

Enclosure.

16, Mark Lane, London, E.C.,
10th June, 1872.

MY DEAR SIR,—

Yours of the 8th I received this morning. I *did* get the bolts of cloth away by the P. & O. steamer, which left on the 8th instant, as I promised you I would, and herewith hand you the receipt for the box for you to send to Dr. Hector, to whom it is addressed.* The package contains—

*1 bolt, 38½ yards canvas	} All pure New Zealand hemp.
1 " 36 " single warp sacking	
1 " 27 " double " "	

The canvas is made from fibre prepared by me, yarn spun by Mr. A. K. Forbes, and the cloth made by Messrs. John Walker and Co., Stanley Works, Arbroath. The cloth called sacking is made partly from fibre prepared by me here, and partly from fibre prepared in New Zealand. Only the tow has been used in the manufacture of this sacking, and it is considered quite fit for woolpacks, coal sacks, and corn sacks. Finding a place in the box which required filling, I put in a hank of the line fibre and some tow, from which the canvas was made; also a hank of the fibre from which the tow was taken to make the sacking, but this latter has been lying about for some time, and does not look well; it, however, shows how soft the fibre is.

I have long upheld that New Zealand hemp can be softened and rendered fit for textile fabrics, and Mr. Forbes has put the matter beyond a doubt by his very practical experiments and proofs. His latest production of cloth, viz., "fine towelling," entirely of New Zealand hemp, I hand you herewith. It is needless for me to enter into detail regarding these positive evidences of what the fibre can be utilised for; but I am sure Mr. Forbes's letters to me, when handing the particulars of the fabrics, will prove of interest to all concerned, and I therefore annex extracts from his letters bearing upon the matter. With regard to the canvas, some people have expressed a doubt as to whether it would stand the effect of water. Mr. Forbes maintained it would. I laid the three bolts on the grass, and had them well watered; heavy rain fell before they were removed from the grass. The result was as follows:—

	Length when received.		Length when wet.		Length when redried and calendered.
*1 bolt	38½ yards	...	36 yards 1 foot 6 inches	...	38½ yards
1 "	41 "	...	39 " 0 " 3 "	...	41¼ "
1 "	40 "	...	38 " 0 " 9 "	...	40 "

I will see you in a day or two. In the mean time I remain,
Very faithfully yours,

W. Buller, Esq.,
7, Westminster Chambers, S.W. C. THORNE.

[Extracts from various letters from A. K. FORBES, Hatton Mills, Arboath, to C. THORNE, 16, Mark Lane, E.C., London.]

"12th December, 1871.

"I have just been to the factory, and found your canvas all ready, so had it baled and sent off. * * There are three bolts, 40, 41, and 38½ yards. They are good weight, and the manager says they will stand a great deal of wear. He would have liked the weft of the line instead of the tow, which would, he said, have made a cloth that would never wear out."

"21st May, 1872.

"I have this morning been to the factory where your cloths have been finished, and have given orders for their despatch by rail to you to-day.

- "3 bolts tow sacking, made from GGG with T in diamond, 1, 2, 3 tows. Single warp, marked 1, 2, 3.
- "4 bolts tow sacking, do., do., do. double warp, marked 4, 5, 6, 7.
- "1 bolt bleached sheeting, made from flax line and wefted with tow, No. 1A.
- "1 bolt do., do., No. 1B, marked 8.

"I think these are all good cloths, and you will find the bleached sheeting nice and soft; a little lumpy, caused by the nap in the tow. The manufacturer is now making a bolt of light sacking from No. 1A, No. 1B, and Nos. 1, 2, and 3 tows. * * * The sacking is all quite easy to weave, and requires no more work than ordinary yarns; but the sheeting is more difficult. I hardly like to say as yet that the fibre can be profitably employed. * * * I think what you say puts it in a right light—that a loss will have to be submitted to before it is decidedly introduced into this country for textile fabrics. As to its adaptability for such, I have no hesitation in saying that I have proved its usefulness for that purpose. I can give the best certificate to the quality 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 therefore hold that the colonists can make all their own packs from the New Zealand fibre."

"3rd June, 1872.

"I have given the questions you ask a good deal of consideration, as careful replies to these are of great importance. For woolpacks the fibre would come into competition with jute; and, if it were put into the market here, would have to compete with jute selling for these purposes at from £15 to £20 per ton. For coal bags, which I believe it is quite fit for, it would compete with common Russian

* Now in the Colonial Museum.