

(No Model.)

B. BRIODY.
SAFETY GUARD FOR RAILWAYS.

No. 279,700.

Patented June 19, 1883.

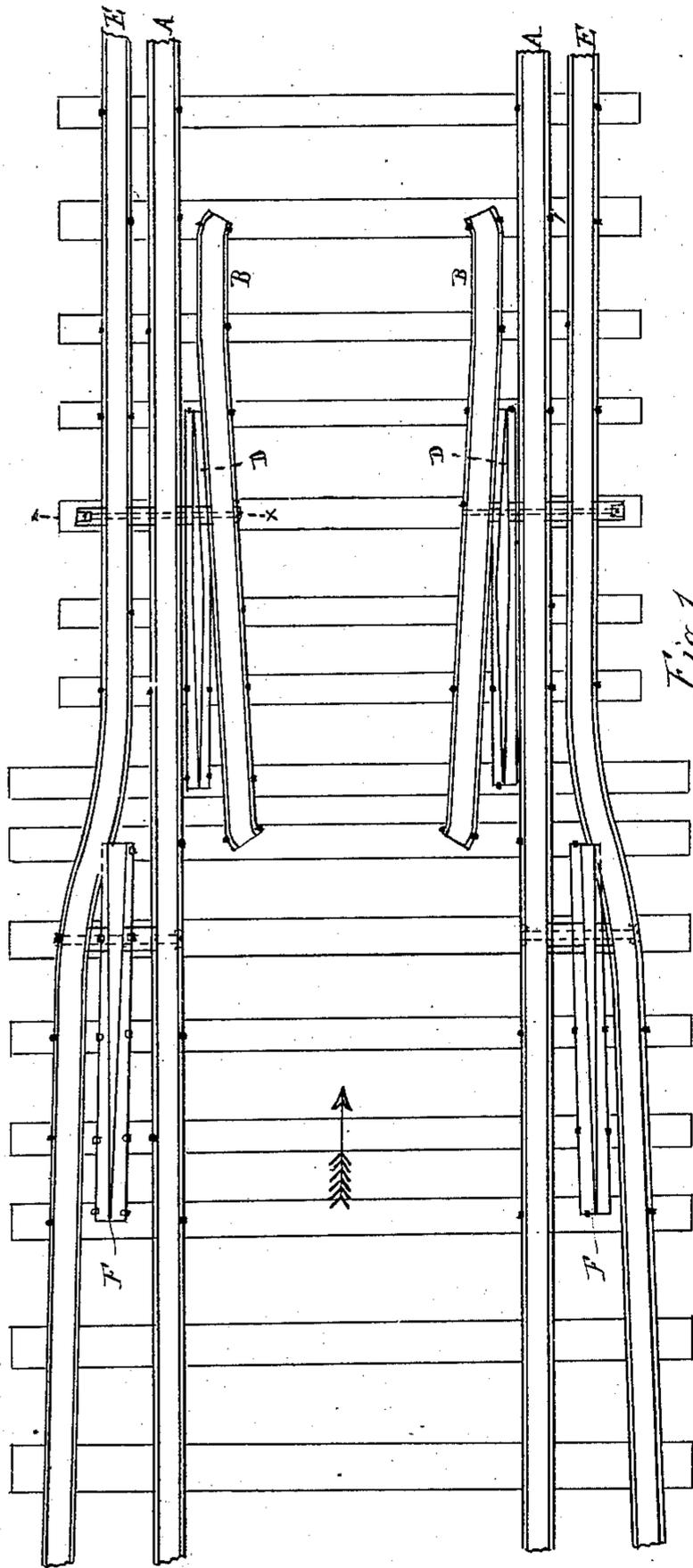
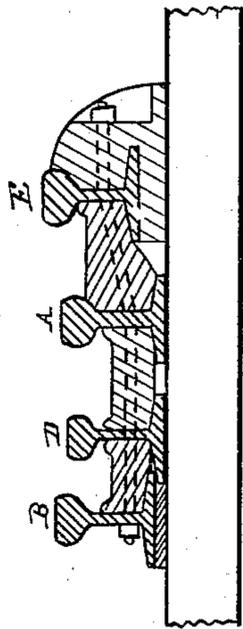


Fig. 1.



Figs



Fig. 2.

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SAFETY-GUARD FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 279,700, dated June 19, 1883.

Application filed February 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, BARNAD BRIODY, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Safety-Guards for Railways; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction of safety railway-guards, the object of the invention being to so construct a railway as to guard the approaches to bridges, trestles, &c., and to effectually prevent the train from being derailed and to insure its passage over the main track.

To that end the invention consists in the peculiar construction and arrangement of certain points and guard-rails, in combination with the main rail, all as more fully hereinafter set forth.

Figure 1 is a plan view, showing arrangement of points, guards, and rails as laid at the approach to a bridge or trestle. Fig. 2 is a side elevation of one of the inclined points. Fig. 3 is a section on the line $x x$, Fig. 1.

In the accompanying drawings, A A represent the main-track rails, which are laid in the usual manner.

B B represent the inner guard-rails, the surfaces of which should be higher than the surfaces of the main rails. These guard-rails are placed quite close to the main rails, their ends converging toward each other, as in the usual manner; but instead of having the ends square I prefer to round them off in any suitable manner, in order that they may not catch the brake-chains or staff of a passing train.

Between the guard-rails B and the main rails A are secured the safety-points D, substantially of the same construction as those described in Patent No. 204,710 to James Briody, June 11, 1878, with the exception that the heel of this point is extended, and the head and web of each are cut away upon a gradual incline from the foot of the rail to the face, as shown in Fig. 2.

E E represent the outer guard-rails, which are laid upon and secured to the ties close to the main rail at the immediate approach to the bridge or trestle, while their other ends are curved and diverge from the main rails, and are carried back as far as may be desired; and the upper faces or tread of these guard-

rails should be above or higher than the main rails about the depth of the flange of a car-wheel, more or less. The ends of the guard-points F, which are farther away from the trestle, are inclined from the foot to the head of the rail from which the point is made, similar to the point D, as above described, while the tread at the opposite end of this point is brought close to the inner sides of the guard-rail E, and at about the same level therewith, and are so placed that the inner edges of the points and the guard-rails will be almost upon a direct line.

In practice, a train passing over the road in the direction indicated by the arrow, should it by any cause be thrown from the track or derailed, the wheels upon one side of the train would be between the main rails, while upon the opposite side they would be between the main rails and the outer guards E, and rest upon the ties. As the train in this condition approaches the bridge or trestle the wheels which are between the outer guard-rails and the main rail would be compelled to run up the inclined point F, over the same, and upon the tread of the outer guard-rail upon that side, and in the further progress of the train the wheels upon the opposite side will be compelled to ride up the inclined heel of the points D, and from thence out onto the tread of the inner guard-rail, B. The wheels which have reached this point are now upon the tread of the guard-rails which are above the surface of the main rail. Now, in the further progress of the train, the inner guard-rail compels the wheel which is running upon it to shift over to the tread of the main rail. This movement draws the opposite wheel across the tread of the opposite main rail, the flange dropping between it and its adjacent inner guard-rail.

What I claim as my invention is—

In combination with the main-track rails A, the inner guard-rails, B, and the diverging outer rails, E, arranged higher than the main rails, the points D, arranged between the rails B and A, and inclined points F, arranged between the rails E and A, the whole constructed, arranged, and operating substantially in the manner and for the purposes set forth.

BARNAD BRIODY.

Witnesses:

H. S. SPRAGUE,
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