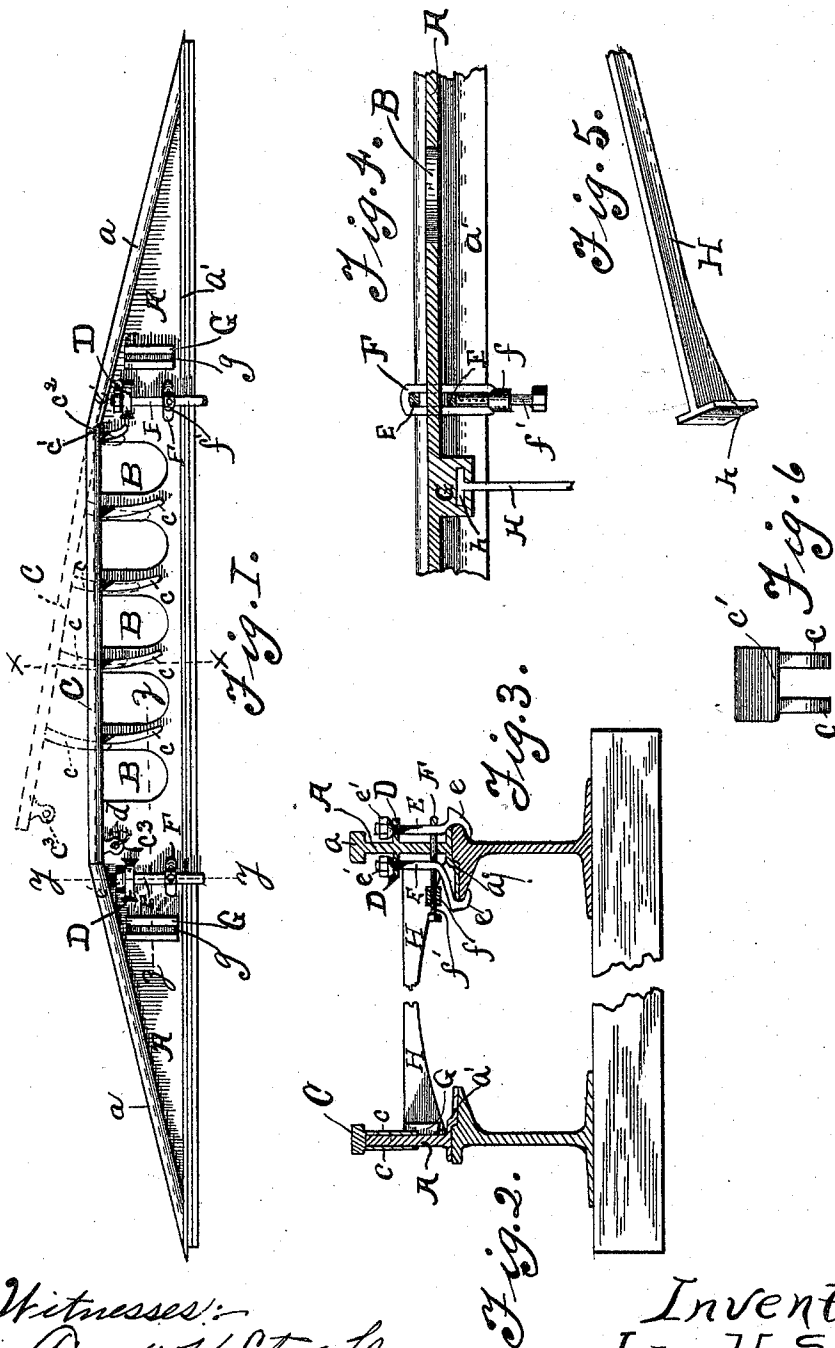


(No Model.)

J. H. SPANGLER.  
HOSE BRIDGE.

No. 585,540.

Patented June 29, 1897.



Witnesses:  
Frank H. Stringer  
John Roland

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Inventor:  
John H. Spangler.  
By Henry C. Ewert, Atty.

# UNITED STATES PATENT OFFICE.

JOHN H. SPANGLER, OF PITTSBURG, PENNSYLVANIA.

## HOSE-BRIDGE.

SPECIFICATION forming part of Letters Patent No. 585,540, dated June 29, 1897.

Application filed January 11, 1897. Serial No. 618,816. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. SPANGLER, 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.

This invention relates to certain new and useful improvements in hose-bridges, and relates more particularly to that class known as "jumpers" or "crossovers."

The invention has for its object to provide new and novel means whereby one or several lines of hose may be laid across tracks without interfering with the traffic or the running of the cars.

The invention has for its further object the construction of a hose-bridge that may be easily placed in position on the rails and readily removed when desired.

A still further object of my invention is to construct a hose-bridge of the above-referred-to class that will be extremely simple in construction, strong, durable, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a side elevation of my improved hose-bridge. Fig. 2 is a vertical sectional view taken on the line *xx* of Fig. 1. Fig. 3 is a similar view taken on the line *yy* of Fig. 1. Fig. 4 is a longitudinal sectional view taken on the line *zz* of Fig. 1. Fig. 5 is a perspective view of one end of the brace. Fig. 6 is an end view of the removable head-rail.

In the drawings, A represents the body portion of the jumper, said portion having inclined sides *a a*.

The reference-letters B B denote the U-shaped openings extending through the body

portion A, the latter being adapted to receive the hose.

C represents the removable head-rail extending between the side pieces *a a*, and serves to close the top of the U-shaped openings. The said removable head-rail is provided with downwardly-extending curved fingers *c c*. The latter are adapted to embrace the solid portion of the jumper between the openings B B and serve to prevent lateral displacement of the removable head-rail. The face of said rail is slightly beveled at its one end, as shown at *c'*, and is adapted to fit a corresponding beveled portion *c<sup>2</sup>* of the body portion. The other extremity of the removable head-rail is provided with apertured lugs *c<sup>3</sup>*, which are likewise placed on each side of the body portion, the said body portion being correspondingly apertured to correspond with the apertures in the lugs. A pin *d* through the lugs and aperture of the solid portion serves to hold the head-rail firmly in position.

The inner and outer faces of the body portion are provided with outwardly-extending apertured lugs D D, which are cast integral with the same and are designed to receive the bolts E E. The lower extremity of said bolts carry jaws *e e*, forming a clamp to engage the underneath face of the head of the rail. The upper end of said bolts are screw-threaded and are adapted to receive nuts *e' e'*. The body portion of the jumper is apertured for the reception of a yoke F, which embraces the bolts E E and carries an interiorly-screw-threaded collar *f*, adapted to receive the screw-threaded bolt *f'*. By this means the device is securely clamped to the rail. Guides G G, having guideways *g g*, are cast on the inner faces of the body portions of the jumper. A brace H, carrying a square head *h* on each end thereof, is so formed as to snugly fit the guideways, serving to brace both sections together. One or more of such braces may be employed in this construction.

Particular attention is called to the peculiar construction of the removable head-rail and downwardly-extending curved fingers, for the latter may be placed in position or removed, as shown in dotted lines in Fig. 1, in such a manner so as to clear the U-shaped openings containing the hose. It will be seen

that a decided advantage is gained by such construction. Attention is also directed to the fact that various changes may be made in the details of construction of the jumper without departing from the general spirit of my invention.

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

10 1. A hose-bridge, consisting of a body portion having inclined ends, and provided with openings, in combination with a removable head-rail carrying downwardly-extending fingers, yokes embracing adjustable clamping-  
15 bolts, to hold the bridge from displacement, substantially as shown and described.

2. A hose-bridge, consisting of a body portion having inclined ends, said body portion being provided with openings, in combination  
20 with a removable head-rail carrying downwardly-extending fingers arranged between said openings and embracing said body portion, substantially as described.

3. A hose-bridge consisting of a body por-

tion having inclined ends, said body portion 25 being provided with U-shaped openings in combination with a removable head-rail having a beveled end, a correspondingly-beveled end of the body portion, said removable head-rail carrying fingers fitting between the  
30 said U-shaped openings of the body portion, substantially as described.

4. A hose-bridge consisting of a body portion having inclined ends, said body portion being provided with openings, a removable  
35 head-rail carrying downwardly-extending fingers, in combination with lugs arranged on the inner face of the body portion, bolts carrying jaws clamping the underneath side of the  
40 rail-head, and a yoke embracing said bolts, all parts being arranged substantially as shown and described.

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

JOHN H. SPANGLER.

Witnesses:

H. C. EVERT,

GEO. B. PARKER.