

PITTSBURGH, PA., 12TH. MARCH 1889.

THEO. COOPER, ESQ.

CONSULTING ENGINEER, No. 35 BROADWAY,  
NEW YORK CITY.

DEAR SIR :

IN RESPONSE TO YOUR RECENT REQUEST, I SEND YOU HEREWITH ENCLOSED, BLUE PRINTS OF SUCH PORTIONS OF THE PLANS OF THE CHANNEL SPAN OF THE OHIO RIVER BRIDGE AT STEUBENVILLE, OHIO, AS I COULD RECOVER FROM THE DESIGNS MADE BY MR. J. H. LINVILLE IN POSSESSION OF THE KEYSTONE BRIDGE COMPANY. THE DETAILS APPEAR SUFFICIENTLY UPON THE HALF INCH SCALE DRAWING, AND TRUSS DIAGRAM GIVES THE SIZES OF THE MEMBERS. THE EXTERNAL DIMENSIONS OF TOP CHORDS AND COLUMNS ARE UNIFORM, THE DIFFERENCE IN AREA, BEING IN THE THICKNESS OF METAL. THE TABLE OF STRAINS ON THE MARGIN OF THE BLUE PRINT HAS BEEN CALCULATED RECENTLY, WITH A VIEW OF ASCERTAINING WHETHER IT WOULD BE SAFE TO ERECT THE NEW DOUBLE TRACK BRIDGE FROM THE PRESENT STRUCTURE, AND AT THE SAME TIME CARRY THE TRAFFIC. I HAD INTENDED, IF SUCH MODE OF ERECTION SHOULD BECOME NECESSARY, TO ERECT A PLATFORM ON THE TOP CHORDS FOR THE TRAVELLER, BUT, IN THE MEAN TIME, PERMISSION HAS BEEN GIVEN US TO OBSTRUCT THE CHANNEL BY ORDINARY FALSE-WORKS DURING THE ERECTION, SO THAT THE PROJECT OF ERECTING A NEW SPAN FROM THE OLD ONE WAS ABANDONED.

THE BRIDGE WAS ERECTED IN 1863 AND 1864 AND IF IT WERE NOT FOR THE NECESSITY OF EXTENDING OUR SECOND TRACK OVER THIS BRIDGE, I SHOULD FEEL INCLINED TO CONTINUE ITS USE FOR SOMETIME INTO THE FUTURE, AS I CONSIDER IT A PERFECTLY SAFE BRIDGE,