

MUNICIPAL ENGINEERS, CONTRACTORS, AND MATERIALS.

which may be done at a greater rate than in ordinary filtration.

Instead of sinking shallow wells, intercepting tunnels may be driven into the water-bearing strata, as is done in California in the boulder and sand formation. In Naples the town supply is collected from springs by galleries 50 feet below the surface, and at Constantinople the supply is increased by leaving the joints of a tunnel open to allow the percolation of water. The yield of springs may sometimes be increased by making a puddle trench so as to prevent the flow of water past the spring. Another method of intercepting water, much practiced in Holland, for collecting water for domestic supply from the sand dunes which lie near the coast, is to intersect the dunes with one or more canals, into which the water from the sand drains. The fine sand of which the dunes are composed is very retentive and consequently forms a reservoir for the rain water. Even after a long drought the amount of water stored continues to drain into the canals, and the supply is consequently equalized.

In the discussion on this paper, Mr. J. H. T. Turner stated that syphons are frequently used to collect water from the wells in the low plains of Flanders into a central pumping well. In order to intercept a large quantity of the subterranean flow that is slowly passing beneath their feet they sink a number of shallow wells. The water table is very near the surface there, and they sink these wells in each district, then a central well, and then syphon from the various collecting wells into the central well, using an ejector to exhaust the air out of the syphon, so that they have a half-dozen natural pumps going at once.—*Engineering Record.*

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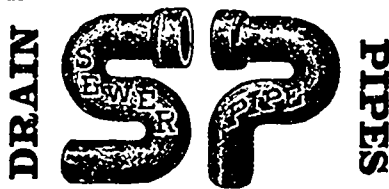
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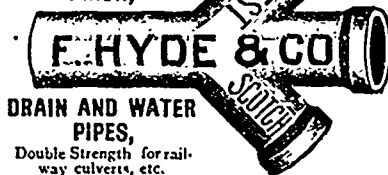
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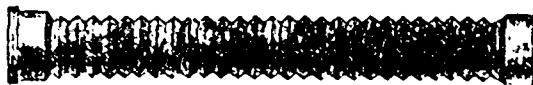
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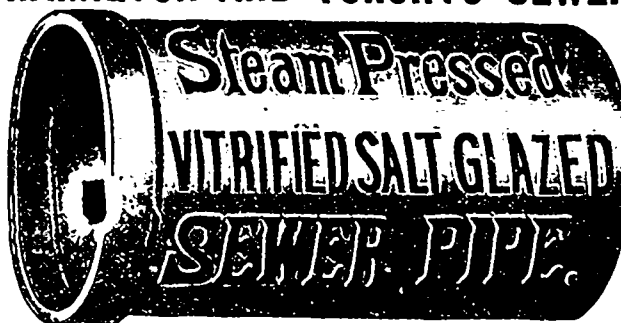
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