transit of Venus; but I doubt whether the longitude can thus be accepted, for the following reason:—
The best part of Captain Kay's determination rests on lunar transits, and (in the absence of explanation) I suppose that these were compared with the lower places in the "Nautical Almanac," which were then computed from Buchhardt's Tables, known to be sensibly erroneous. I do not think, therefore, that the expedition, if located at Hobart Town, would be exonerated from the labour of itself determining the longitude.

3. My present impression is, therefore, that it will be best to adhere to the proposed adoption of a station in New Zealand, preferring Canterbury, but accepting Auckland if political reasons should be held sufficient for the change; but I should be glad to see Hobart Town occupied by a party of observers, its value for the astronomical purposes being not very much below that of the New Zealand

I have, &c., G. B. AIRY.

The Under Secretary of the Colonial Office.

#### No. 2.

### MEMORANDUM for HIS EXCELLENCY.

Adverting to memorandum No. 43, 1871, on the subject of the selection of a station for the observa-tion of the transit of Venus in 1874, Ministers beg to inform His Excellency that they are advised by the Superintendent of Canterbury that a society is being formed for the purpose of erecting an observ-atory at Christchurch, and it is the intention of the Provincial Government to propose that a subside be granted to the society, for the purpose of constructing a building for the observatory, and towards

an endowment, with the view of obtaining an astronomer in permanence.

The Superintendent of Canterbury telegraphs that he will be obliged if the Government will write by the outgoing mail, stating the willingness of the society and of the Provincial Government to co-operate with the Imperial Government in promoting the desired object.

Ministers have no doubt that, if the Astronomer Royal will state what is to be done by the local authorities, they will undertake to the utmost to carry out his wishes, in advance of the arrival from home of the processory staff. home of the necessary staff.
Wellington, 23rd December, 1871.

Julius Vogel.

#### No. 3.

Governor Sir G. F. Bowen, G.C.M.G., to the Right Hon. the Earl of Kimberley. (No. 114.) Government House, Wellington, New Zealand,

My Lord,-25th November, 1871.

Adverting to your Lordship's despatch No. 69, of the 12th September ultimo, on the subject of a station in New Zealand for the observation of the transit of Venus in 1874, I have now the honor to transmit a Ministerial memorandum, with other papers.

The Right Hon. the Earl of Kimberley.

I have, &c., G. F. Bowen.

## Enclosure 1 in No. 3. MEMORANDUM by Mr. Fox.

Adverting to the despatch No. 69, of 12th September, 1871, from the Right Hon. the Secretary of State for the Colonies, on the subject of the selection of a station in New Zealand for the observation of the transit of Venus in 1874, and to the remark in its enclosure, by the Astronomer Royal, that he would prefer Canterbury to Auckland as a station, but would accept Auckland, "if political reasons should be held sufficient for the change," Ministers are of opinion that no political reasons should be allowed to interfere with the determination of this question, which is one of a purely scientific character.

A memorandum from Dr. Hector, F.R.S., on the subject of this despatch, is forwarded, together with the printed enclosures noted in the margin.

with the printed enclosures noted in the margin.

Ministers have to express their desire to aid, to the utmost extent in their power, the Imperial authorities in the necessary arrangements for the establishment of an observatory in New Zealand for the purpose indicated.

Wellington, 24th November, 1871.

WILLIAM FOX.

## Enclosure 2 in No. 3.

# MEMORANDUM for the Hon. the COLONIAL SECRETARY.

THE longitude of the Government Observatory at Wellington has been fixed with considerable accuracy, as shown by the enclosed returns, which, however, are liable to the same objection that the Astronomer Royal urges against the Hobart Town observations, namely, that they are calculated from the lower transits given in the "Nautical Almanac." I have, however, just received and forwarded to Mr. Jackson the actual Greenwich observations for the period during which his lunar transits were observed, so that the longitude ascertained for Wellington will no doubt be accepted. From this place, as an initial meridian, the longitude of any other place that may be selected for the site of the proposed observatory, and to which the telegraph extends, can be readily ascertained with precision,