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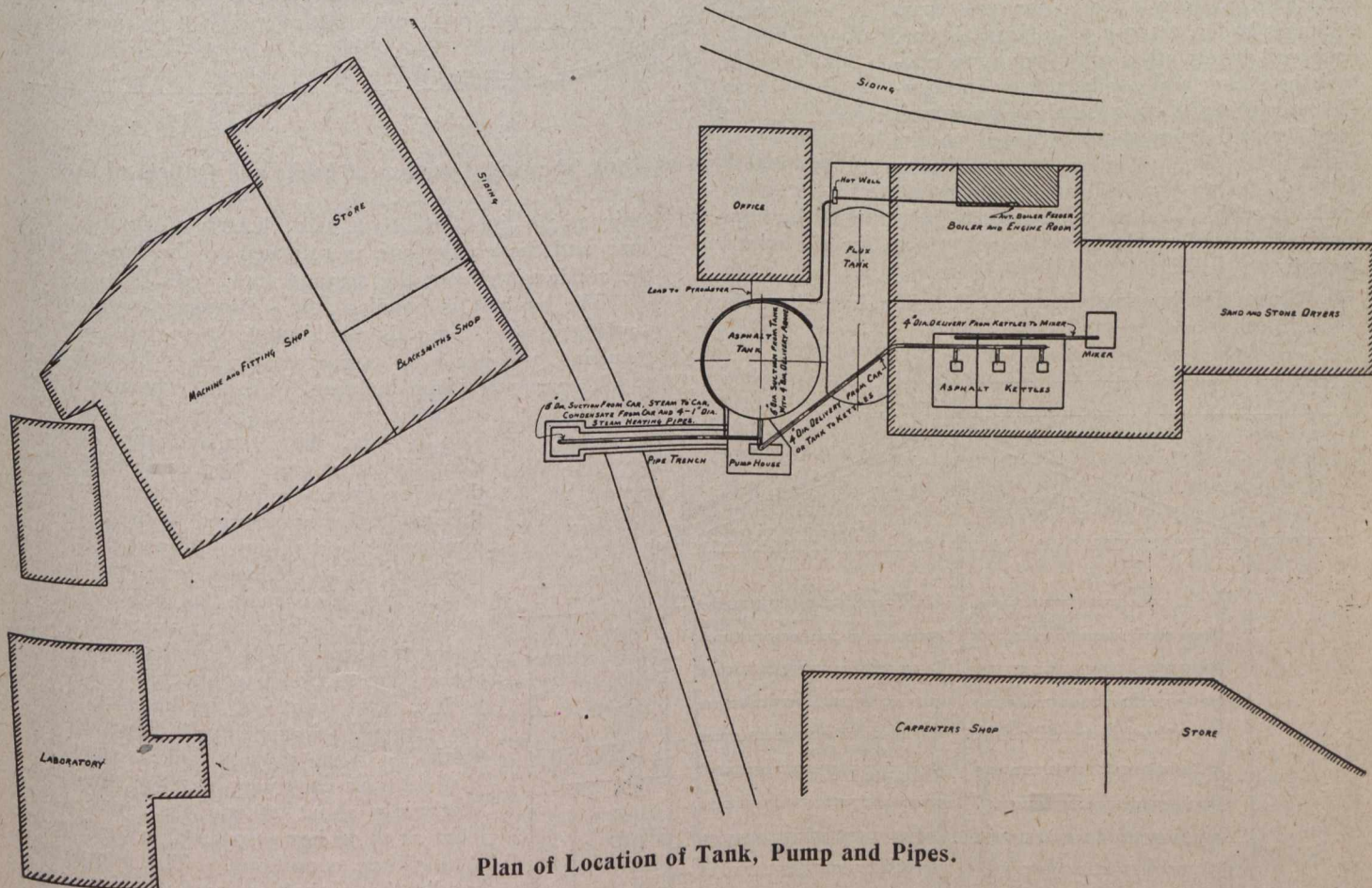
MECHANICAL HANDLING OF ASPHALT

DESCRIPTION OF A SMALL LAYOUT FOR THE HANDLING OF ASPHALT IN BULK—DETAILS OF CONSTRUCTION ARE SHOWN.

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FOR the large consumer asphalt in the barrel has nothing to be said for its advantage, while its disadvantages are many. In initial cost it is more expensive than the article in bulk, it is costly to handle and store, quite a considerable amount adheres to the barrel without any practicable manner of recovery,

The tank is 16 ft. diameter and 16 ft. high, with a capacity of 20,000 imperial gallons, with a cone-shaped roof and ventilator. The plating is as follows: Bottom, $\frac{3}{8}$ in., sides $\frac{5}{16}$ in., and top $\frac{3}{16}$ in.; the riveting, shell and bottom, $\frac{3}{8}$ in. diameter at 2-in. pitch; shell and roof, $\frac{1}{2}$ in. diameter at 2-in. pitch; roof-plates,



Plan of Location of Tank, Pump and Pipes.

the barrel itself being a complete loss, an eyesore until its removal, and an expense to get out of sight.

The alternative of mechanical handling seems to offer an approach to the ideal, and, as the writer knows of no data on the subject available for the immediate reference of engineers interested in the subject, he offers the following description of a small layout:—

The plant was installed at the corporation yard at Princess Street towards the end of last year, and has been running through the present year with entire satisfaction.

$\frac{3}{8}$ in. diameter at $1\frac{5}{8}$ -in. pitch. Two 24-in. manholes are provided, one in the roof, with steel ladder accommodation to it from the ground or from the existing flux tank top, and one centred 2 ft. 6 in. from the tank bottom. The tank was shipped from the Toronto Iron Works in halves and field-riveted at the yard. Lap-joints are used in the shell, the roof is flange-jointed, and the bottom joint made with $2\frac{1}{2}$ -in. x $2\frac{1}{2}$ -in. x $\frac{3}{8}$ -in. angle. The foundation, which is on made ground, is a reinforced concrete slab, 18 in. thick, the tank resting on a 3-in. sand cushion, kept in place by a 6-in. curb 2 in. from