No. 695,429. Patented Mar. 11, 1902.

A. B. GOMBAR.

CUSHION FOR RAILROAD RAILS, FROG AND SWITCH RAILS, &c.

(Application filed Dec. 20, 1901.)

(No Model.)

Fig. 1.

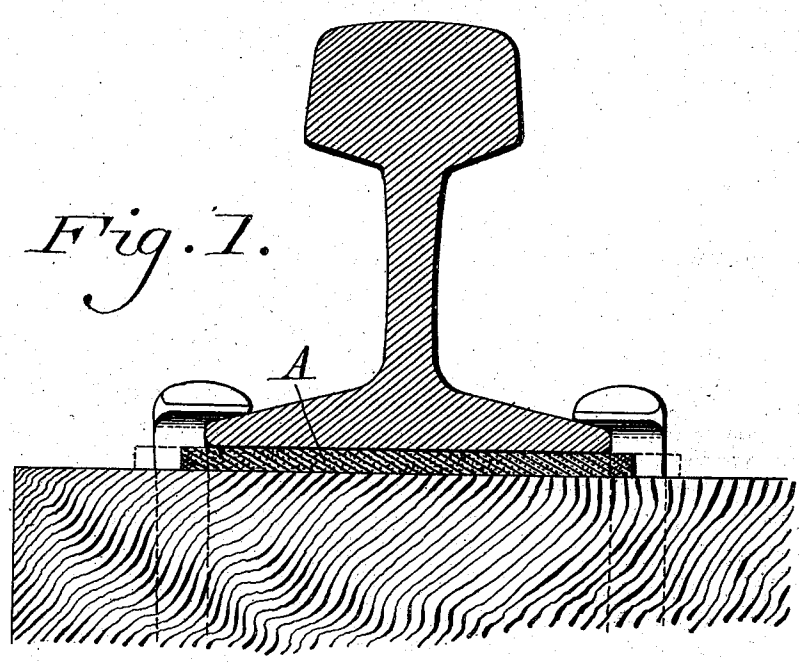
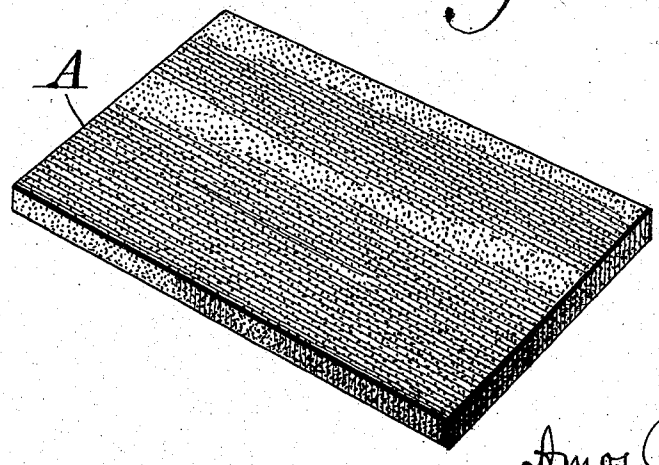


Fig. 2.



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UNITED STATES PATENT OFFICE.

AMOS B. GOMBAR, OF CORNWELLS, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF THREE-FOURTHS TO WILLIAM BARKLIE HENRY, TRUSTEE, AND HORACE H. BURRELL, OF PHILADELPHIA, PENNSYLVANIA.

CUSHION FOR RAILROAD-RAILS, FROG AND SWITCH RAILS, &c.

SPECIFICATION forming part of Letters Patent No. 695,429, dated March 11, 1902.

Application filed December 20, 1901. Serial No. 86,698. (No model.)

To all whom it may concern:

Be it known that I, AMOS B. GOMBAR, a citizen of the United States, residing at Cornwells, in the county of Bucks, State of Pennsylvania, have invented a new and useful Improvement in Cushions for Railroad-Rails, Frog and Switch Rails, &c., of which the following is a specification.

My invention consists of a cushion for a rail, frog, switch, and other parts of a railroad-track, the same being formed of asbestos, and thereby adapted to be effective in deadening the sound of a train passing thereover, preventing the cutting of the tie or sleeper on which the rail is supported, as well as its destruction from fire, and securing more effectively the rail to the tie or sleeper, other advantages being presented, as will be hereinafter set forth.

Figure 1 represents an end view of a cushion embodying my invention. Fig. 2 represents a perspective view thereof.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a cushion which is adapted to be interposed between the rail of a railroad-track, frog, switch, &c., and the supporting tie or sleeper therefor, the same being formed of a sheet or mat of asbestos, which is properly shaped for such cushion, it being seen that said cushion owing to its nature deadens the sound of the train and prevents cutting of the tie by the weight of the rail and the load superimposed thereon, while it is also prevented from being cut by the rail, the cushion, furthermore, not being liable to be ignited by sparks, cinders, &c., nor to corrode, absorb moisture, and cause the tie to rot, while it is comparatively indestructible. Furthermore, it acts as a compensating and resilient device between the rail and the tie or sleeper to take up the swelling and shrinking of the latter, due to wet and dry weather, thus obviating the drawing of the spike, the necessity of respiking, and enabling the rail to be more firmly fastened to the tie or sleeper than heretofore. Again, the cushion formed of asbestos lessens the degree of heat of the rail, while a metal tie-plate increases such heat. The former is important from the fact that heat causing expansion and contraction does more damage and gives greater difficulties in track work than any other known element; hence the value of the device in lessening the heat. Furthermore, the cushion formed of asbestos is porous and comparatively immutable and allows sufficient space to permit the wave motions of the rail to pass through the spikes or fastenings, leaving the latter unaffected in their driven position.

The pad or mat may be primarily cut or punched out for the spikes, or the necessary openings may be formed in the same by the driving of the spikes therethrough.

In the use of the word "asbestos" I include material in which asbestos may be a component part.

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

1. A cushion for a rail of a railroad, frog, switch, or other part of a track, composed of asbestos.

2. A cushion of asbestos interposed between a rail of a railroad, frog, switch or other part of a track and the supporting tie or sleeper therefor.

3. A cushion for a rail of a railroad, frog, switch or other part of a track composed of an immutable porous substance between said part and a support therefor, allowing sufficient space to permit the wave motion of the rail, &c., to pass through the spikes or fastening, leaving them unaffected in their driven position.

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