

MUNICIPAL ENGINEERS, CONTRACTORS, AND MATERIALS.

bear with safety, but any gates on the conduit except at the head should be considered out of the question. Bearing this in mind and taking proper precautions whenever the water is drawn off from or let into the pipe, it ought to be possible to use conduits of vitrified pipe under considerable pressure. The saving in cost over cast-iron pipe in the case of the vitrified pipe main, 5.63 miles long, supplying Little Falls, N. Y., was over one-half, according to the paper by Mr. Stephen H. Babcock, read before the American Water-Works Association in 1888 (*Eng. News*, April 28, 1888). Mr. Babcock, in the vitrified pipe mains laid under his direction, has taken great pains not to subject the pipe to internal pressure, and has used cast-iron pipe whenever it was necessary to drop below the hydraulic grade line. In the discussion on Mr. Babcock's paper, however, Mr. J. T. Fanning said that a 2 ft. vitrified pipe conduit 7,000 ft. long was in use under an average head of 15 ft. on the water-works of an Eastern city. The pipe forms the supply main leading from an impounding reservoir toward the city, and is connected at its lower end with an iron pipe. To prevent any hammer coming on the vitrified brick an open-topped standpipe was placed on its lower end, with its top 3 ft. higher than the water in the reservoir. The joints of this conduit were covered with wrought-iron sleeves packed with Portland cement. This conduit has been in use for 20 years and has given perfect satisfaction.

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FARQUHAR v. CITY OF HAMILTON.—Under a contract with a municipality for the laying of block pavements on certain streets, with provision that "the decision of the city engineer on all points coming within this contract specifications shall be final and conclusive, whether as to the interpretation of the various clauses, the measurements, extra work, quantity, quality, and all other matters and things which may be in dispute, and from his decisions there shall be no appeal." The city engineer is not disqualified, according to the Ontario Court of Appeal, in the absence of fraud or of bad faith, from deciding whether certain work is or is not extra work, and does or does not fall within the plans and specifications. The possible bias of the engineer in favor of the plans and specifications drawn by him is not sufficient to disqualify him.

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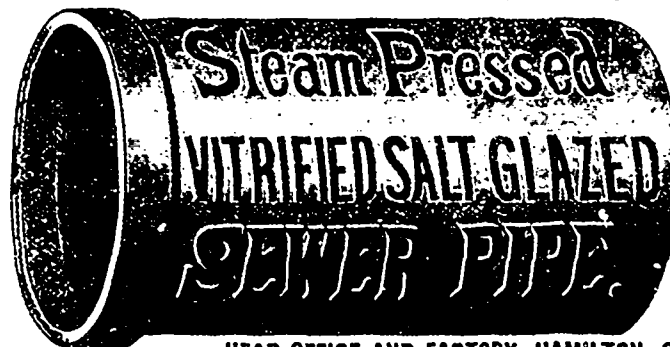
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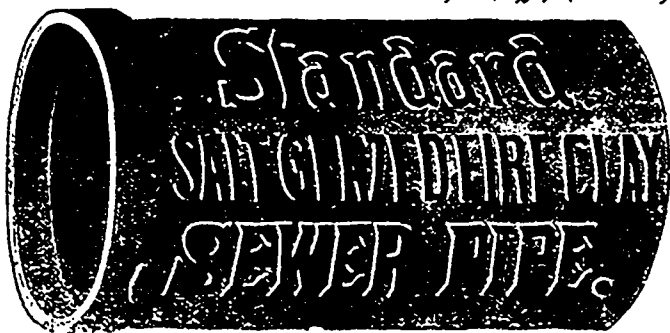
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