

No. 679,570.

F. R. McCLURG.
HOSE BRIDGE.

Patented July 30, 1901.

(Application filed Apr. 13, 1901.)

(No Model.)

Fig. 1.

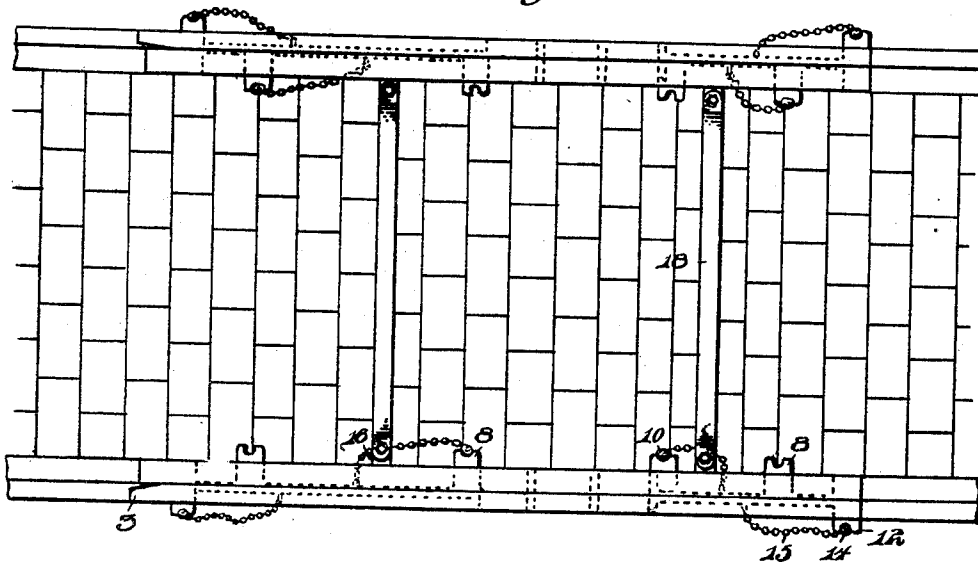


Fig. 2.

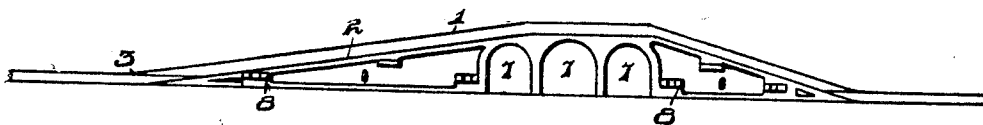


Fig. 3.

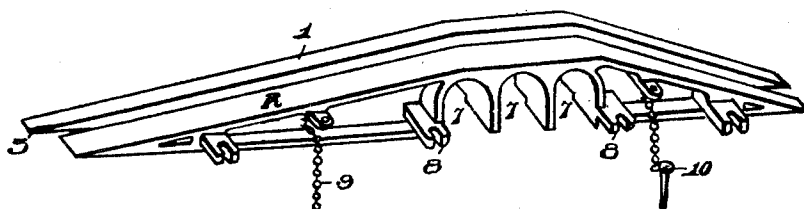


Fig. 4.

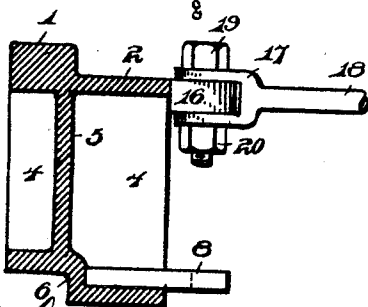
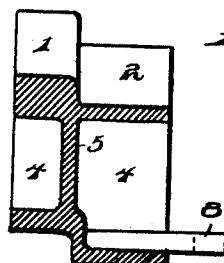


Fig. 5.



Witnesses:

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Fig. 6.



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By

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UNITED STATES PATENT OFFICE.

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HOSE-BRIDGE.

SPECIFICATION forming part of Letters Patent No. 679,570, dated July 30, 1901.

Application filed April 13, 1901. Serial No. 55,644. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. McCLURG, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Hose-Bridges, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has for its object to provide a convenient, simple, effective, and reliable hose bridge or crossing for use on street and other railways to conduct the cars over the lines of hose lying across the track in case of fire. It is well known that in time of fire, where the same is in a building adjacent to the tracks of street or other railways, the movement of the cars is frequently interrupted for a considerable length of time owing to the water-hose lying across the track or tracks, thus causing great inconvenience, impediment to business, and oftentimes involving a very considerable loss in time and money. My invention aims to remove this class of obstructions to the traffic and provide a bridge under which the water-hose is passed, which bridge serves as the rails over which the car is guided across the line of water-hose without injury to the latter.

Briefly described, my invention comprises two bridge rails or members, one for each rail, these bridge rails or members being provided with openings to receive the water-hose and being connected the one to the other by tie-bolts, which are detachably connected at each end, whereby they may be disconnected at either end. Each bridge rail or member carries slotted or notched lugs to receive securing-spikes, which are adapted to be driven into the ties between the cobblestones or other paving in order to hold the bridge rails or members against longitudinal movement on the rails proper. These securing-spikes are suspended from each bridge rail or member by chains or equivalent means. The openings in each bridge rail or member to receive the water-hose are placed closer to one end of the bridge than to the other, so that a gradual incline is formed at that end of the bridge rails or members onto which the car passes, in order that it will easily ride the

bridge rails or members. All of this construction, together with other features entering into my invention, will be hereinafter more specifically described and then particularly pointed out in the accompanying claims, and in describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference will be employed for designating like parts throughout the several views of the drawings, in which—

Figure 1 is a top plan view of my improved hose bridge or crossing in working position shown as applied to a street-railway track. Fig. 2 is a detail side elevation of one of the bridge rails or members as applied to the track. Fig. 3 is a detail perspective view of one of the bridge rails or members. Fig. 4 is a transverse vertical sectional view of one of the bridge rails or members, showing a part of one of the tie-rods. Fig. 5 is a transverse vertical sectional view of one of the bridge-rails, taken on a different line than Fig. 4. Fig. 6 is a detail side elevation of a part of one of the securing-spikes.

To put my invention into practice, I provide two bridge-rails or bridge members both identical in construction, and the same reference-numerals will be employed in this description for each bridge-rail or bridge member. These bridge-rails are formed with a tread 1 and a flange 2, both at equal inclines, the tread 1 at one end of the bridge-rails being extended beyond the flange 2, as shown at 3, while at the opposite ends of the bridge-rails the ends of the tread and flange may be even. The tread and the flange are both provided with inclined or tapered points, so that the wheels of the car-truck will ride readily onto the same. These bridge-rails may be cast, and in so doing they may be lightened by coring the sides, as shown at 4, forming a thin web 5, which connects the tread 1 and flange 2 to the base 6, this base being shaped in cross-section so as to conform to the tread and flange of the rail proper, upon which the bridge-rails rest. These bridge-rails, intermediate of their ends, between the cored-out or recessed portions 4 are provided with a series of openings 7,

these openings being at a point closer to one end of the rail than to the other. Each bridge-rail carries on its inner face integral notched lugs 8, and there are connected to the web 5 chains 9, which carry spikes 10, which are adapted to be driven into the cross-ties into the space between the cobble or paving stones or at any other point where a hold may be obtained. The chains may be fastened to the spikes by providing the latter with an eye 11, or the chains may carry a ring to receive the shank of the spike, as will be readily apparent. Each rail-bridge also carries on the outside, near each end, a notched lug 12, which is adapted to receive securing-spikes 14, held by the chains 15, attached to the web 5 on the outer face of the tread. Each bridge carries on its inner face, just below the flange 2, apertured lugs 16, and these lugs are engaged by the bifurcated ends 17 of the tie-rods 18, which connect one bridge-rail to the other. These tie-rods may be secured in position by bolts 19, passed through the bifurcated ends 17 and through the apertured lugs 16, secured by the nuts 20, or a wedge-pin may be employed for this fastening, as will be readily apparent.

In practice the nuts 20 at one end of the tie-rods may be unscrewed, the tie-rods disconnected at this end swung around against the opposite bridge, and the nuts which have been removed again placed in position. The securing-spikes which enter the notched lugs and are driven down into the ties or paving are adapted to prevent the longitudinal movement of the bridge-rails upon the rails proper, so as to hold the bridge to permit the car to pass upwardly onto the same and over the water-hose. The openings 7, which receive the water-hose, are preferably placed closer to one end of the bridge than the other, so that a gradual incline will be formed upon which the car is to ride, the bridge being placed on the track so that the car rides upwardly onto the incline of less degree in passing over the bridge.

In practice it will be evident that the securing-spikes 14 entering the notched lugs 12 on the outside of the bridge will be sufficient to hold the bridge firmly against longitudinal movement, though I may provide the lugs 8 and spikes 10 as additional securing means, as these may possibly be employed where it might not be convenient to obtain a secure fastening at the outside of the bridge.

I desire to call attention to the fact that the tie-rods being disconnected near one end and the securing-spikes being suspended by chains or like means from the bridge there are no disconnected parts to be lost when it is desired to place the bridge in position.

As many of the openings for the water-hose as may be desired may be provided in the construction of the bridge, and the location of the notched lugs to receive the spikes may be changed from the position shown in the drawings and other details of construction

may be changed without altering or departing from the spirit of my invention.

Having thus fully described my invention, 70 what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the track-rails, of bridge-rails having their bases formed to fit the track-rails, said bridge-rails having openings to receive the water-hose, both ends of said bridge-rails being tapered to a point with the riding-on end at less pitch than the other and the tread portion of the bridge-rails at the riding-on end extended beyond the flange portion, notched lugs carried by the bases of the bridge-rails, chains pivoted to the webs of said bridge-rails, and spikes carried by said chains for securing the bridge-rails against longitudinal movement on the track-rails, notched lugs carried by the bridge-rails to receive said spikes, apertured lugs carried by the bridge-rails, and tie-rods having bifurcated ends removably connected to said apertured lugs, substantially as shown and 90 described.

2. In combination with the track-rails, of the bridge-rails having their bases formed to fit the track-rails said bridge-rails having openings therein, formed therein to receive the water-hose, the said bridge-rails having an inclined tread-flange which is inclined from each end of the bridge-rails toward the center with the incline at the passing-on ends of the bridge-rails at less pitch than the incline at the other end, notched lugs carried by the said bases of the rails, chains carried by the bridge-rails, spikes carried by said chains for engagement with the notched lugs and in the road-bed to prevent longitudinal movement of the bridge-rails, the said rails carrying apertured lugs, and tie-rods provided with bifurcated ends, and a nut and bolt securing said ends to said apertured lugs, substantially as described. 110

3. The combination with the track-rails, of the bridge-rails having their bases formed to fit the track-rails, said bridge-rails having apertures formed therein to receive the water-hose, notched lugs carried by the bases of the bridge-rails, a chain connecting with the web of the said bridge-rails for securing the same against longitudinal movements, apertured lugs carried by the said bridge-rails, a tie-rod provided with bifurcated ends, the said ends having apertures formed therein adapted to register with the perforation in the lugs, a nut and bolt for securing the said ends of the rod and the perforated lugs together, whereby one of the nuts and bolts may be disengaged and the tie-rods swung around, substantially as described. 125

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

FRANK R. McCLURG.

Witnesses:

JOHN NOLAND,
A. M. WILSON.