(No Model.)

E. J. HOFFMAN.

LIFE PROTECTOR FOR RAILROAD RAILS.

No. 293,024 Patented Feb. 5, 1884.

Fig 1.

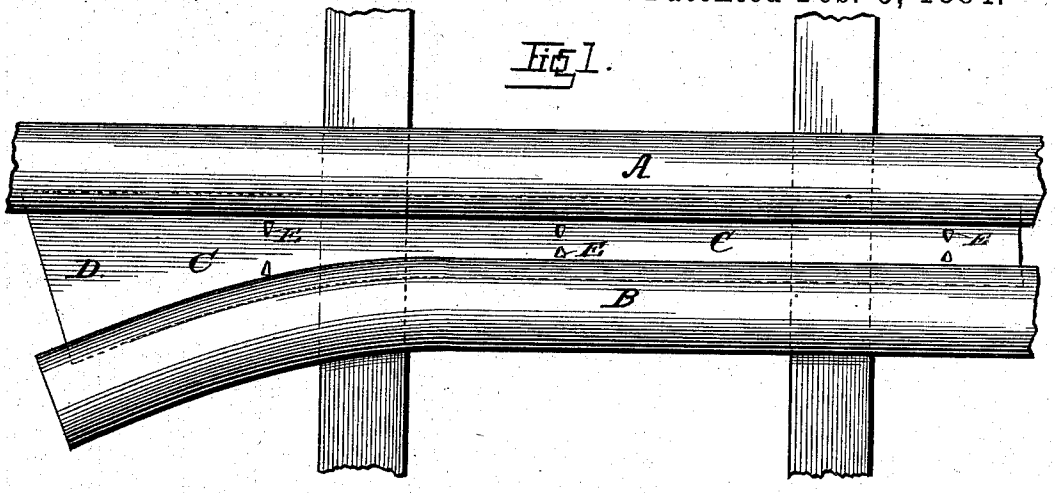


Fig 2.

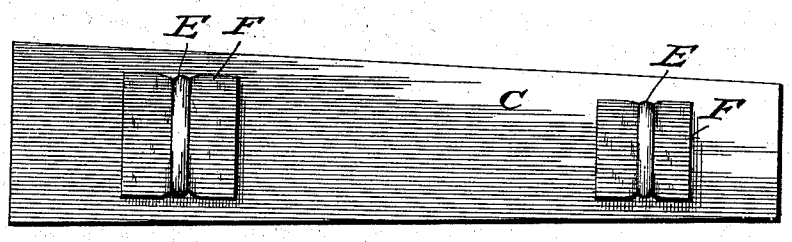
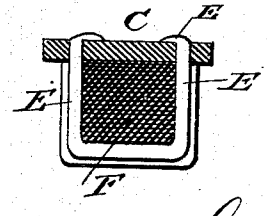


Fig 3.



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UNITED STATES PATENT OFFICE.

EDWARD J. HOFFMAN, OF SIOUX CITY, IOWA.

LIFE-PROTECTOR FOR RAILROAD-RAILS.

SPECIFICATION forming part of Letters Patent No. 293,024, dated February 5, 1884.

Application filed May 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. HOFFMAN, of Sioux City, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in Life-Protectors for Railroad-Rails; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a top view of two railroad-rails provided with my improved life-protector. Fig. 2 is a view of the under side of the protector removed from the rails, and Fig. 3 is a cross-section of the protector.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of devices which are adapted to be placed between the main rail and guard-rail of a railroad-switch to prevent persons or animals walking along the track from becoming caught in the frogs and guard-rails; and it consists in a certain improvement upon the life-protector for which Letters Patent of the United States No. 228,353 were granted to me on the 1st day of June, 1880, which said improvement will be hereinafter more fully described, and particularly pointed out in the claim.

In the protector as already patented by me I use a cushion made of rubber or other elastic material, which is interposed between the closely-adjacent rails of a railway-track, so as to fill the space between the same, this cushion having a sufficient amount or degree of elasticity to yield readily when the flanges of the car-wheels pass over it, while at the same time it is stiff or rigid enough to support the weight of a person or animal walking on the track. I have found in practice, however, that the surface of the rubber cushion soon wears by the contact with the wheel-flanges of passing trains, and it is to overcome this drawback that I have improved my device, as hereinafter described and claimed.

In the accompanying drawings, A and B are the two closely-adjacent rails of a railway-track. C is a steel plate, made of such shape that it will fit into the narrow space between the rails, and made, preferably, with a flaring-head, D, at one end, so as to completely fill the space at the point where the guard-rail B diverges from the main rail A. Upon the under side of plate C are fastened two or more rubber blocks, (shown at F,) which are fastened upon the plate by means of staples E, clamping the blocks, and riveted with their free ends upon the top of the steel plate C, as will appear more clearly by reference to Fig. 3 of the drawings.

From the foregoing it will be seen that the wheel-flanges do not come in contact with the rubber springs, but by bearing against the steel plate C depress the rubber springs or cushions F F, so as to permit the wheels to pass readily without causing any injury to the same. At the same time the rubber blocks F F possess sufficient rigidity to support the weight of a person or animal stepping upon plate C.

I am aware that plates supported by yielding springs have been placed between the rails in a railway-frog or between the rails of a crossing, and I do not wish to claim such construction, broadly; but

What I claim, and desire to secure by Letters Patent of the United States, is—

The life-protector for railroad-rails, consisting of the steel plate C D, elastic cushions F F, and staples E, constructed and combined substantially in the manner and for the purpose herein shown and set forth.

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

EDWARD J. HOFFMAN.

Witnesses:

T. G. HENDERSON,

CRAIG L. WIGHT.