

(No Model.)

2 Sheets—Sheet 1.

W. T. SLIDER.
BRIDGE FOR FIRE HOSE.

No. 586,205.

Patented July 13, 1897.

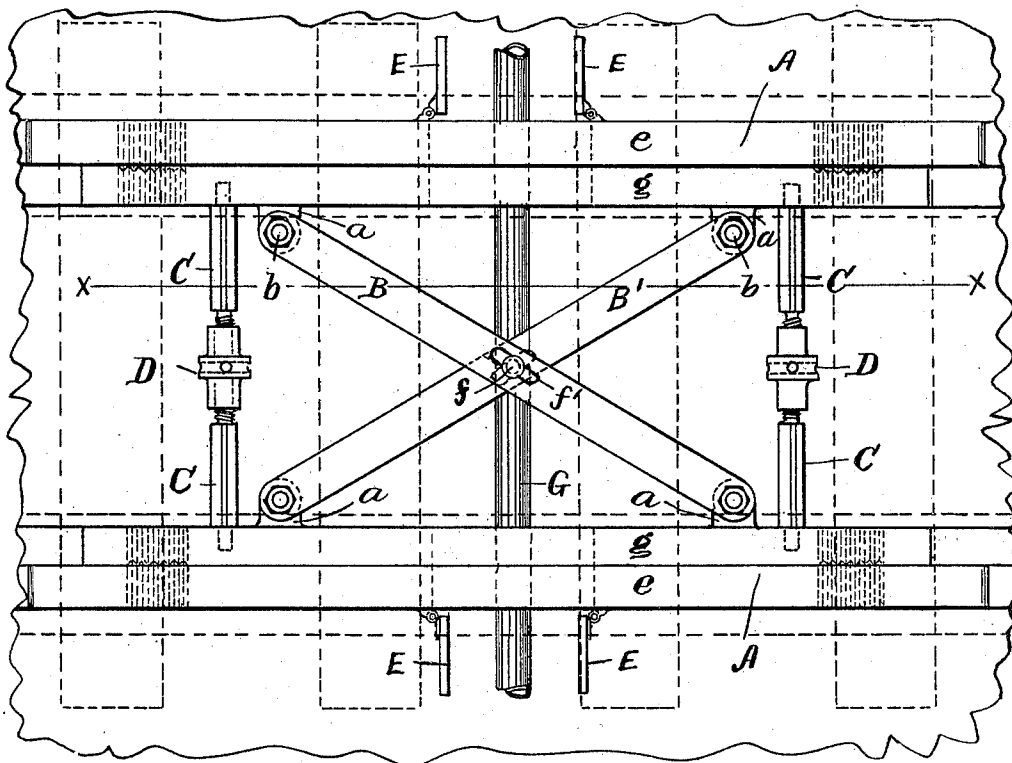


Fig. 1.

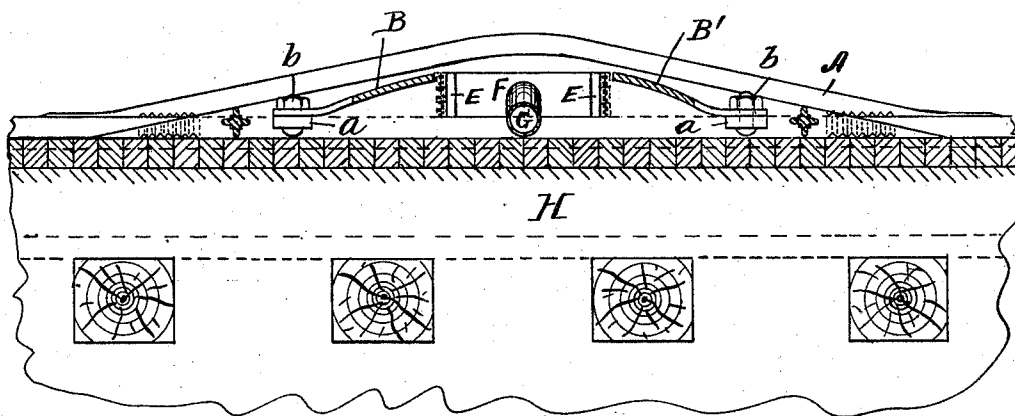


Fig. 2.

Witnesses.

Chas. Marien.

H. H. Deane.

Inventor:
WILLIAM T. SLIDER
By Thurman^d & Librus
Attornes.

(No Model.)

2 Sheets—Sheet 2.

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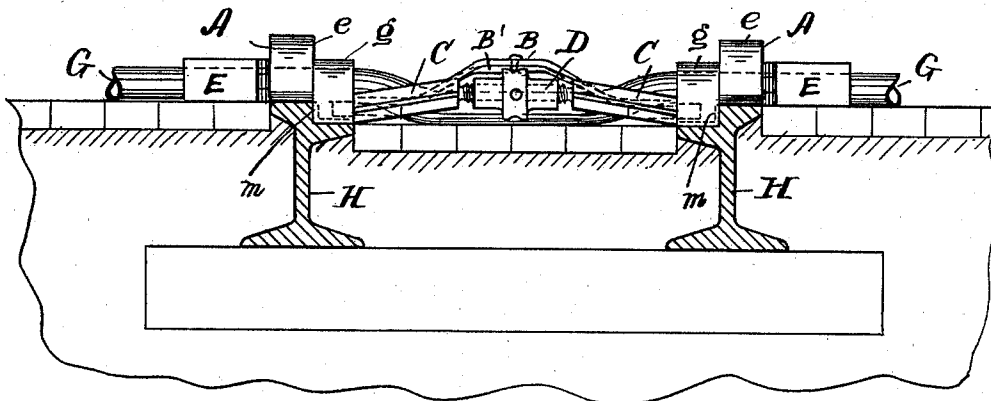


Fig. 3.

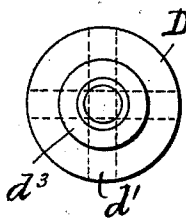


Fig. 5.

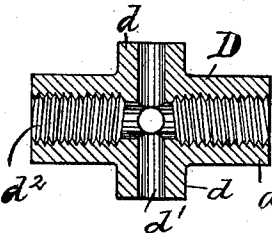


Fig. 4.

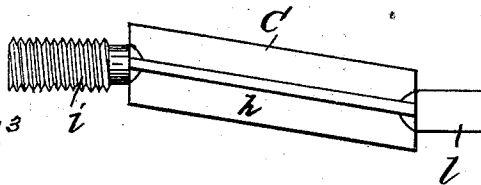


Fig. 6.

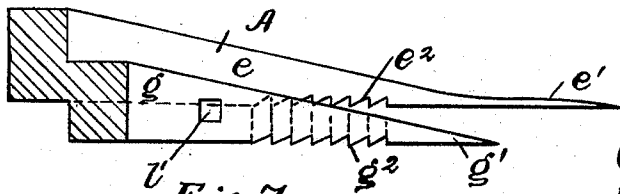


Fig. 7.

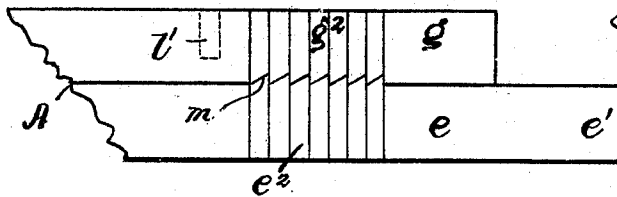


Fig. 8.

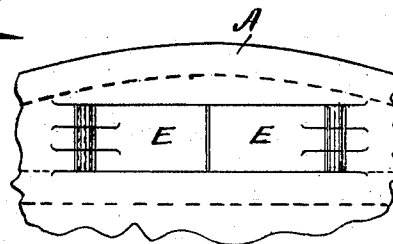


Fig. 9.

Witnesses.

Chas. Marien.

D. D. Deane

Inventor:

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BY Thuman & Sbrina
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UNITED STATES PATENT OFFICE.

WILLIAM THOMAS SLIDER, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-THIRD TO JOSEPH MATZ, OF SAME PLACE.

BRIDGE FOR FIRE-HOSE.

SPECIFICATION forming part of Letters Patent No. 586,205, dated July 13, 1897.

Application filed February 12, 1897. Serial No. 623,140. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM THOMAS SLIDER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Bridges for Fire-Hose; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an apparatus that is designed to be used upon the track or rails of street-railways as well as steam-railways; and it consists of the parts and combination of parts whereby I provide a temporary bridge adapted to carry the cars over water-hose which may be laid across the tracks during fires or at other times, as will be more fully described hereinafter, and pointed out in the claims.

The object of my invention is to provide an apparatus of this character which may be compact in form, so as to be readily handled, quickly connected and placed in position and removed, and which shall be durable and efficient in use; and I attain these objects in my invention illustrated in the drawings accompanying.

Referring to the drawings, Figure 1 represents a plan view of a section of railway to which my bridge is applied; Fig. 2, a longitudinal sectional view on the line X X of Fig. 1; Fig. 3, an end view of the bridge applied to the track, the rails being shown in transverse section; Fig. 4, a central sectional view of the spreading-nut; Fig. 5, an end view of the spreader; Fig. 6 a side view of one of the bridge-points; Fig. 7, a side view of one of the bridge-points, showing its larger portion cut across diagonally; Fig. 8, a bottom plan view of a bridge-point, and Fig. 9 a side elevation of the central portion of the bridge.

In constructing my invention the various parts are composed of such metal as may be best adapted to provide the maximum strength with the minimum weight.

In the drawings, H H designate street-rails as usually constructed.

A A are metallic bridges or elevating-rails, which are arched at the center and have two upper bearing-surfaces corresponding to the upper surface of the street-rails, the lower surface *g* being adapted to carry the wheel-flanges or wagon-wheel and the higher surface or track *e* carrying the treads of the car-wheels. The lower track *g* has a point *g'* and at the under side is provided with claw-teeth *g''*, while on the side surface, where it comes in contact with the inside of the higher portion of the car-rail, there are claw-teeth *m*. The tracks *e* have elongated points *e'* and the under side of these have claw-teeth *e''*, being adapted to gouge into the street-rails when the weight of the cars are upon them.

The central part of the bridge is preferably inclosed by a web, but is provided with a suitable aperture F to admit the water-hose G. This aperture, when the bridge is not in use, is closed by suitable doors E, which when in use are opened and stand outward and when suitably blocked up at their outer ends provide a substantial support to the bridge laterally. At the inside of each bridge-piece is a pair of lugs *a*, to which are connected crossed braces B B', which are pivoted to the lugs by means of bolts *b*. The cross-braces are loosely connected at their centers by means of a suitable bolt *f*, inserted through suitable slots *f'* in the bars. When the cross-braces are detached from the bridge-rails, they are conveniently held together by means of the center bolt *f*.

Near each end of the elevating-rails are transverse holes *l*, which are preferably square in cross-section and are adapted to receive the ends *l* of the spreading-arms C, the body of the latter being in the form of a cross as seen transversely, having wings *h*, which provide a stiff brace with comparatively light weight. The opposite end of each arm is provided with screw-threads adapted to engage the screw-threads in the spreading-nut D, the ends *d'* of which have screw-threads *d''*, those in one end being right-hand and those in the opposite end being left-hand. The center of the nut *d* is enlarged and is pro-

vided with suitable holes l' therethrough in which to insert a lever. The spreading-arms, with their coupling-nut, are readily detachable from the bridge-rails by contracting their length and withdrawing their ends from the socket-holes.

The whole apparatus is of such design as to permit of being made very light, and, being detachable, the several parts may be handled by any one and quickly placed in position over a line or number of lines of fire-hose, and when the nuts D of the spreading-arms are turned so as to expand the arms are forced into contact with the inner sides of the street-rails, thereby effectively securing them. It is obvious that a device so constructed is capable of sustaining a street-car while passing above the rails, and my device may also be made sufficiently strong to support steam-railway cars in a like manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a railway-track of a pair of arched bridge-rails having the upper surfaces corresponding to the upper surfaces of the street-rails, said arched rails having at the central part thereof a suitable aperture to receive lines of water-hose, doors hinged at one side of said bridge-rails providing a lateral support, when in their open position; claw-teeth at the under side of each end of said bridge-rails and at the outer side of the lower track thereof adapted to gouge

into said street-rails; apertures at the inside of each end of said bridge-rails; a lug at each end of said bridge-rails at the inner side thereof, crossed braces pivoted to said lugs connecting the said pair of bridge-rails; spreading-arms adapted to enter said apertures in the rail ends; a spreading-nut suitably threaded and engaging the opposite ends of said spreading-arms by which said rails may be forced apart and in contact with said street-rails substantially as and for the purposes shown and described.

2. In a bridge for fire-hose of the character described the combination of the arched rails A having the claw-teeth e^2 , g^2 and m at the lower sides of the ends thereof, and central opening F, said bridges having the apertures l' and provided with the doors E providing, when open, a lateral brace for said bridge-rails; the cross-braces B B' connecting said bridge-rails; the spreading-arms C adapted to engage at one end in said apertures l' and the spreading-nut D connecting the opposite ends of said arms to provide means for spreading said bridge-rails against the inner sides of said track-rails substantially as and for the purposes shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM THOMAS SLIDER.

Witnesses:

JNO. S. THURMAN,
E. T. SILVIUS.