## 1874.

## NEW ZEALAND.

## BOILER ACCIDENT AT THE KURUNUI BATTERY, THAMES GOLD FIELD,

(ROYAL COMMISSION TO INQUIRE INTO THE, AND INTO THE MACHINERY AND BOILERS ON THE FIELD GENERALLY).

Presented to both Houses of the General Assembly by Command of His Excellency.

Public Works Office, Auckland, 24th April, 1874.

We have the honor to report that we have completed the investigations into the late boiler explosion at the Thames Gold Field, and on the boilers and machinery there generally,

and with this we beg to hand you box containing our report, plans, schedules, and minutes of evidence; also minute-book, and the newspapers showing that the notices of the meeting of the Commissioners had been duly advertised.

We have, &c.,

CHARLES O'NEILL.
JAMES STEWART.
J. NANCARROW.

The Hon. the Minister for Public Works, Wellington.

## REPORT.

To His Excellency the Right Honorable Sir James Fergusson, Baronet, Governor of New Zealand, &c., &c.

MAY IT PLEASE YOUR EXCELLENCY,-

We, the Commissioners appointed by your Excellency, under Commission dated the 21st of February, 1874, to inquire into the causes of the explosion of a boiler at the Kurunui Battery, on the Thames Gold Field, by which three persons were killed; also to inquire into the nature and construction of said boiler and machinery, and the use, management, and inspection thereof; also into the nature, construction, and state of the boilers and machines used in mining and quartz-crushing operations on the said gold field, and the use, management, and inspection of such boilers and machines,—now beg respectfully to report as under:

In accordance with the terms of the Commission, your Commissioners have examined the boiler in question, and taken the evidence of the persons more or less directly in charge of the same and of the machinery at the Kurunui Battery, and of most of the principal engineers and mine managers on the gold field. We have also carefully considered the evidence taken at the

Coroner's inquest touching the death of the three persons caused by the explosion.

The Kurunui Battery is one of those on the gold field ranking as first-class. It was the very first to be established on the field, and about six years ago its present arrangement was effected. It consists of 41 head of stampers, together with berdans, driven by a horizontal condensing engine, supplied by steam, at about 30 lbs. pressure, alternately by two boilers. One of these was made originally for the engine, was worked alone for about three years, and is the one which burst, and caused the death of the three men, on the morning of the 24th January last. The other, or newer boiler, was procured for the purpose of allowing alternate working and cleaning, and doing repairs, as is common on the first-class mines and batteries on the field. The water used in these boilers is from the sea. A cistern is filled at high water of every tide, the contents of which serves during the ebb for the double purpose of use in the battery-boxes and for condensation in the engine. The boilers are fed from the hot well, in the usual manner. Both boilers are of the kind known as Cornish. The one that burst has the firing flue enlarged at the furnace end to unusual dimensions, having been evidently intended for the combustion of wood.