

RENSSELAER POLYTECHNIC INSTITUTE,

PALMER C. RICKETTS, DIRECTOR.

DICTATED.

TROY, N. Y. Oct 4, 1900.

Theodore Cooper, C. E.,
#35 Broadway, New York City.

Dear Sir:-

For some time past I have been employed by the President of the Union Bridge Co., to make some experiments relative to the remodelling of their Waterford and Lansingburgh bridge.

This bridge is of the Burr truss type and is mentioned in your article in Vol. XXI of the Transaction of the American Society of Civil Engineers.

The facts of the case are these- The charter of the Company does not give them the right to rebuild, hence to replace the structure with a steel one, is out of the question, and as there is not sufficient head room to accommodate the electric cars of a new road desirous of crossing the bridge, it becomes necessary to devise some method whereby this head room can be increased. To this end we have had a model on the scale of 1/2" to the foot made and have conducted our experiments with it. We have several times loaded up this model with a concentrated load in the middle, until it broke, and find with the plan we have finally adopted that we have an increase of 50% in strength, and at the same time obtain the desired head room.

Before going any further with the work it has been deemed advisable to get the opinion of some disinterested Engineer in the matter and to that end I am writing you.

My duties in the College as Director Ricketts assistant, keep me pretty well employed but I can arrange to be in New York on Tuesday or