## ANNEXURE C.

## STONE-QUARRIES.

SUMMARY OF REPORT BY INSPECTOR OF QUARRIES FOR THE NORTH ISLAND (MR. JAMES NEWTON).

During the year as much time as possible has been given to actual inspection of the various operations in and about the quarries, and, broadly speaking, I have found that the operators have exercised reasonable care in operating same. In a majority of the quarries that have been operated the work has been undoubtedly of a hazardous and dangerous nature, owing to the disposition of the stone exploited, and its having been extensively shattered, in consequence of which it is found to be traversed by treacherous backs. In very few cases has the rock been found to be bedded in such manner that it would have been wise to demand that operations should be carried on by regular-sized benching on the face of the quarry, consequently I have preferred that the face should be operated on a substantial backward batter of sufficient inclination to allow of easy and reasonable access, and also to ensure

on a substantial backward batter of sufficient inclination to allow of easy and reasonable access, and also to ensure a sufficient support to the underlying strata.

Electricity has been much more extensively used for power purposes than formerly during the year under review, and is now being used at almost all quarries where it is available. During the year quite a number of operators have discarded the suction-gas, oil, and steam engines and replaced them with electric motors. Valuable and extensive installations have been put in in the Auckland Provincial District at places owing to the fact that it has been found necessary in order to supply a demand that has arisen for more varied grades of material for roadmaking purposes, &c.

With regard to the operations of the Act and Regulations, in my opinion the remarks made by me in my last vear's report still hold good.

year's report still hold good.

When compared with the year 1925 the output of stone for the present year shows a substantial increase. Each of the four provinces under my supervision has increased its output of stone, the increases being respectively—Auckland, 204,750 tons; Hawke's Bay, 6,189 tons; Taranaki, 14,939 tons; and Wellington, 12,915 tons; or a total increase of 238,793 tons. Nineteen more quarries have been operated and 153 more men have been employed.

I have found the year a very busy one, an increased amount of my time has been occupied clerically. A very great deal of clerical work has had to be attended to in connection with applications for quarry-managers' or foremen's mortly the applicants have been examined in their own districts wery few of them elect to troval to

permits. Mostly the applicants have been examined in their own districts, very few of them elect to travel to Auckland owing to the expense of doing so, and a considerable number are examined in the evenings on account of the same thing. The greater number of applicants have been granted a pass,

the same thing. The greater number of applicants have been granted a pass.

One fatal and five serious non-fatal accidents occurred at quarries in my inspection district during the year.

On the 25th February in the diversion tunnel at the Arapuni Hydro-electric works, a workman named Kawahene Mutu, a Maori, was electrocuted through coming into contact with a live wire carrying approximately a pressure of 230 volts for lighting purposes. At the time of the occurrence Mutu was employed shovelling concrete into the framework of the tunnel-lining.

On the 5th February in the diversion tunnel at the Arapuni hydro-electric works, George Bacon sustained a broken rib as the result of slipping and falling against a pipe whilst employed shovelling concrete on a platform.

On the 7th September, in a sewerage tunnel at Ellerslie, a workman named James Grama received a broken leg and abrasions to his head and arms as the result of a premature explosion of calignite whilst delling a round of heles

On the 7th September, in a sewerage tunnel at Ellerslie, a workman named James Grama received a broken leg and abrasions to his head and arms as the result of a premature explosion of gelignite whilst drilling a round of holes in the face of the tunnel. The previous round of holes had been fired the day before, and the debris cleared out from the tunnel, and apparently all was safe to warrant a commencement of the drilling for further blasting. Shortly after commencing drilling the drill struck through into an open space in the rock, probably a crevice, either natural or caused by the previous blast of holes shattering the stone. It was stated that the hole was then cleaned out and drilling recommenced, and immediately the explosion occurred. It is supposed that when the former round of holes was fired, one of the shots must have displaced a portion of a charge from another hole and driven it away into this particular crevice.

On the 29th September, in the Gisborne Harbour Boards "Whareongaonga," a workman, Tui Rangi, received a broken leg as the result of slipping and falling on the floor of the quarry.

On the 5th November, in the Farmers' Mauriceville limestone-quarry, S. Riogard, whilst shovelling on the floor

of the quarry, was struck by a rolling stone and had a leg broken.

On the 4th December, in the Wellington City Council's Ngahauranga quarry a workman named John Parr ell over a 10 ft. face and sustained a fractured pelvis.