

(No Model.)

E. S. HART.

Safety Guard for Railway Frogs, Switches, &c.

No. 240,587.

Patented April 26, 1881.

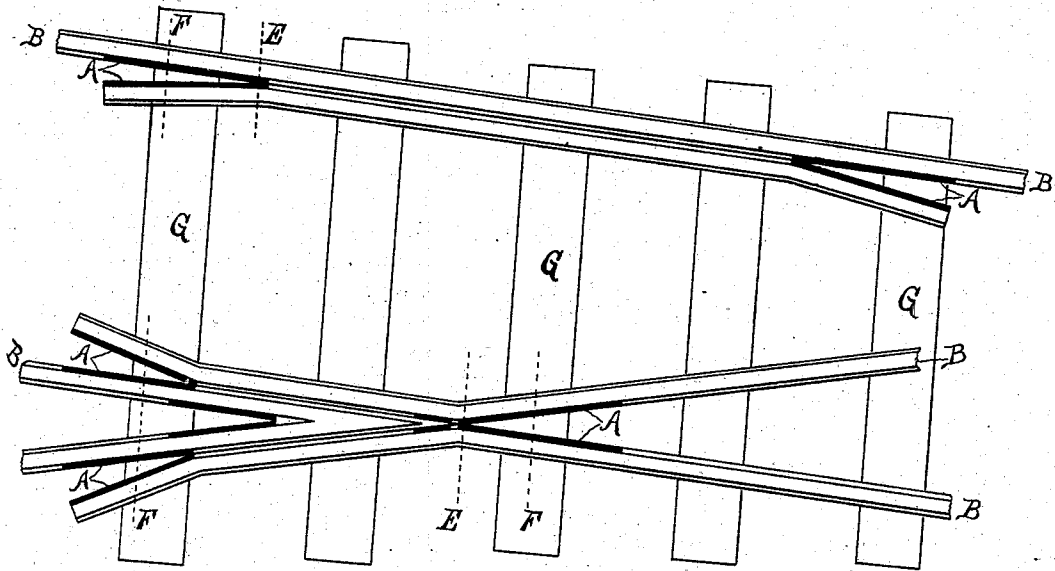


FIG. 1.

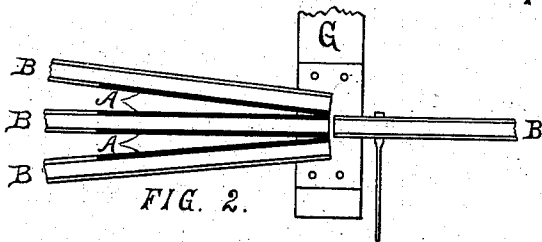


FIG. 2.

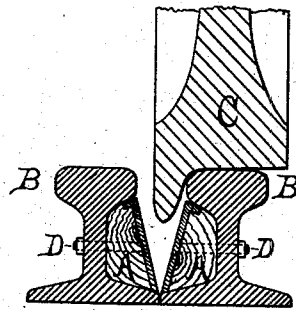


FIG. 3.

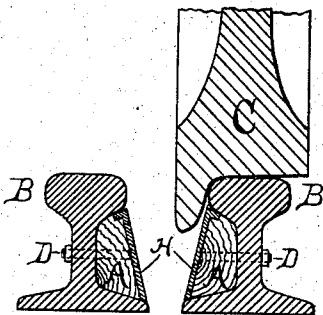


FIG. 4.

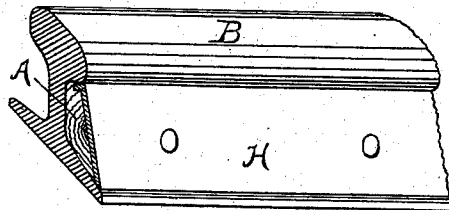


FIG. 5.

Witnesses.

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UNITED STATES PATENT OFFICE.

ELI S. HART, OF CLINTON, IOWA.

SAFETY-GUARD FOR RAILWAY FROGS, SWITCHES, &c.

SPECIFICATION forming part of Letters Patent No. 240,587, dated April 26, 1881.

Application filed February 23, 1881. (No model.)

To all whom it may concern:

Be it known that I, ELI STILLSON HART, of Clinton city, in the county of Clinton and State of Iowa, have invented certain new and useful Improvements in Safety - Guards for Railway Frogs, Switches, Guard - Rails, &c.; 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, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in safety-guards in railway frogs, switches, &c., to prevent the liability of persons or animals getting their feet caught in the angles of the frogs and narrow spaces between converging rails and guard-rails. I accomplish this by a guard placed in the recess between the base and upper flange on the inner side of each of the converging rails, forming a V-shaped space with straight or curved sides wider at the top than at any other part of the space, as hereinafter fully described.

In the drawings, Figures 1 and 2 are top views of a frog and switch. Figs. 3 and 4 are cross-sections at E and F, respectively, of Fig. 1. Fig. 5 is a perspective of a rail with the guard attached.

My improved guard may be made of wood, metal, cast or wrought, or of any other suitable material; and it may be constructed to fill the entire space back to the web of the rail, or to rest against the base and upper flange of the rail, leaving a space between the guard and the

web of the rail. The external surface of the guard is made smooth and either straight or curved, so as to form a V-shaped or a U-shaped space between the rails, having straight or curved smooth sides from the base to the top of the rail, as shown in Figs. 3 and 4, with the sides straight or V shape. The guard may be secured in place by bolts or by any other suitable means.

In the drawings, A designates my improved guard, made of wood, with the outside straight, and filling the entire space back to the web of the rails B, and is provided with a metal facing, H, secured in place by the bolts D, to prevent liability of injury to the wooden surface from the picks and bars in removing ice and snow from between the rails.

These guards are placed on the inner side of each of the converging rails, where the space between them is so narrow as to be liable to catch and hold the feet of persons or animals.

What I claim as new, and desire to secure by Letters Patent, is—

The guard A, attached to the inner sides of each of the converging rails, forming between the rails a V-shaped or a U-shaped space having straight or curved sides from the base to the top of the rails, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

ELI STILLSON HART.

Witnesses:

W. W. SANBORN,
B. B. HART.