

tuated by an ordinary single spring catch lever of N.S.W. railways standard type.

(N.B. In America. twelve switches are frequently operated by one lever.)

3. Examples of broad gauge (5ft. 3in) and narrow gauge (4ft. 8½ in.) turnouts from mixed gauge main line.  
(The lecturer explained that this arrangement is the only safe method, for the reason that if two ordinary switches were used, and became misplaced, a train of one gauge could be turned on to the track of a different width and would be derailed.)
4. Change of common rail device. This is for the purpose of always bringing carriages or wagons to the same distance from the edge of the platforms; also, for engine turntables, and many other conditions in station yard construction.
5. Example of a Victorian or South Australian 5ft. 3in. track, crossing a mixed gauge railway, showing design of crossings.
6. Test of the third rail at Tocumwal, showing the thorough testing of the various devices with engines and trains of both gauges, demonstrating the practical suitability of the third-rail method as the solution of the break of gauge problem.

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### Discussion.

MR. HOYLE, Minister for Railways, in a brief speech, outlined the reasons that prompted the installation of the experimental track, and said that the success that had attended this venture augured well for the scheme if it were carried still further.

THE PRESIDENT (Mr. Bragg): It is my very pleasant duty to propose a vote of thanks to Mr. Wilkin this afternoon. Personally, I have found his lecture very interesting. I was at the exhibition at the Tocumwal yards on the 12th November, last year, and I think, if anything the kinematograph views give one a very much better idea of the scheme than the actual scenes at the place itself. It is a sort of subversion of the old say-

ing: "If Mahomet cannot go to the mountain, you must bring the mountain to Mahomet." In this matter Mr. Wilkin has certainly brought the mountain to us. He has shown us more clearly on the pictures what happened at the change of gauge than what could be seen at the practical demonstration at Tocumwal.

Mr. Hoyle has given us very valid reasons why we should seriously consider this change of gauge. I think we all appreciate the sense of his remark that we must be prepared to protect ourselves, and our part, as engineers, in seeing to this protection, is to have our railways properly ready for handling troops and munitions. Mr. Wilkin's design and the arrangement of the third rail is well on the way towards that goal. I have no doubt there are a few of you who would like to ask Mr. Wilkin some questions, and, if there are any questions asked, I am sure he is quite ready to give his reasons.

MR. POOLE: I have very much pleasure in seconding the vote of thanks. I had not the advantage of seeing the Tocumwal demonstration, although I had the advantage of seeing the exhibitions in Thornley's yards. As one who has travelled through Victoria, New South Wales, and South Australia, very vivid impressions are in my mind of the great inconvenience occasioned by the large number of breaks of gauge. From Melbourne to Adelaide is the only journey where you can get into the train at one end and get out of it at the other; in all the others you have two trains. In South Australia, if you are going to Mt. Gambier, you have two: first of all the change from 3ft. 6in. to 5ft. 3in., and back again to 3ft. 6in.

I do not want to enlarge on the features on which Mr. Hoyle so ably touched; but I think you will all agree with me when this matter is pushed forward—

as we all hope it will be—it will enable the development of our rich Riverina country to proceed apace—whether it is into Victoria or out west into South Australia, it does not matter—so long as it is fully developed.

MR. BRAGG: I have much pleasure in putting the vote of thanks to the meeting, and I hope the third rail will eventually prove a brilliant success. (Acclamation.)

MR. WILKIN: I thank you very much for the very kind way you have spoken. I am very glad to have had an opportunity of explaining the third rail—it has really been a pleasure, for I am always pleased to meet men of my own persuasion. All I can say is, after you have seen the system demonstrated, and have heard what Mr. Hoyle said about it, I hope you will do all you possibly can, in whatever capacity you may be, to try and bring about the solution of this great question of the railway break of gauge. There is no doubt whatever that the third rail is the proper, indeed, the only, way to do it; it is the quickest, the cheapest, and the best.

MR. BRAGG: Before we part, I think we should pass a vote of thanks to the proprietors of this theatre and the Union Theatres, Ltd., and Mr. Waite, for the trouble they have taken to enable us to have such a pleasant afternoon. I am sure their kindness is very much appreciated. We are very much indebted to them. (Carried unanimously.)

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