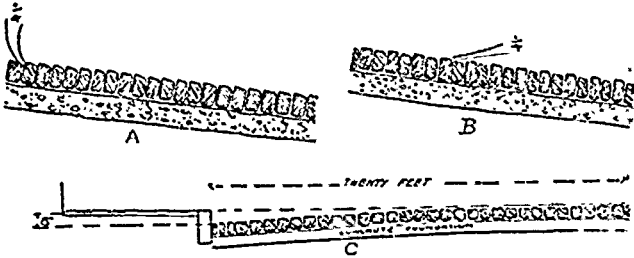


MUNICIPAL DEPARTMENT

ENGLISH METHODS OF GRANITE PAVING CONSTRUCTION.

(Continued from last issue.)

Bituminous mixture is, however, by far the best grouting material, and is composed of the following, namely, pitch and tar in the proportion of 2 2/3 gallons of tar to one-hundredweight of pitch, thoroughly boiled in a special pitch boiler made for the purpose. These boilers vary in size, but there are two sizes in general use. The



larger size holds nine hundred-weight of pitch and 24 gallons of tar, and when boiled this makes about 150 gallons of the mixture. The smaller size will hold half this amount. One hundred and fifty gallons of this grouting mixture, as above, will flush the joints of about 22 superficial yards of paving. The quality and suitability of this mixture depends greatly upon the quality of the pitch and tar used. The proportions given above are for the best materials.

Inclines exceeding 1 in 26 should not be paved with granite setts, although steeper gradients are paved in this manner; but considerable danger arises from the use of granite upon inclines greater than that mentioned.

A small projection, say 1/4 inch, made in each course when the stones are being laid (see sketch A) upon steep hills, will be found to be a great improvement, and safer for vehicular traffic (the projection affording a foothold for the horses) than the ordinary method of paving, as laid upon practically level roads. Another method of dealing with this point is shown on sketch B, every alternate course being lowered.

The curvature of the surface is shown upon sketch C. This varies according to the longitudinal gradient, but that shown upon sketch is very satisfactory for a level or nearly level road. If the cross gradient is too great, heavy vehicles, when using the roadway gradually slide into the channel, and it is most difficult to get the vehicle on to the centre of the road again.—Charles T. Ruthen, C. E., in "Stone."

*From "The Builders' Journal and Architectural Record."

CEMENT FLOORS FOR BRIDGES.

The committee which went from Middlesex county council last week to inspect the cement floors adopted in the new iron bridge in Elgin county were very favorably impressed with the innovation. The floors consist of a corrugated steel bottom covered with a layer of cement, a centre filling of grout and a top covering of cement, giving a solid, stone-like surface similar to the cement sidewalks laid down in the city. The committee will recommend to the council the experimental use of the flooring on the next iron bridge erected by the county, and it is probable the trial will be made. In view of the constantly increasing price of plank and the cost of frequently renewing plank floors, the experiment will doubtless be watched with interest, not only throughout the country, but in this city and other municipalities. — London, Ont., "Advertiser."

WATERWORKS AND SEWERAGE.

The waterworks and sewerage system of Prescott, Ont., has been completed, at a cost of \$87,500. It is said that Prescott has the greatest amount of pipe under ground for this purpose of any town in Canada. The following figures speak for themselves:

WATER MAINS IN SYSTEM.

400 feet of 12 inch intake pipe; 342

feet of 12 inch water pipe; 2,468 feet of 10 inch water pipe; 9,853 feet of 8 inch water pipe; 21,534 feet of 6 inch water pipe; 3,896 feet of 4 inch water pipe; 9 hydrants; 2 valves 12 inch, 3 valves 10 inch; 16 valves 8 inch; 30 valves 6 inch; 5 valves 4 inch. In all 38,463 feet of water pipe—7.22 miles.

SEWERAGE SYSTEM.

2,491 feet of 15 inch pipes; 6,341 feet of 12 inch pipes; 11,649 feet of 10 inch pipes; 6,708 feet of 8 inch pipes. In all 27,189 feet—5.15 miles.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

SLATER VS. VILLAGE OF BEETON.—Judgment in action tried at Barrie brought by administratrix of estate of Mar Slater, deceased to recover damages for injuries resulting in the death of Mary Slater owing to alleged nonrepair of Main street in the said village. Held that the plaintiff has failed to satisfy the onus of proof as to negligence causing the injury and the preponderance of evidence is in favour of the finding that defendants have not been negligent; and taking into consideration the character of the horse the deceased was driving when it ran away, the condition of the harness and the place where the wheels of the vehicle beyond doubt crossed the gravel (the alleged obstruction in the highway) and other circumstances, a finding cannot be made in plaintiff's favour. Action dismissed without costs.

Architects and engineers will be interested in knowing that you are submitting a tender as the result of the advertisement for tenders placed in the CONTRACT RECORD. Mention the fact.

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