filled by opening a wooden gate at the lower end of the bin. The outside scaffolding was made of 3-inch by 10-inch discarded bridge flooring cross braced with 1-inch by 8-inch ship lap. It was erected in sections as the work progressed.

The inside working platform was supported on double rows of 3-inch by 8-inch joists projecting radially from a

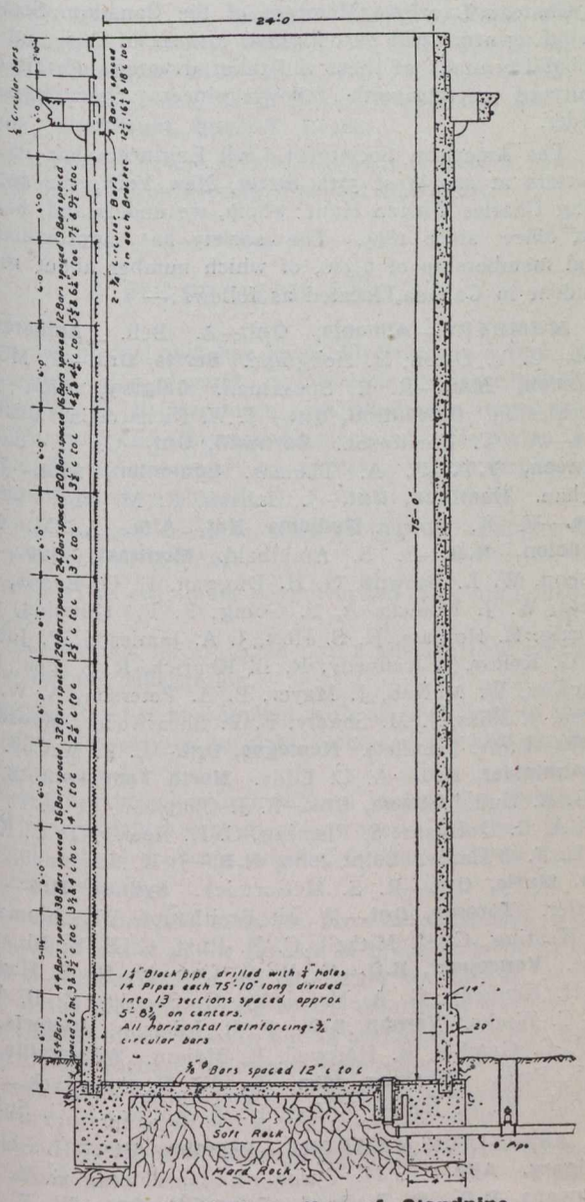

Fig. 1.—Vertical Section of Standpipe.

short central post to which they were rigidly attached. Each pair of floor joists was separated by wooden blocks allowing the 4-inch by 4-inch vertical guide and support studs to pass between them. These studs were set back 2½ feet from the inside of the wall to give room for the wheelbarrows. The only inside flooring was that laid between these studs and the wall. The stud joints were mitered and fastened with bolts. Six feet below the working platform a similar arrangement of joists supported the wooden inside forms, which were made up in sections 6 feet high, or double that of a single set of outside forms. Each of these systems of floor joists was supported by iron pins set in holes bored in the vertical studs at any level required.

Method of Construction.—Excavation for the foundation revealed rather soft rock at the depth originally determined upon for the bottom of the standpipe and wall footings. The excavations for the wall footings was therefore deepened four feet, stopping on solid rock. The concrete for the wall foundation was poured to within about one foot of the lower side of the bottom of the standpipe. The remainder of the wall foundation and the bottom were next placed at one pouring. Keys were left for the walls, as shown in Fig. 1. During this pouring, one-foot lengths of 1¼-inch pipe, threaded on the upper end and provided with sleeves, were set vertically around the periphery in the soft concrete.

The steel forms shown in Fig. 2 were used for the outside of the thicker wall at the base as well as for the remainder of the vertical shell. The increase in the circumference required for the first 6 feet from the bottom was obtained by bolting the plates in each ring against vertical wood spreaders.

The 1¼-inch pipes used for supports for the reinforcing bars came upon the ground cut into sections of the exact length shown in Fig. 1, threaded and drilled. Each 6-foot section was screwed into place as it was reached with the concrete.

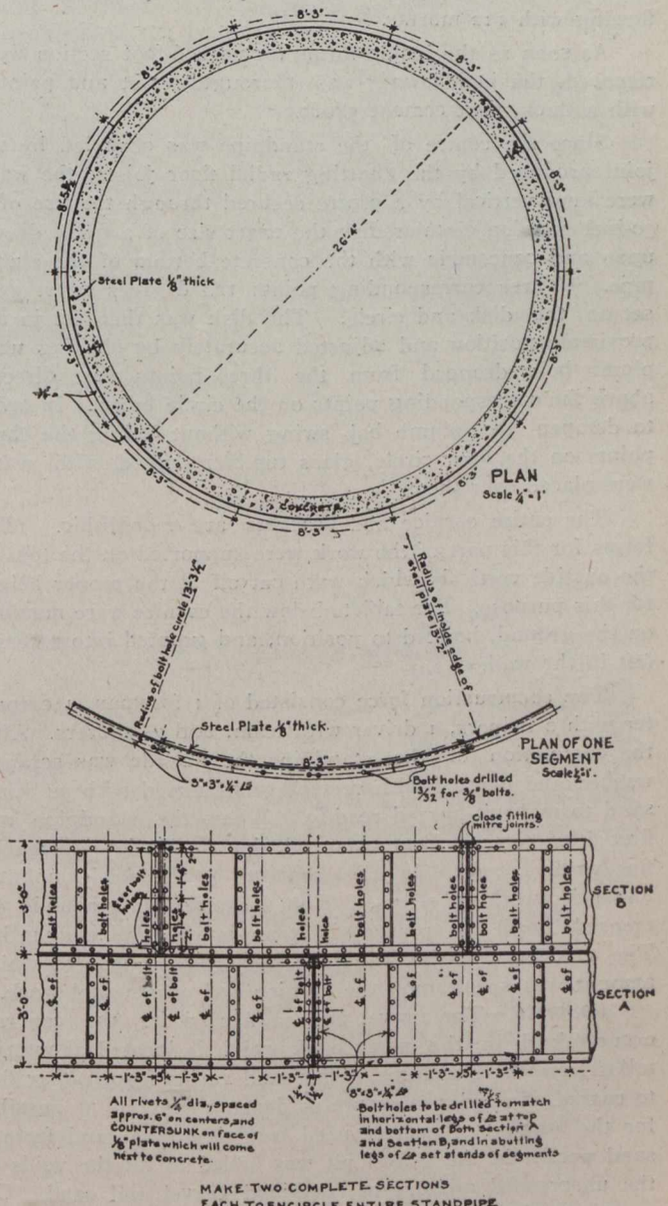

Fig. 2.

The reinforcing bars were bent to the approximate curvature required before hoisting them to position. At each vertical pipe each bar was spaced and held by passing a wire through the ¼-inch holes in the pipe and around the