

DISCUSSION.

MR. J. I. HAYCROFT said that he considered that the importance of the expansion of rails was over-estimated, as in one case in America a length of three miles of railway existed in which the whole of the rail joints were absolutely rigid, no allowance whatever being made for expansion, and had proved successful. In this case ordinary fish plates were used, but they were rivetted to the rails instead of being bolted. The permanent way consisted of ordinary sleepers bedded in clay and grassed over. Only the head of the rails was exposed to atmospheric temperature, and allowance was made for expansion by a turn off at the end of the three miles.

Mr. Vicars stated that a modification of the bridge fish plate was in use in America and had given general satisfaction.

Mr. Howarth in reply to the remarks made in discussion, said that his object in bringing the subject before the members was to show that the designing of a perfect rail joint was a much more intricate problem than it was generally believed to be and that it would bear considerable improvement. He had purposely abstained from commenting on existing types of fish plates.
