time.







Trough for Drying Sand —Elevation, End Removed.
SAND HOUSE—COLUMBUS SHOPS, PITTSBURGH, CINCINNATI & ST. LOUIS RAILWAY.



Cross Section.