

Machinery and Supplies

AN IMPROVED CONTRACTOR'S BUCKET.

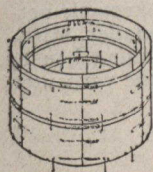
An improved form of bucket for use in concrete, asphalt and other contracting work has been placed on the market. These buckets have a countersunk hoop on the inside top rim, riveted through the staves, and outer top hoop, which makes it impossible for the staves to drop out or become loose, and in consequence the bucket cannot fall apart, even when dried out. Each hoop passes under the strap to which the ball is attached, thereby making it impossible for the hoops to drop out, as the strap is riveted through the staves above, below or through each hoop. The bottom is double, and cannot be forced out, and it is doubly reinforced by the strap. These buckets are $12\frac{3}{4}$ in. in diameter at the top and $10\frac{1}{2}$ in. high, and are handled by Mr. J. S. Barron, 127 Franklin Street, New York.

FRIGITE FOR WINTER WORK.

Freezing weather, with its problems to the concrete worker, is here. The Trussed Concrete Steel Co., of Detroit, Mich., offers to the trade a crystalline chemical compound called Frigite, which is dissolved in the water used for mixing the concrete, and by preventing the freezing of the water to which it is added allows the cement to set as under normal temperature conditions. Laboratory experiments and tests have demonstrated the efficiency of Frigite under severe weather conditions. It not only allows concrete to develop full strength, but causes an increase of from 10 to 15 per cent. It also renders concrete over 50 per cent. more impermeable to water.

SIL CURBS.

We show herewith a concrete silo curb. Instructions for its use are furnished by the London Concrete Machinery Co. as follows: Dig a trench about 2 feet deep in the ground. Fill this trench up with rough concrete made of 1



part cement to 8 parts coarse gravel. Then set out your silo curbs in a perfect circle, having them level at all points. They should be so adjusted as to make the silo with walls vertical on the inside, but having a taper on the outside. A silo 12 feet in diameter and 30 feet high should have walls about 12 inches thick at the base, and should have a gradual taper, finishing 6 inches thick at the top. After the rings have once been set out in a perfect circle no difficulty is experienced in perfect form each time the rings are set up, as both rings are not removed at once. A glimpse at the illustration will show that silo curbs are built of two outside and two inside sections. After the first and second sections have been filled with concrete, the bottom section is removed and placed on top of the second section, which remains in place until the one which has been placed on top of it is filled, the section below always holding the top rings in perfect position while the concrete is being placed therein. A silo 12 feet in diameter and 30 feet high can be erected in six days with three men. It will require 32 yards of gravel or sand and 28 barrels of cement. Large stone may be tamped into the wet concrete during the course of construction, and by this method the silo can be built with less cement than here indicated.

ENAMEL FOR CONCRETE BRICK.

Enamels are now on the market for enameling concrete brick, as well as clay products, without calcining them. Frequent attempts have been made to replace dull surfaces in the past. Concrete brick cannot be heated to the same excessive temperature as clay brick, and difficulty has been encountered in coating them with glass enamels or porcelain. Mr. Paul Fuchs, 611 Carmen Avenue, Chicago, who is a specialist in this line, has invented a process by which concrete brick as well as clay products can be enamelled without calcining them. The blocks or brick are merely heated to a temperature up to 500° Fahrenheit, or, in other words the enamel is baked on instead of being vitrified or fused.

CONCRETE PILES.

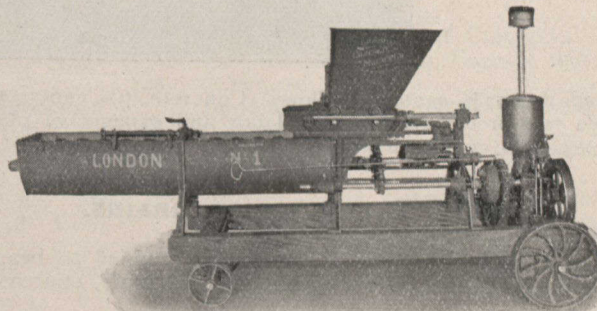
In order to afford engineers, architects and others interested in foundation construction an opportunity of familiarizing themselves at first hand with its methods, the Raymond Concrete Pile Co., of New York and Chicago, will give at the coming Chicago cement show working demonstrations of its system of making and placing concrete piles. The Raymond system consists of placing a sheet steel shell in the soil by means of a collapsible steel core, withdrawing the core and thereupon filling the shell, previously subjected to a searching examination, with concrete. The entire operation will be shown at the Raymond Company's booth. A model pile-driver will be employed in the placing of the shells.

THE JACKSON SYSTEM OF BUILDING.

The Jackson System of Economic Building is described in an interesting pamphlet issued by the F. M. Jackson Co., of Akron, N.Y. Its application to residence, office, factory and warehouse buildings is described in this pamphlet. It claims to solve the problem of a strong, fireproof and damp-proof building at a lower cost than a frame building of the same dimensions. This company claim for their system an absolutely dry wall, simplicity of design and low cost. The F. M. Jackson Co. will be represented at the Toronto Exhibition.

CONCRETE MIXER.

We show herewith a new, automatic, continuous batch concrete mixer, manufactured by the London Concrete Ma-



chinery Co. It has a capacity of forty yards per day, and is supplied with a $2\frac{1}{2}$ horse-power gasoline engine.

THE MANITOBA GYPSUM COMPANY.

The various products manufactured by the Manitoba Gypsum Co., Limited, Winnipeg, Man., are conveniently arranged in catalogue form, a copy of which has reached our office. The plant of the above company is located at West Winnipeg, and is one of the most modern on the continent. The gypsum rock is brought from quarries near the north end of Lake Manitoba.

FENCE POST MACHINE.

Among the various devices for the manufacture of concrete fence posts our attention has been called to the Victor Concrete Fence Post Machine, an improved screw-feeding device, which proportions the material and forces it into the boot of an elevator. This carries it up and throws it into the mixing bowl, where it is caught by a series of ploughs, and is turned over as the water is applied by a revolving sprinkler. The bottom of the mixing bowl is opened by a slide, which allows the material to feed into the mould, which is round and made from sheet steel. Four moulds, with the reinforcement already in place, stand on a reel, ready to be filled, small end down. As the mould is filled it is raised 120 times a minute to consolidate the concrete, and when com-