

FINISHING RADIATORS IN WHITE WITH GLOSS.

J. E. S., St. Louis, Mo., wants to know how to finish old radiators in white with gloss, so that heat heat will not discolor or blister the same.

Answer : Use old files and wire brushes to thoroughly remove all the old paint and loose scales, wash down with benzine and allow to dry. Give a priming coat of flake white in japan, thinned with turpentine only, and allow to dry hard. Next give a coat of French zinc in damar varnish, also thinned with turpentine, to which is added a little white enamel varnish, say one tablespoonful of varnish to a pint of the thinned zinc paint to produce a faint eggshell gloss. For the finishing coat use French zinc in damar varnish, thinned to brushing consistency with a good pale baking varnish. If heat can be introduced to bake on every coat, blistering need not be feared, but if heat cannot be had until the job is finished, every coat must be given plenty of time to thoroughly harden before another is applied.

FRICTION IN HOISTING TACKLE.

The friction in hoisting tackle has been investigated recently by Mr. John Devin, superintendent of erection for the Berlin Iron Bridge Company. A pile hammer weighing 2,125 pounds was suspended by a four-part tackle with its hoist line led through a snatch block to a winch. A dynamometer was made to form part of the line at different places, and its readings were recorded. Disregarding friction, inertia, velocity, etc., the static strain in all parts of the funicular machine would be, of course, $2125 \div 4 = 531 \frac{1}{4}$ pounds. In the first test the dynamometer was attached to the becket line, and registered 500 lbs. when lifting and holding the load, and 650 lbs. when lowering it. In the second test the dynamometer was attached to the hoist line between the snatch block and the winch, and registered 875 lbs. when the load was being lifted and 400 lbs. when it was being lowered. In the third test the dynamometer was attached to one of the moving parts of the line between the blocks, and registered 500 lbs. while the load was being hoisted and 575 lbs. while it was being lowered. The double blocks had first quality 10-inch sheaves with nut-line bushings, and were reeved in the usual manner with first-class 1-inch manilla line, led straight.—Engineering Record.

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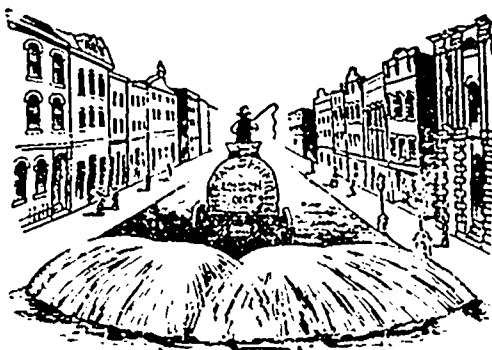
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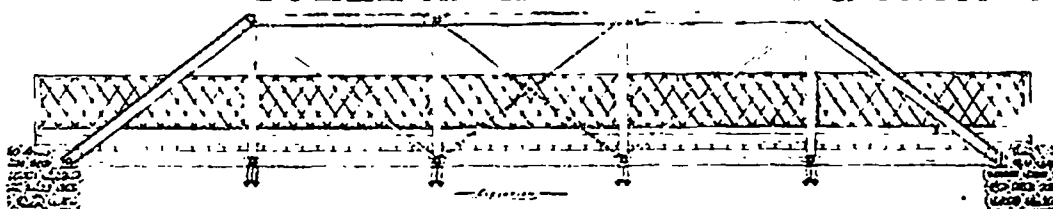
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