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## Canadian Society of Civil Engineers.

## REPORT OF COMMITTEE ON A STANDARD SPECIFICATION FOR PORTLAND CEMENT.

## January 27th, 1903.

The Committee, consisting of Dr. H. T. Bovey (chairman), Messrs. M. J. Butler, C. B. Smith, T. Monro, P. A. Peterson, C. H. Rust, G. A. Mountain and J. A. Duff, recommends that the following be adopted as a Standard Specification for Portland Cement, and that all testing be done in accordance with the accompanying report :—

The whole of the cement is to be well burned pure Portland Cement, of the best quality, free from free-lime, slag, dust, or other foreign material.

(1) FINENESS.—The cement shall be ground so fine that the residue on a sieve of 10,000 meshes to the square inch shall not exceed ten percent of the whole by weight, and the whole of the cement shall pass a sieve of 2,500 meshes to the square inch.

(2) SPECIFIC GRAVITY.—The specific gravity of the cement shall be at least 3.09 and shall not exceed 3.25 for fresh cement; the term "fresh" being understood to apply to such cements as are not more than two months old.

(3) TESTS.—The cement shall be subjected to the following tests:

(a) Blowing Test.—Mortar pats of neat cement, thoroughly worked, shall be trowelled upon, carefully cleaned, 5-in, by  $2\frac{1}{2}$ -in, ground glass plates. The pats shall be about  $\frac{1}{2}$ -in, thick in the centre and worked off to the sharp edges at the four sides. They shall be covered with a damp cloth and allowed to remain in the air until set, after which they shall be placed in vapour in a tank, in which the water is heated to a temperature of  $13^{0\circ}$  Fah. After remaining in the vapour six hours, including the time of setting in