(No. 708.)—Mr. W. L. Buller to Dr. Hector.—30th May, 1872.

In pursance of your instructions, I have arranged with Professor Church, of Cirencester Agricultural College, to furnish a further and more exhaustive Report on the Chemistry of the New Zealand Phormium tenax. I beg to furnish herewith a copy of our correspondence on the subject.

7, Westminster Chambers,

Victoria Street, Westminster, S.W.,

29th May, 1872.

DEAR SIR.

On behalf of the New Zealand Flax Commission, I have much pleasure in accepting your offer to prepare a further report on the chemistry of Phormium tenax, of the kind and on the terms mentioned in your note of 25th instant.

I need hardly say that I shall be ready to assist you in every possible way—by forwarding classified samples of the fibre for comparative examinations, or by furnishing any information in my power as to the growth and development of the Native plant.

I shall take an early opportunity of seeing Dr. Hooker, who, I am sure, will assist us to the utmost

of his ability.

If, however, a sufficient supply of green leaves cannot be obtained from Kew Gardens, I shall have no difficulty in getting a supply from Ireland.

Believe me, dear Sir,

Professor Church, M.A., Cirencester College. Faithfully yours, WALTER BULLER.

My DEAR SIR,-

Royal Agricultural College, Circucester, 25th May, 1872.

I give on the next leaf a list of the subjects which I propose to include in the Second Report on New Zealand Flax. If it be thought that the investigation should extend to other particulars, will you let me know?

I cannot promise the Report before 31st October in the present year, as the analytical work required will be very tedious and troublesome.

I am willing to undertake the investigation of the four subjects named on the annexed leaf for the sum of £40.

W. Buller, Esq.,

7, Westminster Chambers.

I remain, dear Sir, Yours faithfully,

A. H. CHURCH. (Signed)

P.S.—I take it for granted that Dr. Hooker will, as heretofore, place specimens of the fresh plant at my disposal. I feel sure that he will kindly provide this important help.

Phormium tenax.—Subjects for a further Chemical Report.

- (1.) A more complete analysis of the fresh plant, including a further study of its proximate constituents.
- (2.) Determination of the chemical differences of the fibres from the several parts of the leaf, and from leaves of various ages.
- (3.) Experiments as to the best ways of treating the fibre, so as to prepare it for its several uses.

(4.) Further examination of these fibres, so far as may be necessary for comparison.

(No. 272.)—Mr. W. L. Buller to Dr. Hector.—8th June, 1872.

I regret to have to report that, owing to a general strike on the part of the workmen, all the North Ireland mills are at present closed, and, as a necessary consequence, the further experiments with New Zealand Phormium are at a standstill.

By last mail I sent you samples of sacking, manufactured by Mr. Forbes out of pure New Zealand fibre. Referring to these samples, Mr. Forbes says, in a letter to Mr. Thorne, "I can give the best certificate to the quality of the fibre out of which the sacking has been made, as these have required no extra work, and this, I think, is important, as being the article of cloth which the Colony is most anxious to introduce. I hold that the colonists can make all their own packs, &c., from the New Zealand fibre

Mr. Forbes writes that the towels (New Zealand Phormium) ordered by Dr. Featherston will be dispatched to London this week. I hope to be able to report by next San Francisco mail that the Irish flax trade "strikes" are over, and that our experiments are again in progress.

(No. 273.)—Mr. W. L. Buller to Dr. Hector.—12th June, 1872.

I do myself the honor to forward herewith bill of lading for one case (containing samples of sacking), shipped to your address by the present mail viâ Suez-freight and charges paid here.

I beg to forward at the same time copy of a letter from Mr. C. Thorne, whose most valuable assistance I have again to bring under your notice.

I hope by next mail to be able to report what steps have been taken in order to get this industry properly represented in the International Exhibition.