

**MUNICIPAL ENGINEERS, CONTRACTORS, AND MATERIALS.**

by Mr. Stephen H. Babcock read before the American Water-Works Association in 1888 (Eng. News, April 18, 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 water hammer coming on the vitrified pipe an open-topped stand-pipe was placed on its lower end, with its top 3 ft. higher than the water covered with wrought-iron sleeves packed with Portland cement. This conduit has been in use for 20 years and has given perfect satisfaction. — *Engineering News.*

tiff was returning home from the city one night last August about 10 o'clock and deviating about one foot from the usual path of the wheels of a vehicle, the rig was thrown down an embankment. He sustained injuries which might be permanent. The washout had occurred over a month before the accident, and the plaintiff claimed that there was negligence on the part of the corporation. Verdict for plaintiff and \$1,000.

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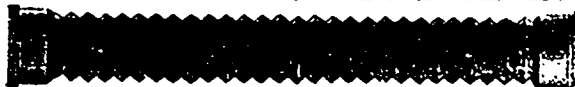
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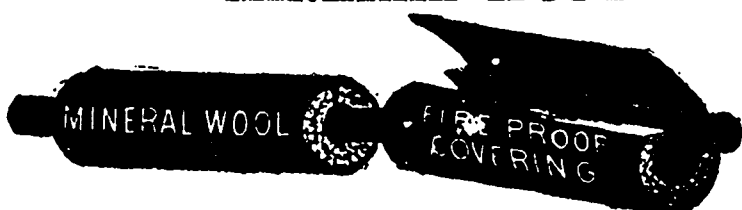
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