#### AIR AS A TIMBER PRESERVATIVE.

Probably no better illustration can be had, even at the present time, of the great importance of free access of ail to woodwork as a means of protection against premature decay, than the results of an investigation, conducted a few years ago, into the causes of an accident in an expensive apartment house in one of the principal cities of the United States, in which a portion of one of the upper floors gave way, and, in falling, carried along corresponding sections of the several floors below, landing the whole mass of wreckage in the cellar. It was found that a fortunately unusual system of floor con-struction had been adopted in the building in question, the spaces between the wooden beams having been filled with ashes, presumably with the view of making a comparatively fire-proof structure. Whatever its merits in this respect may have been, there was no question whatever that the mixture of ashes formed a most efficient barrier against the access of air to the timbers, and any moisture that was inherent in them, or afterwards found its way to them through the tiling above, had little opportunity of being carried away by any ventilating air currents. The beams simply had to rot, and that comparatively quickly. In the sub-sequent work of reconstruction of the floors, however, good care was taken that they should not again suffer in the same

way.

Mill architects generally appreciate the preserving influence of free air circulation so thoroughly that they carefully guard against even the painting of any floor beams which are open to the suspicion of imperfect seasoning. Where any moisture is still present in the wood, a coat of paint or tar, or anything else impervious to air, ordinarily looked upon as a protective agent, simply prevents this moisture from escaping, and thus, instead of guarding against rapid decay, really promotes it to a very material degree. Happily this circumstance is becoming properly recognized, and is beginning to receive a due share of attention.—Cassier.

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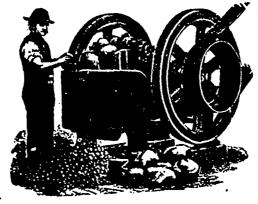
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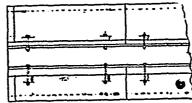
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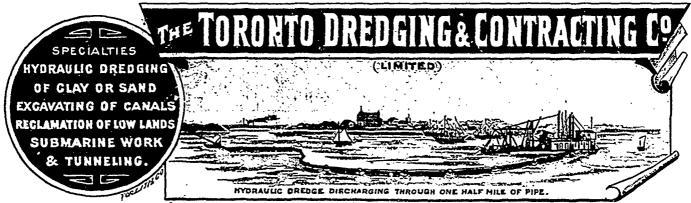
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