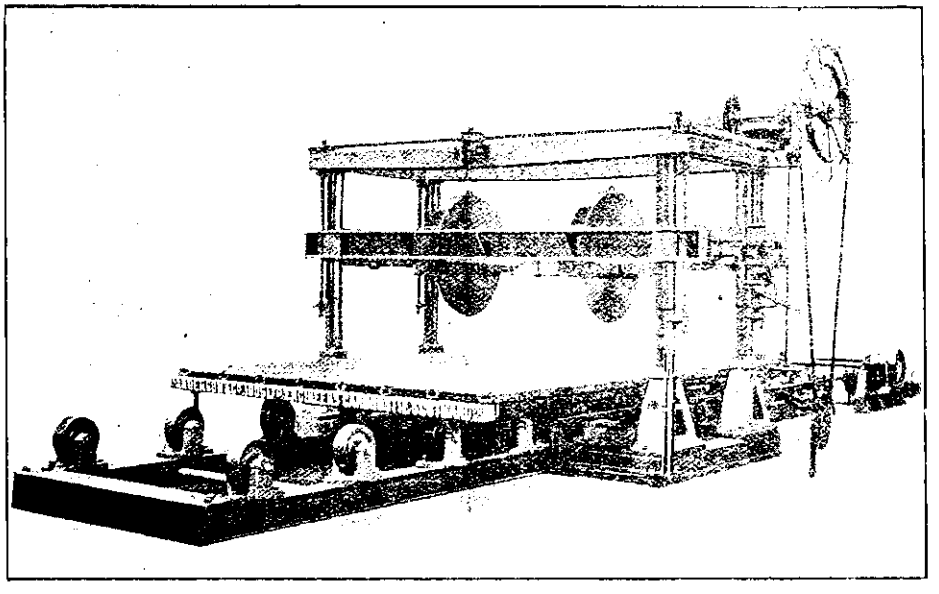
tance being covered with debris. However, it is assumed that with such large masses of sound stone at both ends, it will only be necessary to remove the debris to expose further extensive deposits. This will be a task for future generations, because there is more than sufficient for the present uncovered. The sound rock exposed on the west side of the gully, pictured on page 568 is sufficient to provide all the marble needed for Parliament Building.

It is difficult to define the full range of colour in the Kairuru marble. What has been opened up ranges from dark blue-grey to pure white. A few stones show beautiful tintings of pink, and occasionally there are small blocks obtained of such dark blue colour that they could well be used with the white stone for tiling contrasts, when the effect would be black and white.



THE DIAMOND SAW.

Used by Messrs. Hansford and Mills for cutting the marble in their masonry yard at Parliament Building.

PERFECT QUALITY.

The Government overseer at the quarry, Mr. Angus Ross, subjects every stone to close and critical inspection, exceeding in severity that imposed in the case of material for ordinary buildings. So far, he has rejected stones only on account of surface faults due to heavy bush fires.

Mr. Ross had practical experience in the Iona marble quarries in Scotland, and when he was asked how the New Zealand marble compares with the Scottish stone replied: "It is far superior, both for quality and colour."

THE TRAMLINE.

What has made Kairuru marble of practical value is the tramline, six and a half miles long, which enables heavy blocks of stone to be shipped at Sandy Bay. The quarry is 1,130 feet above sea level, in extremely broken country, and it was found difficult to devise an easily worked line. The scheme finally adopted involves a gigantic ziz-zag down one spur, ending in an incline 777 feet long with a grade of 1 in 2.

Starting from the marble deposit, the line which is of 3 feet 6 inch gauge skirts the left, or eastern side of the deep valley, and runs on a slightly rising grade for the first mile. The descent then commences, the grade limit being 1 in 10. Huge swallow-holes, or pot-holes, are passed and one as large as a crater is circled by the line, which gains grade with a horse-shoe bend. At 1 mile 36 chains, stiff grades begin. The line is maintained within a grade limit of 1 in 10, but to do this involves two back shunts, so as to work diagonally down the hillside. The first back-shunt is at 1 mile 64 chains, and the next at 2 miles 5 chains. The top of the incline is reached 2 miles 34 chains from the quarry. As the load is with the grade, one horse can manage the haulage of a tram to this point, its services being needed mostly during the first mile, and at the back-shunts. The important item of equipment is the brake, which has to stand very severe wear, the four-wheeled trams frequently carrying a three-ton axle load. At the incline top, the height is 621 feet above sea level. A loaded tram is attached to the wire rope running over a large pulley provided with two powerful hand brakes. Its weight easily draws up an empty tram, and any supplies required at the quarry. The bottom of the incline is 270 feet above sea level. Thence the line runs by a slight down grade over two bridges, and past the foot of the incline formerly serving the unsuccessful Sandy Bay quarry. The last mile skirts one side of a lagoon, and at the end of the line is a temporary wharf for loading stone upon the scows. The present method is the primitive one of dumping big