

average railway bridge is usually several miles from a town or village, it is essential that not one item in the long list of requirements be forgotten as the omission of one necessary tool may delay an erection gang several days and so prevent the railway company from completing its line on the date arranged for. Very frequently steel bridges have to be erected on the site of old wooden trestles and the erection proceeded with in such a way as to keep the line open for railway traffic. When this condition exists it is necessary for the erectors to exercise a great deal of extra precaution as one bad connection or one weak shore might cause the wreck of a train and great loss of life.

In the erection of very long spans it is often necessary to erect what is known as false work. This is done by erecting wooden piers or trestles at intervals, upon which the steel work is laid. An illustration of this may be seen in the two accompanying photographs, which shows a 250 foot Decked Truss Span in the course of erection over a ravine in British Columbia.

Chairman,—

I am sure, gentlemen, that Mr. Smith has gone to considerable trouble in preparing such a thorough paper, and the thanks of the members of this Club are due to him.

I just noticed myself to-day where they were building a bridge across Davenport Road, how quickly they put these bridges up, and how neatly they are fitted together.

Mr. Smith touched upon the great part which the draughtsman plays in bridge building. There is no doubt in my mind but that the draughtsman is the most important man in bridge building, but nevertheless considerable of the credit for a good bridge job is due the erectors, I think.

No doubt there are some here this evening who would like to discuss the matter of bridge construction; I am sure Mr. Smith will be pleased to answer any questions.

Has Mr. Baldwin anything to say on this matter? I believe he has had considerable experience on this line of work.

Mr. G. Baldwin,—

Mr. Chairman and gentlemen, I have listened with a great deal of interest and pleasure to the splendid paper which our friend Mr. Fred G. Smith has given us to-night, for two reasons. First, as Mr. Smith is an old friend and workmate of mine; and secondly, because it brings back pleasant memories of the good times that I had years ago when I worked on the Grand Trunk Railway in the Bridge and Building Department.

It is not my intention to ask Mr. Smith many questions from a technical point of view.