

MUNICIPAL DEPARTMENT

PORTLAND CEMENT.

(Continued from last issue.)

In choosing cement for construction preference is given to that factory whose cement, all other qualities being equal, gives the greatest resistance to rupture after seven days tested pure. Pure cement after seven days must, when tested by rupture, bear a strain of not less than 21 to 25 kilograms on the square centimetre.

In preparing samples out of pure cement, water in proportion of one-third of the weight of cement is added, i.e., when the process by absorption is used. Samples intended for testing must remain exposed to the open air during the first twenty-four hours after they are made, and then be kept in water till the moment of being tested. At each stage (seven and twenty-eight days) of the experiment, ten briquettes must be broken when testing cement of an unknown firm or brand for the first time; for cement of a known brand at least five briquettes are necessary. When the normality of a cement is determined in a laboratory, then simultaneously with the test after twenty-eight days, a test of the mortar after seven days must also be made and the ratio of the two determined. It is necessary to know this ratio when making quick control tests. Mortar consisting of one part cement and three parts of normal sand must have a tensile strength after twenty-eight days of 8 kilograms on the square centimetre, or, after seven days, of not less than 5 kilograms to the square centimetre.

7. All the tests enumerated in the preceding rules determine the normality of a given brand. For cement of a known brand, in order to save time (especially when tests are necessary at the location

of constructions), control tests are allowed to determine (a) the time of setting; (b) the property of briquettes made from pure cement to remain free from cracks and warping during seven days; (c) the fineness of the grain; (d) the resistance to rupture after seven days of pure cements and mixtures with sand. The resistance of a mortar composed of 1 part of cement to three parts of normal sand, seven days after being mixed, must in no case be less than 6 kilograms per square centimetre. Should the cement respond to all requirements from a to d, excepting d, then the tests may be adjourned for twenty eight days, when the cement must undergo all the tests provided for in rule 6.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

MILLIGAN v. CORPORATION OF TOWN OF SARNIA.— Judgment in action tried at Sarnia, brought by owners of land on Wellington St., Sarnia, for damages caused by the flooding of the cellars in their houses owing to non-repair of the street sewer, and for a mandamus to compel repair and for declaration as to plaintiffs' rights. Held, that the defendants had power to do the work of laying tile sewer in substitution for the present box drain by way of local improvement, and to do so by day work instead of contract. Held, also, that an injunction should not be granted, there being no reason to suppose that the work would be delayed; on the contrary, the only delay so far being occasioned by the plaintiffs themselves. Held, also, that damages (in the absence of evidence, only nominal) had been sustained by eight of the plaintiffs owing to the defective condition of the box drain, which it was defendants' duty to repair or to notify the plaintiffs that their license to use it was terminated so as to enable them to shut off connection with their cellars.

Wilshire (plaintiff in the Superior Court), appellant, and the Town of St. Louis, defendant, and the Montreal Water & Power Company (intervening, and defendant in warranty in Superior Court), respondent. The appeal was from a

judgment of the Court of Review, which reversed a judgment of the Superior Court. The appellant is a florist, maintaining conservatories in St. Louis, and his action was brought against the corporation to recover \$4,225 damages which he alleged he had suffered by the almost total ruin of his plants and flowers, owing to the failure of the water supply. He alleged that in 1891 the corporation of St. Louis du Mile End entered into a contract with a company for a supply of water to the village, and granted the company the exclusive right of maintaining and operating a water system for twenty-five years. The appellant alleged that, relying upon the representation of the corporation that a sufficient supply of water would be furnished to him, he extended his greenhouses, but owing to the deficient supply of water, he had suffered heavy loss. The Montreal Water & Power Company intervened and took up the defence of the case, alleging that no lien de droit existed between appellant and the corporation of St. Louis, and that if appellant had any right of action it was against the company, not against the village of St. Louis. The first court maintained the action and assessed the damages at \$2,500. The Court of Review reversed this judgment and dismissed the action on the ground that there was no lien de droit between plaintiff and the corporation of the village under the circumstances. This judgment was maintained by the Court of Appeal.

The city council of Victoria, B.C. has chosen Mr. C. H. Topp, of Victoria, B.C., as city engineer.

Mr. J. W. Shackelton has been appointed city engineer of Chatham, Ont., as successor to Mr. C. H. Topp.

T. A. S. Hay, C. E., has been appointed Town Engineer and Public Works Superintendent for the town of Peterboro, at a salary of \$1,200 a year.

Mr. P. W. St George, City Surveyor of Montreal, recently resigned in consequence of too much interference by aldermen in the work of his department.

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