J. A. MILLER.

SAFETY DEVICE FOR PLEASURE RAILWAYS.

APPLICATION FILED APR. 19, 1910.

979,984. Patented Dec. 27, 1910.

Fig. 1.

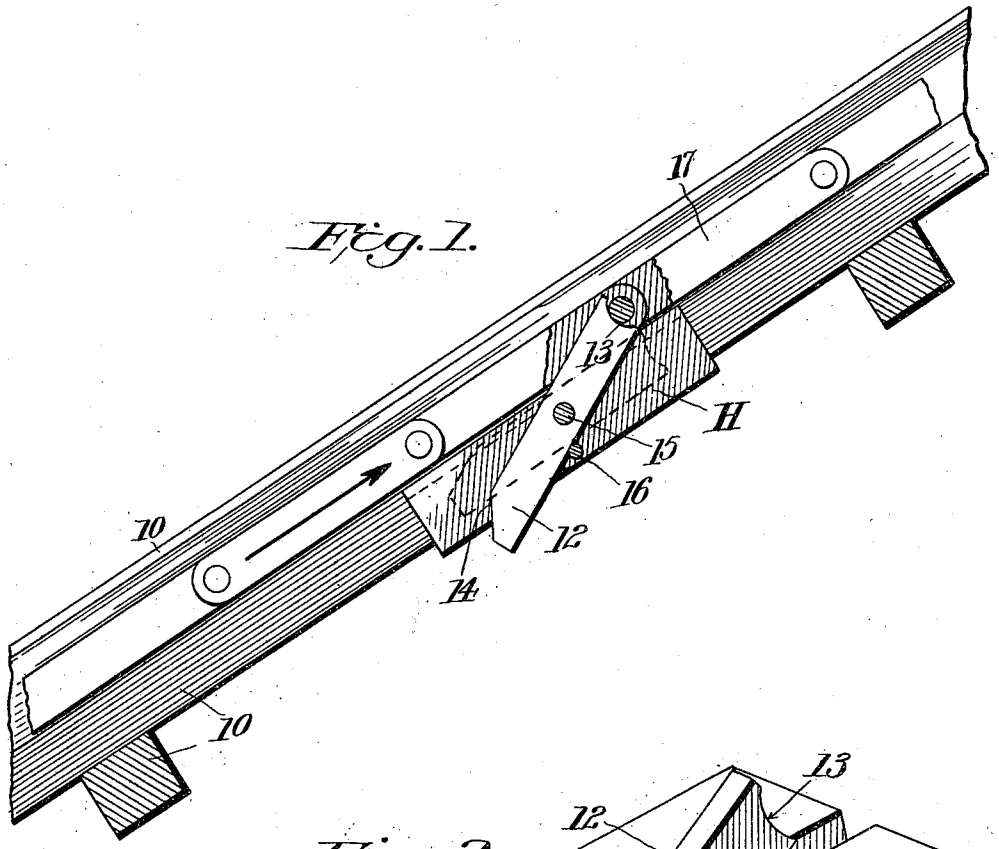
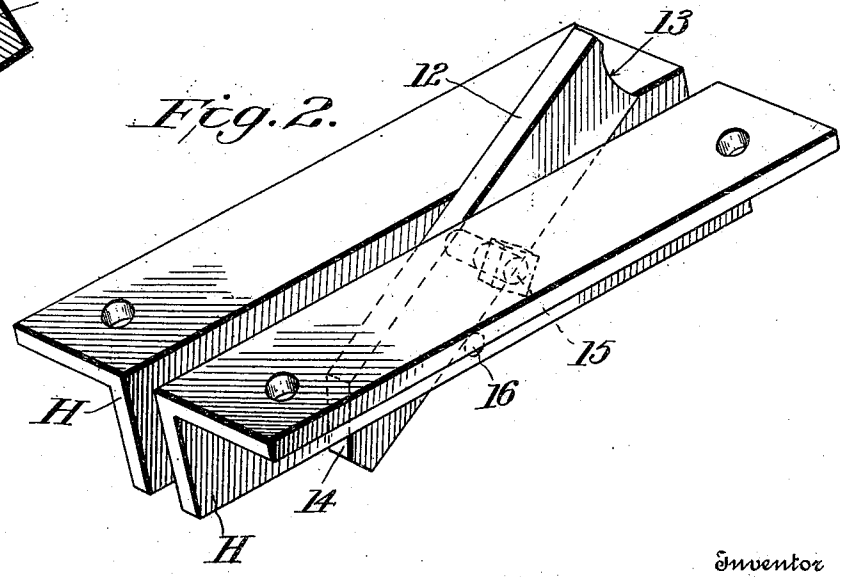


Fig. 2.



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UNITED STATES PATENT OFFICE.

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SAFETY DEVICE FOR PLEASURE-RAILWAYS.

979,984. Specification of Letters Patent. **Patented Dec. 27, 1910.**

Application filed April 19, 1910. Serial No. 556,384.

To all whom it may concern:

Be it known that I, JOHN A. MILLER, of Homewood, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Safety Devices for Pleasure-Railways, of which the following is a specification.

This invention relates to certain new and useful improvements in safety devices for pleasure railways, inclined railways and the like.

In railways of the character described it is customary to carry a car up an inclined plane by means of chains, cables and the like and the object of the present invention is to provide improved means for preventing the return of the car to the bottom in the event of an accidental parting of the power chain, thereby greatly reducing the element of danger involved in the operation of such railway systems.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawing:—Figure 1 is a longitudinal sectional view illustrating my improved safety device. Fig. 2 is a detail perspective view thereof.

Referring to the drawing, 10 designates the inclined road bed of a pleasure railway, although the invention is not limited to this particular class of railways, the same being provided with a suitable opening to receive the angle irons H between which is pivoted the safety dog 12. Said dog is preferably constructed of a bar of flat metal having its forward end concaved as indicated at 13, the rear end being beveled at 14. The pivot 15 is located forward of the center of said bar, whereby the weight of the rear or beveled end normally tends to elevate the forward end above the plane of the angle irons. A suitable stop 16 is arranged to limit this pivotal movement.

In practice the chain 17, moving in the direction of the arrow, engages the forward end of the dog and holds said end depressed within the slot formed by the angle bars, the bevel 14 permitting the chain to pass freely over the dog without catching. It will be understood, of course, that a car or other vehicle is gripped or otherwise secured to the chain in any approved or well known manner. Should the chain break, or slacken from any cause, the weight of the car will tend to drag the lower broken end backward, whereupon the tension being taken off the forward end of the dog 12, the rear end thereof will drop, thereby elevating the forward end of the dog so as to cause the concaved portion 13 to engage one of the cross pins of the chain. In this manner the reverse movement of the chain is arrested thus preventing the backward coasting of the car and avoiding all danger of injury to passengers or rolling stock. It will be understood, of course, that a plurality of dogs 12 are located at suitable intervals along the course to be traversed by the chain 17.

I claim as my invention:—

1. A safety device of the character described comprising a pivoted dog constructed to be placed in the path of movement of a power chain to prevent retrograde movement of the latter, said dog having one end beveled and overweighted, the other end thereof being provided with a concavity.

2. The combination with a road bed and a power chain traveling over the same, of angle irons secured to said road bed, and a safety dog comprising a flat metal bar pivotally mounted between said angle irons and arranged in the path of movement of said chain, the forward end of said bar being concaved to engage said chain and prevent retrograde movement thereof, the rear end of said bar being beveled and overweighted.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

JOHN A. MILLER.

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