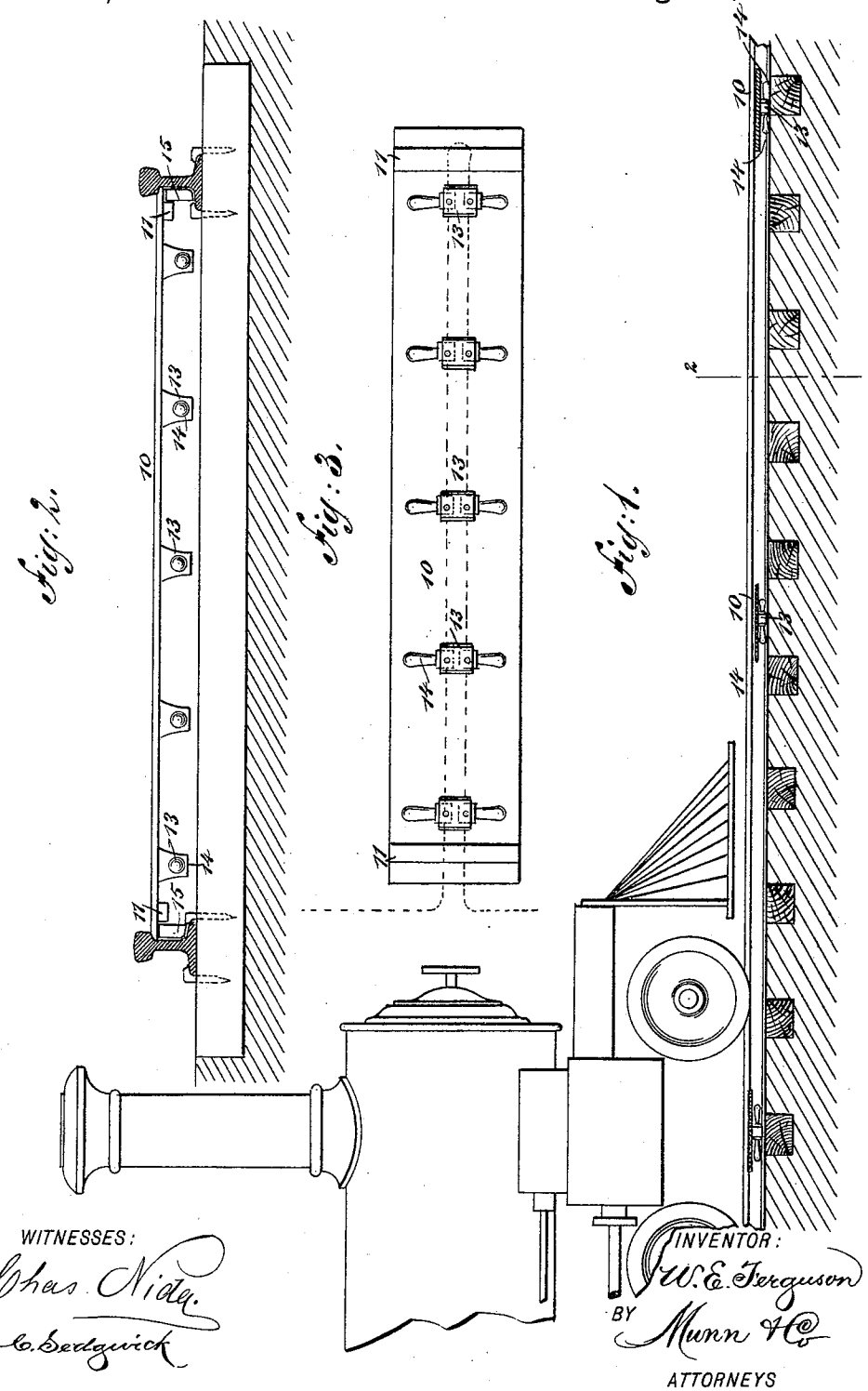
(No Model.)

W. E. FERGUSON.

DEVICE FOR ILLUMINATING RAILROAD TRACKS.

No. 481,016. Patented Aug. 16, 1892.



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WILLIAM E. FERGUSON, OF MONTCLAIR, NEW JERSEY.

DEVICE FOR ILLUMINATING RAILROAD-TRACKS.

SPECIFICATION forming part of Letters Patent No. 481,016, dated August 16, 1892.

Application filed June 13, 1891. Serial No. 396,146. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. FERGUSON, of Montclair, in the county of Essex and State of New Jersey, have invented a new and Improved Device for Illuminating Railroad-Tracks, of which the following is a full, clear, and exact description.

My invention relates to a device for illuminating railroad-tracks, and has for its object to provide a means whereby one or more lights may be placed between the rails of a railroad-track and to so arrange the lights as to admit of trains passing over without injuring them.

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 central longitudinal section through a track illustrating the application thereto of the device. Fig. 2 is a transverse section taken practically on the line 2 2 of Fig. 1, and Fig. 3 is a bottom plan view of the device removed from the rail.

In carrying out the invention a board or plate 10 is usually employed of a length equal to the space intervening the webs of the opposed rails of a track. The board is usually provided upon its under face near each end with a batten 11, and between the battens a series of hangers 13 is arranged pendent from the board, in which hangers the lights 14 are located. The lights preferably employed are electric lights, and the lights shown in the drawings are of that description, two lights being oppositely located in each hanger. All the lights upon the board or plate are brought in circuit in the usual manner. When a board 10 is employed, the ends of the board are made to engage with the inner faces of the webs of the rail, as illustrated in Fig. 2, and the board or plate 10 is wedged in place firmly and securely through the medium of wedge-blocks 15, which blocks engage with the board between the battens and its outer extremities and rest upon the inner flanges of the rails, as is likewise best shown in Fig. 2, being held in place through the medium of spikes or equivalent fastening devices; but the character of the retaining devices for the lights may be varied, as well as the character of the lights, and the board 10 may be entirely omitted, the supports for the lights in that event being preferably fastened to the sleepers or to the surface of the ground between the sleepers. The board, however, is preferred, as it has a tendency to prevent the current of air created by a passing train from extinguishing the lights. It will be observed that these lights are located below the tread of the rails and also below the heads, so that said lights are not at all interfered with by a passing train.

This mode of illuminating tracks is especially adapted for use in tunnels and upon bridges, as when employed in the latter place it may readily be determined whether the draw is open or closed, and in tunnels that portion of the tunnel—namely, the bottom—where the smoke and fog is always thinnest is illuminated and the rays of light readily penetrate the gloom and may be observed by the trainmen in all kinds of weather.

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

1. The combination, with the rails of a railroad-track, of lights located adjacent thereto and below the treads of the rails, as and for the purpose specified.

2. The combination, with the rails of a railroad-track, of a light located between the rails and below the plane of the treads of the rails, as and for the purpose specified.

3. In a railroad, one or more lights placed between the rails and arranged to admit of trains passing over them, as and for the purpose specified.

4. The combination, with a railway-track, of lights located between the rails in a manner to admit of trains passing over them, and a shield located above the lights and also below the treads of the rails, as and for the purpose set forth.

WM. E. FERGUSON.

Witnesses:
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