## PORTLAND CEMENT AS A SUBSTITUTE FOR STONE.

Cement is rapidly superseding the use of stone for all building purposes, as the advantages over the latter are various, inasmuch as it can be conformed to any shape or space, is readily transported, and almost as speedily constructed; the only great obstacle is quality, this being such an important feature that the strength of each barrel may in a measure determine the strength of that portion of the work where it is used. Ordinarily, where cement has a good reputation, and is used in large masses, as concrete in heavy foundations, etc., the testing of every tenth barrel would be sufficient; on the other hand, the common practice of making the price the leading feature necessitates the testing of samples from each barrel used-

The quality of the material to be compounded with the cement is of vital importance; the materials that give the best results are those that are hard and angular and perfectly free from dirt or earthy matter. The writer believes that crushed granite is likely to give the best results, as it presents a rigid surface and possesses a peculiar affinity for the cement mortar. Where sand is used it should be clear and sharp.

There are various methods and machinery for ascertaining the quality of cement, but it is not so simple an undertaking as it is sometimes thought to be; no small degree of experience is necessary before one can manipulate the materials so as to obtain approximately accurate results. The test for tensile strength on a sectional area of one square inch seems to be the best; where the bricquettes are small, there is less danger of air bubbles and the amount of material requisite is smaller. The tensile strength, if properly made, is a good one, though not a perfect indication of the value. The time necessary for making this cement is lengthy. For this reason short tests are made in cases of necessity; under the circumstances it would be well to introduce the tests for checking and for fineness. The strength of a cement depends greatly upon the fineness to which it is ground, especially when it is to be incorporated with a large amount of sand. Cement to, be of the average fineness, that not more than to per cent, should be rejected by a sieve of 2,500 meshes per square inch. The finer the cement, it otherwise good, the larger quantity of sand it will take, and the greater its value.

The test for cracking or checking, though simple, should not be omitted; make several cakes of neat cement 3 inches in diameter, from % to % inch in thickness; flatten out into thin edges; when hard enough put into water. These cakes should be carefully examined from day to day, to see if cracks show themselves at the edges; these cracks indicate that the cement is unfit for use at that age. These cracks may be caused by too much unslacked lime, and will disappear with age, the color being a substantial indication. One of the cakes car ne kept in the air and its color observed, which should be uniform throughout; yellowish blotches indicate a poor quality. Portland cement should be of a bluish gray color.—Warner H. Jenkins in the Builders' Magazine.

HOW TO DRAW NAILS OR SPIKES .-When a nail or spike has been driven into a live tree, or into timber, after a year or more the fibres of the wood will have contracted so tightly about the metal that it will be exceedingly difficult to withdraw the iron. But, strike a nail or spike a sharp blow with a hammer, and drive it in a trifle so as to break the fibres around the metal, and a nail can be withdrawn with only a little force. Iron gate hinges are frequently driven into a living tree. When one is not in possession of a strong claw bar, bore a hale close to the hinge on the under side, and the hinge can be easily crowded down into the hole and withdrawn. When a large nail has been driven head and all beyond the surface of the timber, bore a hole close to the nail, and with a nail set crowd the nail into the When nails have become rusty, they will usually break in two, leaving a portion of the fron in the timber. But, strike a rusty nail a sharp blow, and one can sometimes withdraw a with his fingers. In tearing down an old building, if it is desirable to take off the boards or casings without splitting them, place a nail set on the head of each nail, and with the hammer start it inward about the eighth of an inch. One blow will break the hold of the nail so that most of the nails will come out when the boards are driven off. -- World's Progress.

## Prices of Building Materials.

LUMBER.

CAR OR CARGO LOTS

114 and thicker clear picks, Am. ins	\$30	00	A 32	w
1 % and thicker, three uppers. Am ins.			37	w
1 K and thicker, pickings, Am ins				w
1 x 10 and 12 dressing and better	18	00	20	00
. v to and 12 mill run,	13	00	14	00
x to and 12 dressing	14			00
x 10 and 12 common	12			00
x to and 12 spruce culls				~
x to and 12 maple culls	•			<b>60</b>
inch clear and picks	29	00		<b>∞</b>
inch dressing and better	16			~
inch siding, mill run	11			~ ~
inch siding, common	11			တ
inch siding, ship culls				
inch siding, mill culls		∞		∞
Cull scantling	8	∞	9	90
13/4 and thicker cutting up plank	22	တ	25	$\infty$
i inch stript, 4 in. to 8 in. mill run	14	00	25	00
i inch strips, common ·····	11	00	12	∞
13/2 inch flooring	14	∞	15	∞
13/2 inch flooring	14	œ		œ
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XX shingles, sawn		30		35
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Matallia Poofing Co. of Con				

Metallic Roofing Co. of Canada:

	Per Square.			
Eastlake steel shingles (galvanized),				
Eastlake steel shingles (painted)	3	75	4 00	
Improved Broad Rib Reofing, (gal- vanized)	ξ	∞	5 75	
Improved Broad Rib Roofing (painted)		50	4 60	
North Western steel siding (painted)	3	25	3 53	
Manitoba steel siding (painted)	3	75	3 50	
Metallic Finished Brick	3	75	3 50	
vanised)			6 25	
Tower or Mansard shingles (painted)			4 50	
Metallic Terra Cotta Tives			7 00	
Price of Copper shingles according to		reigh	t, and	
"Hayes" Patent Metallic Lathing acco	rdi	ing to	quan-	
ty.			•	

Canada Galvanizing & Steel Roofing Co.

Canada Garvanizing a Steel Rooming	; CO.:
Corrugated Iron, galvanired, 26 W.G.,	
Corrugated Iron, galvanized, 28 W.G.,	5 cts. 5%
Corrugated Iron, painted, 26 W. G.,	
Corrugated Iron painted as W. C.	4 00
Corrugated Iren, painted, 28 W. G., Broad Rib Roofing, galvanized, per	3 50
Passa Dil Dandamimaal	5 50
Bread Rib Roofing, painted	4 00
Westlake shingles, steel, painted	5 ∞
Standard shingles, "Walter's patent,"	3 50
galvanired, per square	5 50
painted	4 00
per Square	3 50
Metallic Finish Brick, per square	3 25
Metallic Finish Claphoard, per sonare	2 10

Mill cull boards and scantling		10 (%
Mill cull boards and scantling Shipping cull boards, promiscuous		
Mill cull boards and scantling  Shipping cull boards, promiscuous widths  Shipping cull boards, stocks  Hemlock cantling and joist up to 16ft  18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		13 00
11 11 11 18 14 1	3 00	
Scartling and joist, up to 16 ft	13 00	14 00
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" " " " " " " " " " " " " " " " " " " "		23 00
n n 30 ft n n 32 ft n n 34 ft		27 00 27 00 27 00 29 50 31 00
11 16 ft		31 00
		37
Cutting up planks, 134 and thicker, dry board, 156 Cedar for block paving, per cord.	18 00	\$2 00 5 00
Cedar for Kerbing, 4 x 14, per M		14 00
B. M.	18 oo	17 co
1% inch flooring, dressed, F. M	18 00	32 CO
	18 00	19 00
	12 00	15 00
Clapboarding, dressed.		13 00
AAA sawn stingtes, per M, 10 in Sawn lath Red oak White Basswood, No. 1 and 2 Cherry, No. 1 and 2 White ash, No. 1 and 2. Black ash, No. 1 and 2. Dressing stocks	2 00	2 20
White	35 00	45 00
Cherry, No. 2 and 2	70 00	70 00
Black ash, No. 1 and 2	6 00	30 00 22 00
Dressing stocks Picks, American inspection Three uppers, American inspection		40 00 10 00
BRICK-V M		
Common Walling		\$7 50 9 00
Good Facing	8 50	900
Pressed Brick Plain brick C.o. b. at Milton per M		§18 co
Plain brick, f. o. b. at Milton, per M 2nd quality, per M 3rd	-	14 (N) 10 00
Hard Building		8 00
Roof Tiles		74 00
	NE .	16 00
First quality, f.o.5, at Campbellville, per and yell yell with the state of the sta		14 00
Ornamental, per 100	. <b>5</b> 3 to	10 00
Stone.		
Common Rubble, Per Torse, delivered Large flat		18 20
Foundation Blocks, " Cubic Foot Slate: Roofing (V square).		50
n ted		18 00
u uniading green.		9 00
Ulack date Terra Cotta Tile, per sq Ornamental Black Slate Roofing		7 73
Sand:		8 32
Per Load of 114 Cubic Yards		1 25
PAINTS. (In oil, \$16.)		
White lead, Can zinc, Can	6 25 634 534	6 50 7 50
Red lead, Eng	1.00	7 50 634 1 75
vermillion Indian, Eng	10 90	1 00
White lead, Can.  " zinc, Can.  " zinc, Can.  Red lead, Eng.  " venetian.  " vermillion  " Indian, Eng.  Vellow ochre.  Yellow chrome.  Green, chrome.  " Paris.  Black, lamp. Blue, ultramarine. Oil, linseed, raw (\$ Imp. gallon).  " boiled  " refined,  Putty  Whiting, dry.	. 5 15	30 30
Green, chrome	7 25	13 40
Blue, ultramarine	15	30
boiled	65	€8 71
Putty	78 234	212
Whiting, dry Paris white Eng., dry Litharge, Am., Sienna, burnt	75 6%	1 00
	15	20
	601	12
Umber, "	8%	
CEMENT, LIME, etc.	8%	46
CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels, Grey. White Plaster, Calcined, New Brunswick.	<b>8</b> %	3 00
CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels, Grey. White Plaster, Calcined, New Brunswick.	81/4	1 00 3 00 2 00
CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels, Grey. White Plaster, Calcined, New Brunswick.	3 00	55 2 00 2 00 1 00 3 50
CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels, Grey. White Plaster, Calcined, New Brunswick.	81/4	55 2 00 7 00 1 00 3 50 1 50 1 50
CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels, Grey.  White Plaster, Calcined, New Brunswick.  Nova Scotia.  Hair, Plasterers, per bag. Cement, Portland, per bbl.  Thorold,  Queenston,  Rapance,  Hull,	81/4	55 3 00 1 00 1 50 1 50 1 50
CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels, Grey  "" White Plaster, Calcined, New Brunswick "" Nova Scotia Hair, Plasterers, per bag Cement, Portland, per bbl "" Onernstoo, "" Napanee, "" Hull, ""  IIARDWARE.  Gut Nails:	81/4	55 3 00 1 00 1 50 1 50 1 50
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CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels. Grey. White Plaster, Calcined, New Brunswick. Nova Scotia. Hair, Plasterers', per bag. Cement, Portland, per bbl. Thorold, Queenstoo, Napanee, Hull, HARDWARE.  Cut Natls: American Pattern, 14, inch, per keg.  "Hotoly inch, per keg. "Hell', inch, per keg.	81/4	55 200 200 3 50 1 50 1 50 1 50 1 50 1 50 2 50 2 7 7 95 2 7 95 2 97
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CEMENT, LIME, etc. Lime, Per Barrel of 2 bushels. Grey. White Plaster, Calcined, New Brunswick. Nova Scotia. Hair, Plasterers', per bag. Cement, Portland, per bbl. Thorold, Queenstoo, Napanee, Hull, HARDWARE.  Cut Natls: American Pattern, 14, inch, per keg.  "Hotoly inch, per keg. "Hell', inch, per keg.	81/4	55 200 200 3 50 1 50 1 50 1 50 1 50 1 50 2 50 2 7 7 95 2 7 95 2 97