SESS. II.—1879.
NEW ZEALAND.

BORING-MACHINES SUITABLE FOR TESTING LANDS IN NEW ZEALAND FOR MINERAL DEPOSITS

(CORRESPONDENCE UPON THE SUBJECT OF).

Laid on the Table of the House of Representatives, with the leave of the House.

No. 1.

The Hon. the MINISTER of MINES to the UNDER SECRETARY for MINES.

Mr. Wakefield.

I WISH you to telegraph to Dr. Hector, at Sydney, asking him to send a memorandum of particulars of the best kind of boring-machine procurable (complete) most suitable for New Zealand mineral lands, with description of machine, and price.

10th September, 1879. W. GISBORNE.

No. 2.

The UNDER SECRETARY for MINES to Dr. HECTOR.

(Telegram.) Wellington, 11th September, 1879.

KINDLY send by post full particulars of best boring-machine procurable (complete) most suitable for New Zealand, and price. OLIVER WAKEFIELD.

Dr. Hector, Exhibition Buildings, Sydney.

No. 3.

Dr. HECTOR to the Hon. the COLONIAL SECRETARY.

New Zealand Commission, Sydney International Exhibition, 1879,
Sydney, 24th September, 1879.

SIR,—

In compliance with a telegram received from the Under Secretary of the Mining Department, I have the honor to forward, for the information of Ministers, particulars concerning the diamond rock-drills in use here.

I may state that the patent right for the Australian Colonies belongs to a company here, and previous to the receipt of the telegram I had been in communication with the manager, Mr. John Coghlan, to whom I was introduced by Mr. John McKenzie, Inspector of Collieries for New South Wales, and had been invited to witness the working of the machines in time to report on them by this mail.

Unfortunately Mr. Coghlan has been obliged to postpone the appointment till next week, so that I am not able to speak as yet from personal observation. Three sizes of the rock-drill have been used in the vicinity of Sydney, as described in the enclosed prospectus (A).

No. 1, or the hydraulic machine, is at present in use in Moore Park, and has bored to a depth of 1,330 feet, with rods $1\frac{7}{8}$ inches in diameter. The core brought up is 2 inches, and the hole left is $2\frac{5}{8}$ inches in diameter. This machine has bored the last 1,000 feet in five weeks through compact gritty sandstone, ironstone, and black shale. The price at which the machine can be supplied, with all the appliances mentioned in the list, is £1,575, or without the steam boiler, which is detached, £1,300.

No. 2, the positive feed-gear machine, is in use at Botany, and, with the same sized rods, has taken out a core $1\frac{3}{8}$ inches in diameter, leaving a hole $2\frac{1}{16}$ inches diameter, to a depth of 1,900 feet. At the present time it is sinking at the rate of 10 feet per diem, the total weight of the rods being 10,000 lb., which are turned at the rate of 250 to 300 revolutions per minute with 10-horse-power boiler, having 30-lb. steam pressure. The price of the machine, with all fittings and 1,000 feet of rods, is £1,575.