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NEW ZEALAND.

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# THE ABT SYSTEM OF RAILWAYS FOR STEEP GRADE LINES.

(SUPPLEMENTARY MEMORANDUM BY THE GENERAL MANAGER OF RAILWAYS.)

*Laid on the Table by the Hon. E. Mitchelson, with the Leave of the House.*

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Railway Department,  
Wellington, 19th July, 1888.

SINCE the issue of Parliamentary paper D.—8, on the Abt system of railways, I beg to inform you that I have received information privately from a gentleman in charge of a large system of Indian railways, that a length of 2 miles of Abt line had been tried in India, and that it did not stand the tests satisfactorily; it was thought that the idea of having it on the Bolan Pass would be given up. It did not work well on the curves, and the engines could only climb hills “provided their heads were kept straight.” In the account given in D.—8 it is stated that  $12\frac{1}{2}$  chains was the minimum curve used. I understand much sharper curves are needed on the Bolan Pass. It is therefore important to notice that the Abt system is probably unsuited for very sharp curves, and that in this respect the Fell system, which can work with facility upon 5 chains curves, is superior.

The Hon. Minister for Public Works.

J. P. MAXWELL, M. Inst. C.E.,  
General Manager, N.Z. Railways.

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