the sides, on a grade of 3″ in 30 ft. The floor rises toward the head of the dock on a grade of 6″ per hundred feet. The slope timbers are spaced 4 ft., c. to c., being alternately 12″ by 14″ and 8″ by 14″ yellow pine timber. They are framed into the cross timbers at the bottom of the slopes, and secured to the slope pile capping by ⅞″ machine bolts. The yellow pine altars were cut from a timber 10″ by 14″, so that when placed in position they would have a rise and tread of ten inches.

They are secured to the slope timbers by 12 inch boat spikes, and abutting ends are doweled with 1 inch by 6 inch iron pins. They are laid with the treads horizontal, which causes the lowest course to disappear about every 170 feet, owing to the rise in the dock floor.

Four chutes are provided on each side for the delivery of material. At these points the altars are omitted and 6 inch oak plank spiked upon the slope timbers.

Across the ends of the long floor timbers and along the piles in the slope rows are placed 6 by 12 inch yellow pine waling strips, bolted to the piles with ⅞ inch machine bolts. Between these waling strips are placed 12 by 12 inch braces, making a continuous line of bracing from the outer row of piles to the foot of the slopes. Another 12 by 12 inch brace extends from the waling on the outer row of piles to the capping of the third row, and a 1¾ inch iron tie rod is placed beside it. This combination of braces and rod forms a truss as shown on the drawing.

The head of the dock was originally designed to be similar to the sides, that is approximately, a 45 degree slope. During construction, however, an extension was built into this slope, forming a box with vertical sides, thus gaining over 24 ft., in total docking length.

Drainage System.

From the masonry of the entrance to the head of the dock, the floor rises uniformly 6 inches per 100 feet. From the center line to the foot of the side slopes the floor falls uniformly 3 inches in 30 feet. This causes the water to flow toward the sides and entrance of the dock. Along each side the dock, for its entire floor length, extends a drain some 5 feet wide and 3 feet deep, built of 3 inch plank spiked to the piling as shown on the detail drawings.

The oak flooring covers this drain but is not spiked down and the pieces are not fitted so closely together.

Adjacent to the masonry is a 6 foot cross drain, into which the side drains empty. The plans show this to be of a similar plank