No. 867,178. PATENTED SEPT. 24, 1907.

E. M. WILEY.

FOOTWAY FOR RAILROAD BRIDGES.

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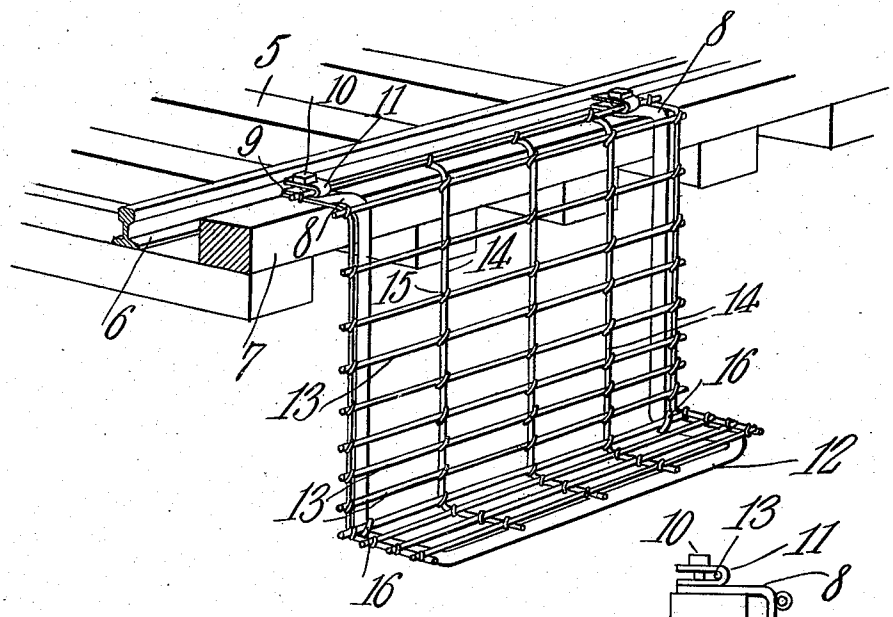
Fig. 1.



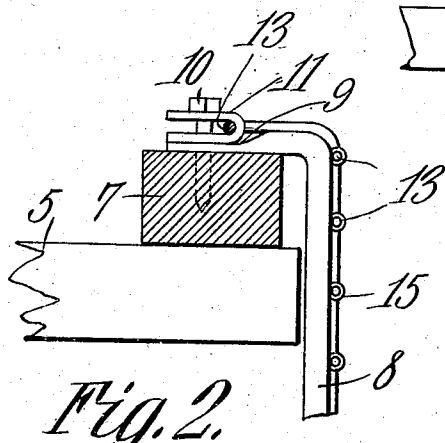


Fig. 2.

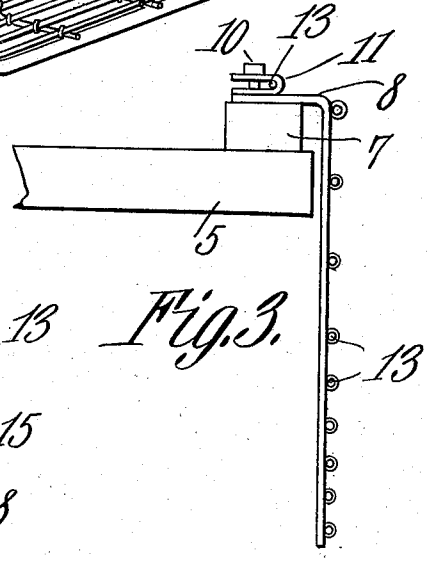


Fig. 3.

WITNESSES:

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FOOTWAY FOR RAILROAD-BRIDGES.

No. 867,178. Specification of Letters Patent. Patented Sept. 24, 1907.

Application filed June 25, 1907. Serial No. 380,771.

To all whom it may concern:

Be it known that I, EDWARD M. WILEY, a citizen of the United States, residing at Adams, in the county of Decatur and State of Indiana, have invented a new and useful Footway for Railroad-Bridges, of which the following is a specification.

This invention relates to foot-ways for rail-way bridges, trestles, viaducts and similar structures and has for its object to provide a comparatively simple and inexpensive device of this character adapted to be suspended from the bridge or trestle and designed to form a step or support for trackmen, flagmen, pedestrians and other persons working upon or crossing the bridge in case of the approach of a train.

A further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a perspective view of a foot-way constructed in accordance with my invention. Fig. 2 is an enlarged detail sectional view of the same. Fig. 3 is an end view illustrating a modified form of the invention.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved device forming the subject matter of the present invention is designed for attachment to either or both sides of a rail-way bridge, trestle or similar structure to form a step or support for pedestrians, trainmen and other persons in case of the approach of a train and by way of illustration is shown suspended from a rail-way bridge or trestle of the ordinary construction in which 5 designates the cross ties, 6 one of the rails, and 7 the longitudinal beam connecting the ends of the cross ties.

The device consists of a frame formed of tubular metal preferably bent into substantially rectangular shape, as shown and having its opposite ends bent outwardly to form laterally extending arms 8 for attachment to the adjacent longitudinal beam or sill 7. The ends of the arms 8 are flattened at 9 and provided with terminal perforations for the reception of attaching bolts 10, there being substantially U-shaped clips 11 interposed between the flattened portions 9 of the arms and the heads of the bolts, as shown.

The lower or free end of the supporting frame is bent laterally to form a horizontally disposed step 12 which forms a support for pedestrians crossing the bridge in case of the approach of a train.

The frame is covered with wire fabric preferably consisting of longitudinal rods or bars 13 intersected by vertically disposed rods 14 and connected with the longitudinal rods by clips or similar fastening devices 15. The wire fabric covering is detachably secured to the depending frame and is supported in position thereon by means of the clips 11, one of the terminal longitudinal rods 13 of the wire fabric being extended through the clips and locked in engagement therewith by the bolts 10. In order to support the wire fabric or covering in engagement with the step 12, said fabric is preferably secured to the extension by one or more clips 16. It will thus be seen that the wire fabric or covering forms a tread surface for the step or support 12, while the longitudinal rods 13 of the fabric forms a ladder by means of which a person may readily descend to the support or ascend to the trestle. It will also be observed that the bolts 10 serve to secure the depending frame in position on the trestle and at the same time lock the fabric or flexible covering in engagement with the clips.

If desired the depending frame instead of being formed of tubular metal such as gas-pipe may be constructed of angle iron, and said frame instead of being bent at right angles to form a step may be extended downwardly in a straight line so that a pedestrian or other person may cling to the longitudinal bars of the fabric covering during the passage of the train.

In Fig. 3 of the drawings there is illustrated a modified form of the invention in which the supporting frame is dispensed with, the device being constructed of ordinary wire fabric having one end thereof secured to the adjacent longitudinal sill 7 and its opposite end free to hang downwardly in a vertical plane beneath the bridge or trestle.

While it is preferred to arrange the foot-ways or steps at pre-determined intervals along either or both sides of the trestle it is obvious that the foot-way may be formed of a continuous length of wire fabric so as to extend the entire length of the bridge or trestle, if desired.

The supporting frame as well as the wire fabric covering may be galvanized, plated or otherwise coated so as to protect the same against the action of the elements.

From the foregoing description it will be seen that there is provided an extremely simple, inexpensive and efficient device admirably adapted for the attainment of the ends in view.

Having thus described the invention what is claimed is:

1. The combination with a support, of a frame depending from the support and having one end thereof bent laterally to form a step, and a flexible cover bearing against the frame and forming a tread surface for the step.

2. The combination with a support, of a frame depending from the support, clips bearing against the fixed end of the frame, and a cover engaging the clips and bearing against one side of the frame.

3. The combination with a support, of a frame depending from the support and having its free end bent laterally to form a step, clips secured to the fixed end of the frame, and a wire fabric engaging the clips and forming a tread surface for the step.

4. The combination with a support, of a frame secured to and depending from the support, U shaped clips bearing against the fixed ends of the frame, a flexible covering engaging the clips, and fastening devices piercing the clips and frame for locking the flexible covering against accidental displacement.

5. The combination with a support, of a frame having one end thereof provided with laterally extending arms and its opposite end bent to form a step, clips secured to the arms, a cover engaging the clips and forming a tread surface for the step, and fastening devices piercing the clips and arms for locking the cover against accidental displacement.

6. The combination with a support, of a frame having one end thereof bent laterally to form a step and its opposite end provided with spaced arms having reduced terminals, U shaped clips engaging the reduced terminals of the arms, and wire fabric engaging the clips and bearing against the frame to form a tread surface for the step, said fabric being formed of intersecting longitudinal and vertical bars.

7. The combination with a support, of U shaped clips secured to the support, a flexible member suspended from the clips, and fastening devices piercing the clips and engaging the support for locking the flexible member in engagement with said clips.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD M. WILEY.

Witnesses:

OSCAR G. MILLER,

SUE LAMBERT.