

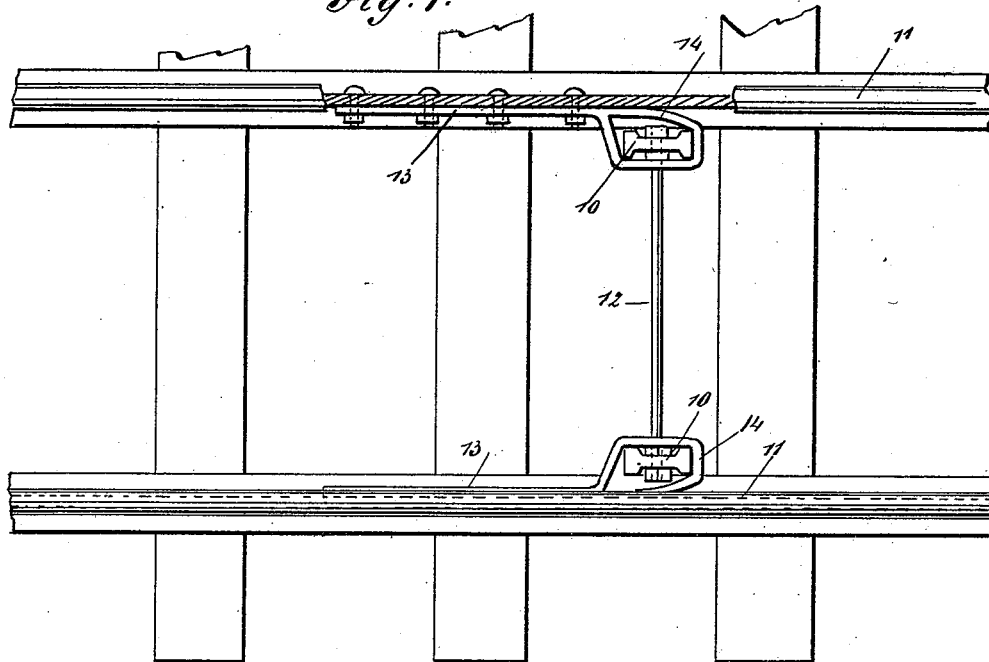
(No Model.)

T. A. DAVIES.  
BULK HEAD FOR RAILROAD TRACKS.

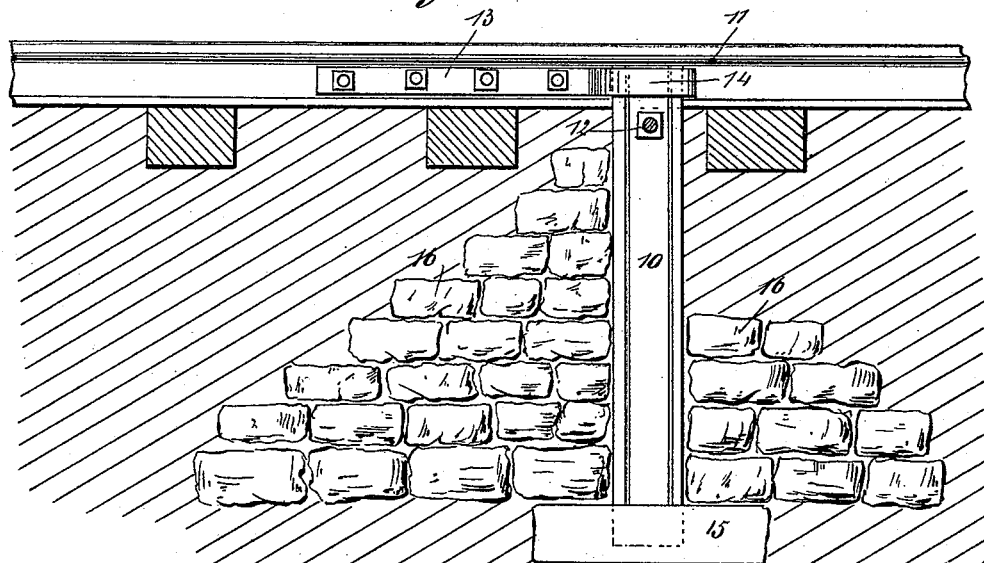
No. 421,679.

Patented Feb. 18, 1890.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS A. DAVIES, OF NEW YORK, N. Y.

## BULK-HEAD FOR RAILROAD-TRACKS.

SPECIFICATION forming part of Letters Patent No. 421,679, dated February 18, 1890.

Application filed July 12, 1889. Serial No. 317,290. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS A. DAVIES, of New York city, in the county and State of New York, have invented a new and Improved Bulk-Head for Railroad-Tracks, of which the following is a full, clear, and exact description.

My invention relates to bulk-heads for railway-rails, and has for its object to place a bulk-head in contact with the rails at intervals in the length of the track, the distance between the bulk-heads being so regulated that the entire line of rails will be effectually prevented from creeping.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of a section of a track, illustrating the application thereto of the bulk-head; and Fig. 2 is a side elevation of the same, illustrating the manner of securing the lower end of the bulk-head.

Between the rails of the track, in contact with the inner members of the flange, opposed beams 10 are perpendicularly planted, which beams are preferably made of iron and of girder-pattern, the upper ends of the beams being in alignment with the under face of the head or tread 11 of the rail, the beams 10 being also connected at any suitable point in their length by means of a cross bar, rod, or bolt 12. To the inner face of each rail-section with which the beams 10 contact a strap-plate 13 is bolted or otherwise secured, one end of each strap-plate being made to terminate in a loop 14, which loops are adapted to embrace or surround the said beams 10 of the bulk-head.

In the application of the bulk-heads to a track the loop-sections 14 of the strap-plates are slipped over the upper ends of the beams 10, and the said strap-plates are thereupon bolted to the webs of the rail, the webs being preferably provided with apertures, through which the bolts are passed. The upper ends of the beams having been brought in alignment with the under face of the rail-heads, the lower ends of the beams are plumbed, whereby the said beams occupy a strictly ver-

tical position, and the opposed beams of each track are united by a cross bar, rod, or bolt 12, one or more of which may be employed. The lower end of each of the beams is secured in a foundation consisting of cement or equivalent material, or a block of stone, as shown at 15 in Fig. 2, and against each perpendicular front and rear edge of each beam a wall 16, of masonry or other approved material, is constructed, as is likewise illustrated in Fig. 2, the wall upon that side to which the beams would naturally incline at the top under the tension exerted upon the rails being built higher than the opposed wall.

I desire it to be distinctly understood that I do not confine myself to the shape of beam employed in the construction of the bulk-head, or to the exact shape of the tie or strap-plate employed; but such construction as is illustrated is preferred, or to the manner shown for bracing the beams against lateral pressure.

The bulk-heads constructed as above described are placed at intervals in the length of the track—for instance, one-eighth, one-quarter, one-half, or a mile apart—as may be demanded by the grade of the road, to effectually prevent the rails from creeping. I thus provide for the rails of the track an anchor, whereby they are firmly held in the position in which they are laid, and by this means I remove all undue strain from the fish-plates along the line of the road.

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

1. The combination, with the rails of a railway-track, of a series of bulk-heads contacting with the rails in the length of the track at intervals, and a connection between the upper portion of the bulk-heads and the rails, substantially as set forth.

2. The combination, with the rails of a railway-track, of a series of bulk-heads contacting with the rails at intervals in the length of the track, and strap-plates secured to the rails having one end looped to surround or engage with the upper portion of the bulk-head, substantially as shown and described.

THOS. A. DAVIES.

Witnesses:

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C. SEDGWICK.