P. MUNZINGER.

CONNECTING PINS FOR BARS OF BRIDGES.

No. 184,888. Patented Nov. 28, 1876.

FIG. I.

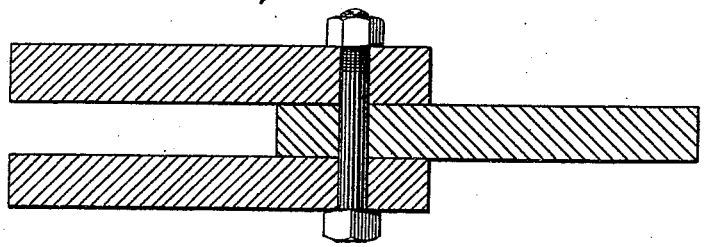


FIG. II.

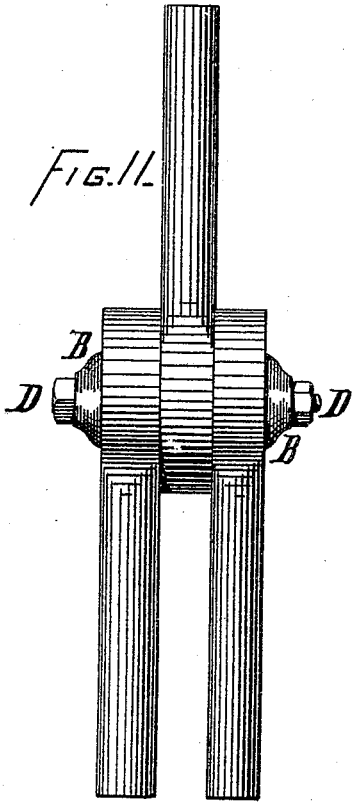
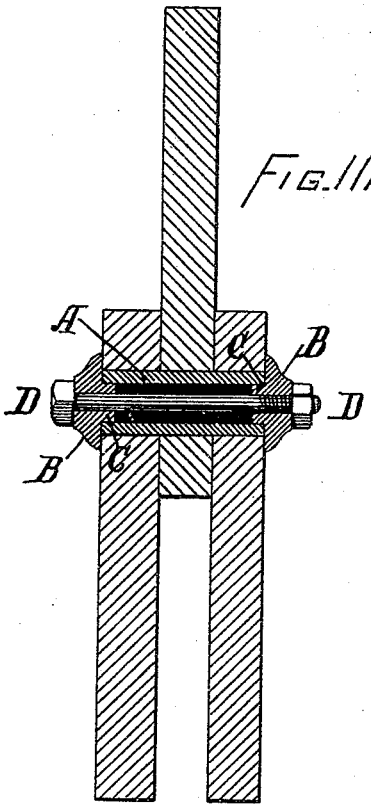


FIG. III.



Witnesses

W. R. Wright

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UNITED STATES PATENT OFFICE.

PETER MUNZINGER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO MORRIS, TASKER & CO., (LIMITED,) OF SAME PLACE.

IMPROVEMENT IN CONNECTING-PINS FOR BARS OF BRIDGES.

Specification forming part of Letters Patent No. **184,888**, dated November 28, 1876; application filed October 10, 1876.

To all whom it may concern:

Be it known that I, PETER MUNZINGER, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Connecting-Pins for Eye-Bars, of which I hereby declare the following to be a full, clear, and precise description, and sufficient to enable those skilled in the art to which my improvement appertains to comprehend and construct it, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to bridge, scaffold, and truss building in general, and the like, and has for its object a reliable connecting-pin for straining or eye bars; to which end it consists in the device hereinafter described and claimed.

Of the drawings, in all of which similar letters of reference denote corresponding parts, Figure 1 represents, in sectional plan, the old form of connecting by a simple bolt, and shows, further, the excessive in-cutting of the threads upon the bolt-shank, to obviate the dangers resulting from which is the aim of this my improvement; Fig. 2, a top view of bars connected by my composite pin; and Fig. 3, a section through the same, disclosing the relative position and construction of the parts.

The disadvantages attending the cutting of the screw-thread too far up the shank of the bolt—a result almost impossible of avoidance, by reason of the carelessness of workmen, and the difficulty of gaging the depth of the cut—are that the straining-bar, which has its seat upon such over-cut portion, is either worn by the thread to the eventual loosing up and twisting out of shape of the connection, or else shears the bolt itself off across the weakened in-cut portion.

To obviate these disadvantages I have invented a very simple device, to be described by reference to the drawings, as follows: A is a hollow cylindrical pin, of exterior diameter correspondent with the bores of the eye-bars. B B are perforated side plates, provided with circular bosses or interior retaining-lugs C C, adapted to be inclosed within the core of the pin, and thereby to retain the plates in position against the pin. D is a confining-bolt, which passes through both plates and pin, and binds them firmly together.

It will be readily understood from this structure that the chances of breakage in the connection thus formed are reduced to a minimum, for the hollow cylindrical pin is of the strongest form, to resist compressing strains, while the side plates prevent a possibility of slipping and twisting off of the eye-bars, and the bolt, being used simply to confine, and itself suffering no strain, is subjected to no possibility of fracture or damage whatever.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the hollow cylindrical pin A, the side plates B, provided with circular bosses C, adapted to fit direct within the core of the pin, and thus retain themselves laterally in position, and a single central confining-bolt, D, adapted to pass completely through both side plates and pin, and to secure the entire device together, so as to form an improved composite pin for the union of straining-bars, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

PETER MUNZINGER.

Witnesses:

J. BONSALL TAYLOR,

JOHN JOLLEY.