

(No Model.)

W. H. BAKER.

STREET CAR BRIDGE FOR BRIDGING OVER FIRE HOSE.

No. 543,837.

Patented Aug. 6, 1895.

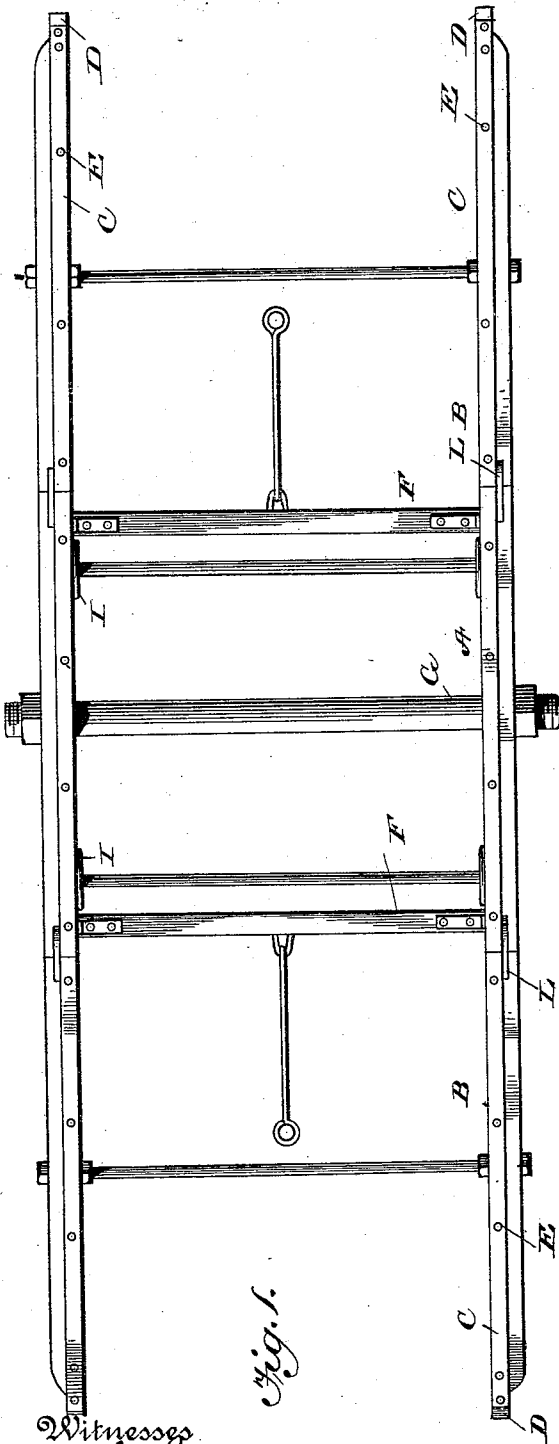


Fig. 1.

Witnesses

John D. Smith
G. M. Amasure

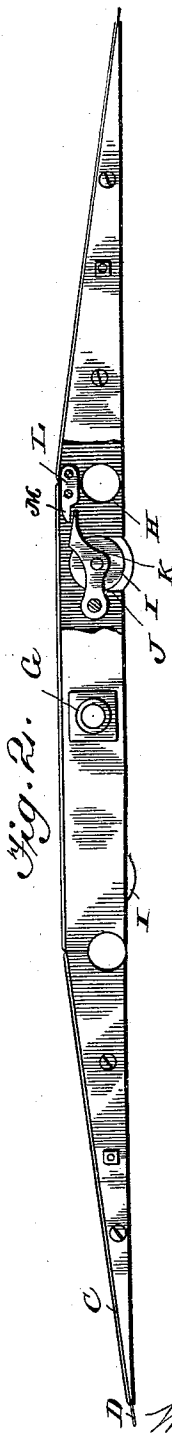
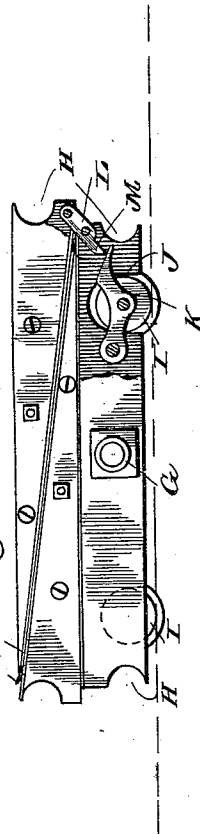


Fig. 2.

Fig. 3.



Inventor

William H. Baker

By Alexander Davis

Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM H. BAKER, OF DETROIT, MICHIGAN.

STREET-CAR BRIDGE FOR BRIDGING OVER FIRE-HOSE.

SPECIFICATION forming part of Letters Patent No. 543,837, dated August 6, 1895.

Application filed May 17, 1895. Serial No. 549,638. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BAKER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Street-Car Bridges for Bridging Over Fire-Hose, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in hose-bridges, and aims to provide a cheap and simple bridge for passing street-cars over fire-hose which can be easily and quickly placed in its operative position.

This object is attained by the use of the device illustrated in the accompanying drawings; and the invention consists in certain novel features of the same, as will be hereinafter described and claimed.

In the annexed drawings, Figure 1 is a plan view of a hose-bridge constructed in accordance with my invention. Fig. 2 is a side view of the same, showing the bridge in its operative position; and Fig. 3 is a similar view showing the bridge arranged to be moved, portions of the sides being broken away in both Figs. 2 and 3 and shown in section.

The bridge consists primarily of a truck constructed in three sections, a central section A and wings or end sections B, hinged to the ends of the said central section. These sections, are constructed of wooden beams or rails adapted to rest on a car-track and having metallic rails C secured on their top edges. The wings or end sections are tapered so as to present an inclined surface leading from the car-track to the top of the central section, so that the cars may easily pass over the bridge. In order to provide the necessary ground-wire when the bridge is used on electric roads, I insert the copper-plates D under the ends of the rails C and also provide the copper points or pins E, passing vertically through the sides of the bridge at frequent intervals. The side beams of the bridge are joined and braced by the transverse bars F and a central pipe or tube G, as clearly shown. The central bracing tube or pipe provides a very strong brace having the minimum weight and also provides means for passing a hose, the ends of hose-sections being coupled to the ends of the pipe.

The main hose-lines are passed through the bridge by being engaged in the notches or sockets H formed in the meeting edges of the sections and are thereby held against removal. The truck is run up to the line of hose, and the proper wing is then swung downward, so as to engage or clasp the hose, and this swinging of the wing-section simultaneously lowers the truck upon the wheels, so that the wheels aid in supporting the body and permit it to rest squarely on the car-track.

The truck, it will be readily understood, is mounted on flanged wheels I, which run on the car-tracks, in order that it may be readily transported from the car-sheds to the scene of the fire. The wheels rotate in recesses J in the sides of the truck and have their axles journaled in the oscillatory bars K, which are pivoted on the sides of the truck and extend outward somewhat beyond the axles. The ends of the end sections or wings are pivoted to the outer ends of levers L, which are fulcrumed on the sides of the central section and have their inner ends formed into fingers M, adapted to bear on and depress the free ends of the oscillatory bars K, as will be readily understood on reference to Figs. 2 and 3.

The side beams or bars of the truck are preferably composed of two timbers bolted together. By crossing the grain of the timbers I lend additional strength to the device, and by using two timbers I avoid a great deal of the cutting away necessary to provide room for the oscillatory bars and the levers acting thereon.

The construction and arrangement of the several parts of the bridge being thus made known, it is thought the manner of using it and its advantages will be instantly understood and appreciated.

As hereinbefore stated, the truck is run over the car-tracks to the scene of the fire and the wings then swung downward, so as to clasp the hose in the joints. Two lines of hose are thus provided for, and a third line may be passed by coupling it in sections to the central bracing-tube. As the wings are swung downward or outward they relieve the downward pressure on the levers L and carry the said levers around on their fulcrums, so that the oscillatory bars K may swing upward, which action takes place immediately, owing

to the weight of the bridge causing it to drop to the track. The truck or bridge will then rest on the track and bear on the upper portions of the wheels, so that it cannot move.

5 When it is desired to return the bridge to the car-sheds, the end sections are swung upward and over onto the central section, so as to occupy but little space. As the sections are swung up and over the levers L press downward on the free ends of the oscillatory bars K, and force the said bars downward, thereby carrying the wheels downward, so that they serve as fulcrums to raise the truck. The device is then coupled to the first car which
10 passes and returned to the car-sheds, a coupling-bar being provided at each end for this purpose. The wheel-flanges bear against the track-rails at all times to hold the truck thereon.

20 The device is simple in its construction and can be instantly placed in position, and as its height is only slightly greater than the diameter of the hose the cars may pass over the hose without any inconvenience to the
25 passengers or danger to the hose.

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

1. In a hose bridge, the combination of a
30 central wheeled section, and two end sections hinged to the end of said central section and adapted to fold over upon the same and being tapered downward toward their outer

ends, the adjacent ends of the sections being recessed to embrace the lines of hose substantially as and for the purpose described. 35

2. In a hose bridge, the combination of a central section, wheels supporting said section, and adapted to travel on the car track, means carried by the truck for movably supporting said wheels, means for raising the truck for transportation and for lowering it to anchor it, and tapering end sections carried by the central sections, substantially as and for the purposes described. 40 45

3. A hose bridge consisting essentially of a wheeled truck, wings or end sections, and intermediate connections hinging the wings to the truck and adapted to lower the truck onto the track or wheels when the wings are swung outward and downward. 50

4. In a hose bridge, the combination of the central section, oscillatory bars pivoted to the sides of the same and carrying a wheeled axle, end sections, and levers fulcrumed on the sides of the central section and having their inner ends bearing on the free ends of the oscillatory bars and their outer ends pivoted to the inner ends of the end sections. 55

In testimony whereof I affix my signature 60 in presence of two witnesses.

WILLIAM H. BAKER.

Witnesses:

GEORGE MCFARLANE,
JAMES SAVILLE.