

N.Z. Sandstone for Building

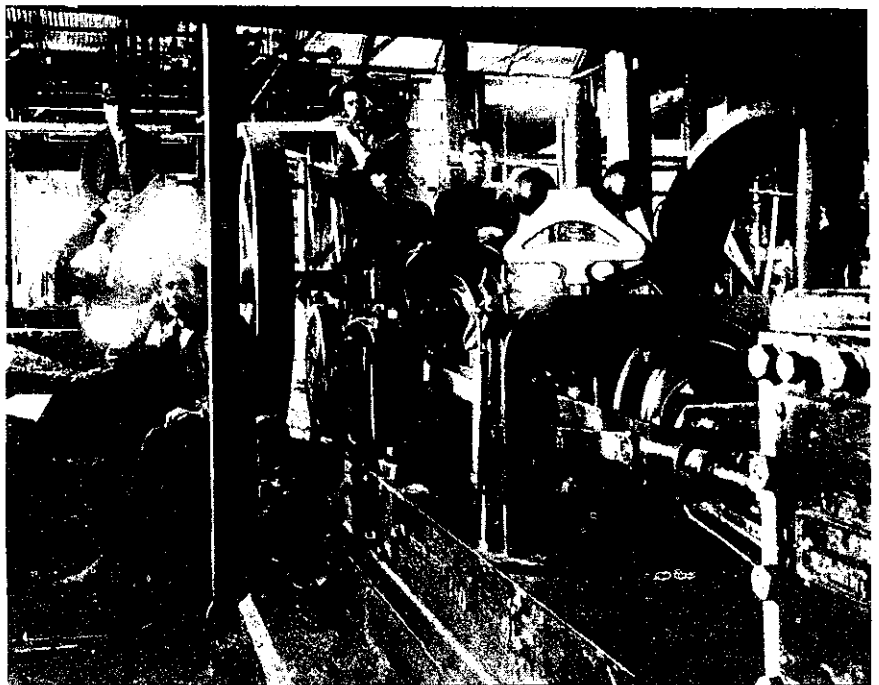
Professor Speight, in his article on Building Stones of New Zealand in our August number, says that "the chief desideratum for building purposes, is a really satisfactory sandstone, such as the Hawkesbury stone, used so freely in Sydney and even occasionally in this country. The best that we possess is probably that got from Dobson, near Greymouth. It is of a fine greyish colour, is easy to work, can be obtained in large flawless blocks, and the amount available is in all probability very great."

He goes on to say that it is early yet to speak of its weathering qualities, although it has lasted very well in some situations. We append some tests made by Prof. Scott, M. Inst. C.E. of Canterbury, from which it will be seen that the stone is of more than ordinary strength and durability, and compares most favourably with the Hawkesbury or the best known English building sandstones.

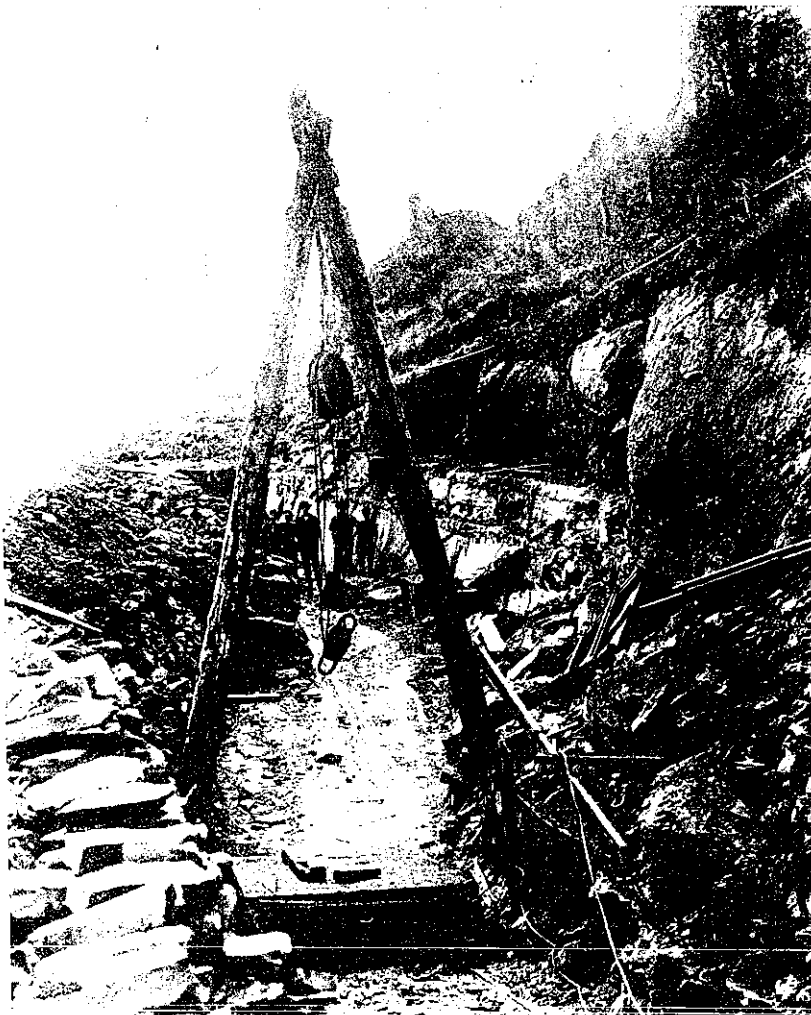
Two pictures are shown herewith, the upper one being of part of the Dobson Building and Monumental Stone Co.'s plant and engine-room staff. The lower is of one of their three quarries, showing the stone in the face of the cut and the sheer legs and tackle used for lifting the rough stone on to the trucks to take to the cutting yards. A quantity of rough hewn stone is shown at the side of the lift awaiting transportation.

railway or other means of carriage, so that the cost of transporting the stone is prohibitive, or nearly so. This is not the case with the Dobson quarry, as it is

Dominion for ordinary building purposes, the Dobson stone is very suitable for steps, risers and landings, paving sets and curbs, and its durability and weather



DOBSON QUARRY CO.—SOME OF STAFF AND PLANT.



DOBSON COY.'S QUARRY.

As Professor Speight says, in many cases where good stone occurs, there is the great disadvantage that it is remote from

connected by rail with the port of Greymouth, and from there stone can be

resisting qualities make it particularly useful for monuments or pillars to stand the test of time in the open air.

RESULTS OF TESTS ON SPECIMENS OF SANDSTONE FROM DOBSON.

ABSORPTION TEST.

Specimens:—

Cubes nominally 2 1/4" x 2 1/4" x 2 1/4"

Actual Dimensions—(1) 2.24" x 2.24" x 2.25"
(2) 2.25" x 2.16" x 2.15"

Process of Test:—The specimens thoroughly dried and then weighed. Then placed under a vacuum of 28" mercury for 30 minutes, then put into water for 3 days. The specimens weighed again on removal from water.

No. of Test	Weight of Specimen.		Water Absorbed.	
	Before immersion (dry) Grammes	After immersion (wet) Grammes	Grammes	Per cent. of original weight of stone
1.	446.4	462.2	15.8	3.54
2.	418.0	434.2	16.2	3.87
			Average	3.705

COMPRESSION TEST.

No. of Test	Dimensions of Specimen.		Maximum Load.	
	Cross-dimensions inches	Length inches	Tons total	Tons per sq. foot
1.	2.10 x 2.10	2.20	22.5	701.3
2.	2.25 x 2.25	2.18	23.9	679.8
3.	2.12 x 2.24	2.22	22.3	676.2
4.	2.25 x 2.10	2.22	25.2	768.0
			Average	706.3

WEATHERING TEST.

Specimens:—Cubes nominally 1" x 1" x 1"

Process of Test:—The specimens thoroughly dried and then weighed (1st dry weighing). The specimens boiled for 30 minutes in sulphate of soda solution and hung up to dry for 24 hours. Then washed, boiled again in sulphate of soda and hung up to dry. This repeated 7 times, after which the specimens washed and dried thoroughly, then weighed again (2nd dry weighing).

No.	Weight of Specimen.		Loss Grammes	Loss per cent on original weight
	1st dry weighing Grammes	2nd dry weighing Grammes		
1.	41.40	39.96	1.44	
2.	40.57	39.58	0.99	
3.	42.63	41.79	0.84	
4.	41.25	39.97	1.28	
5.	41.97	40.87	1.10	
6.	40.11	38.74	1.35	
Total	247.93	240.91	7.02	2.83

shipped to its destination quite cheaply.

While it compares very favourably with any other sandstone obtainable in the

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