capable of development even in grown men. Dignity is a trait difficult of acquirement by most people, who are apt to be irritable, or garrulous, or familiar, or servile, or something else undignified. It is doubtful if these faults can be entirely overcome in the adult. Men afflicted with them should not be placed in positions where they must meet, serve and often placate the public. Highly-polished manners are not necessary, indeed would be out of place, but surely a consistent effort should be made to get good material to begin with, and then to give due recognition to the men who are a real credit to the company.

ADVERTISING ELECTRIFICATION TO TOURISTS

Effective publicity destined to stimulate tourist travel over its transcontinental lines is being utilized at present by the Chicago, Milwaukee & St. Paul Railway, following the completion of the initial electrification of its route over the Rocky Mountains. The days are passed when a change in motive power from steam to electricity could possibly be regarded only from the engineering standpoint. The traveling public is interested in a big task of this kind, involving the electrification in due course of nearly 500 miles of main line, the use of the most powerful electric locomotives ever built, and the supply of power from mountain streams. Even the broad principle of regenerative braking strikes the imagination of the reflective passenger, and the better maintenance of schedules, smoother riding caused by greater evenness of speed, enhanced comforts due to greater cleanliness, and the improvement of views from car windows and observation platforms, due to the elimination of smoke and cinders, are real "talking points" for the railway passenger agent. More and more the interrelation of all departments of a modern transportation company and their combined influence upon the patronage of the public is coming to be recognized. The use of electric power means much to the comfort of the passenger, and the company is wise in expatiating upon its advantages. There is a lesson for the smaller electric railway in this telling advertisement by the St. Paul of new facilities, which will undoubtedly play its part in directing patronage to that progressive system.

VIBRATION THEORY OF RAIL CORRUGATION

In the issue of last week we published an abstract of the somewhat radical ideas on rail corrugation recently put forward by A. Meyer, of the Greater Berlin Street Railways. His theory to the effect that corrugation is due primarily to high-frequency vibrations in the rail (which thus acts like a banjo string) has logical grounds, at least, because the extraordinary regularity of most corrugations gives evidence that vibration must exist somewhere. Mr. Meyer does not deny the existence of contributory causes for the phenomenon, being in accord, as a matter of fact, with R. C. Cram in his belief that the shape of the rail head has an appreciable influence. However, his suggestions for obviating the difficulty are aimed solely toward the elimination of such rail vibrations as may produce waves of sufficient amplitude and frequency to cause displacement of metal in the rail head wherever the wheel strikes the crest of one of them. This answer to the baffling problem of corrugation will, no doubt, be of interest to way engineers, and the proposed remedy of having so flexible a track construction that the vibration period becomes too long to cause severe impacts is well supported by practical experience. On the other hand, the theory, taken in its entirety, is not without weak points. Carried to its logical conclusion it would mean that the worst condition which could prevail would be a rigid track (to produce the greatest severity of vibration) and hard wheel treads (to produce the greatest displacement of rail metal). Such a condition might be considered to be presented by the concrete track supports and chilled-iron wheels that were common some years ago, yet at that time corrugation was apparently less of a problem than it is in the present day, when relatively soft steel wheels and flexible track are more common. As the first book devoted entirely to the exposition of one theory of rail corrugation the publication is interesting. We do not believe, however, that it will accomplish very much in settling the controversy. What is needed is less theory and more actual proof.

"COMING BACK LIKE REAL MEN"

Another great corporation, the Du Pont de Nemours Powder Company, has shown its wisdom by establishing a publicity department. This has been done within the past month. It is, however, with respect to an earlier activity of the same company that its policy affords a suggestion of value to the electric railway fraternity. This activity became known in connection with the trial in New York of a suit for libel brought against the Du Pont company by one of the magazine muckrakers whose name is more or less familiar to the public.

The magazine man got hold of a contract between the Du Pont and a German concern which he construed as an agreement to sell to or exchange government secrets with Germany. The contract was so represented in the articles published in *Harper's Weekly*. Our government was cognizant of the terms of the contract, and the Du Ponts might have disregarded the attack without any more serious consequences than injury to the feelings and reputation of its officials. Instead of ignoring it, however, the company wrote a letter to magazine editors and newspapers setting forth the facts of the case and intimating that the author of the articles in question was not a writer whose productions were desirable to publish. It was on this latter statement that the author sued for libel. The judge took the case from the jury and decided for the Du Pont company, remarking that the statements made in *Harper's Weekly* were libelous *per se*, and that the defendants were "real men for coming back at him as they did."

The application of this incident to the affairs of electric railways is obvious. Instead of letting "libels *per*