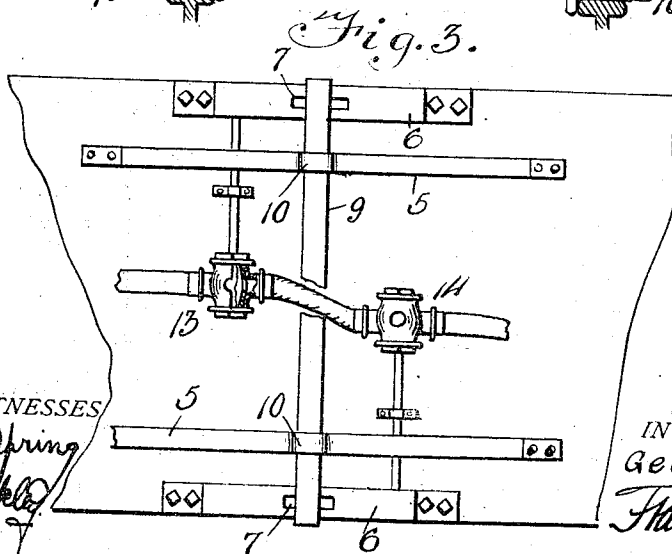
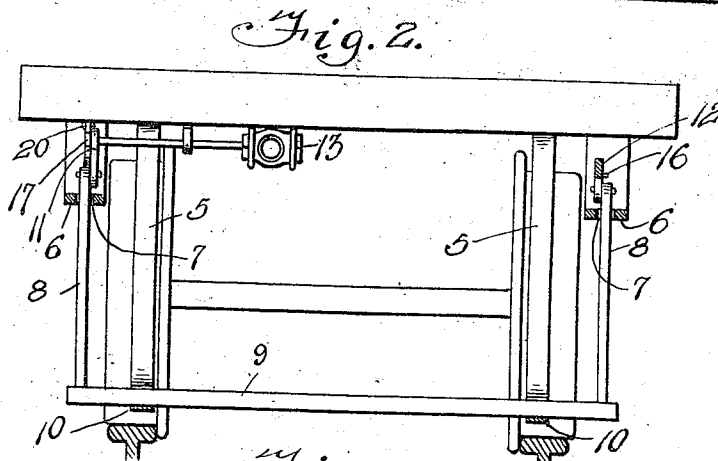
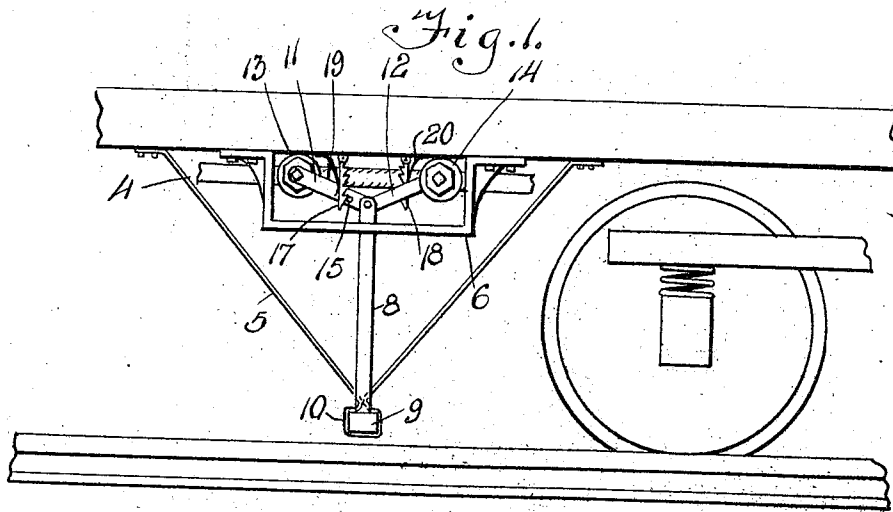


G. A. MORRIS.
EMERGENCY BRAKE.
APPLICATION FILED AUG. 2, 1910.

981,670.

Patented Jan. 17, 1911.



WITNESSES
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GEORGE A. MORRIS, OF ROME, GEORGIA, ASSIGNOR OF ONE-FIFTH TO SHARP & SHARP
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EMERGENCY-BRAKE.

981,670.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed August 2, 1910. Serial No. 575,108.

To all whom it may concern:

Be it known that I, GEORGE A. MORRIS, a citizen of the United States of America, and resident of Rome, in the county of Floyd and State of Georgia, have invented certain new and useful Improvements in Emergency-Brakes, of which the following is a specification.

This invention relates to brakes for railway rolling stock and particularly to an emergency brake designed to operate for the purpose of setting the brakes in the event of a car or engine leaving the track, as by jumping sidewise or the like.

An object of this invention is to provide novel means for interrupting the flow of air in a train line of an air brake system, which would cause the application of the brakes through the discharge of the air contained in the train line.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1 illustrates a view in elevation of the side of a fragment of a car with the invention applied thereto; Fig. 2 illustrates a vertical sectional view through the valve operating mechanism, the car structure proper being in elevation; and Fig. 3 illustrates an underneath plan view of the said car with the wheels omitted.

In these drawings 4 denotes the train line on a car which train line is provided with valves at each end of the car, it being understood that the mechanism for applying the brakes will be duplicated at the end of each car as stated and in describing the invention the mechanism on one end of the car alone will be shown and described.

In applying the mechanism to a car, I provide a brace 5 which is approximately V-shaped, one of said braces being secured at each side of the car. The braces are rigid for the purpose of retaining the mechanism in proper position and yet the same are collapsible or breakable so that if the car jumps

the track and the stirrup contacts with a rail or roadbed, the braces 5 will allow the said stirrup to move.

Each side of the car is also provided with a bracket 6 having a slot 7 therein in which the vertically disposed hangers 8 are slidable, the said hangers at their lower ends being connected by a cross bar 9 and the hangers and bar comprising the stirrups to which reference has already been made. The braces 5 have loops 10 which embrace the bar 9 so that the bar is held against movement except when it encounters a railroad bed or obstruction when the car leaves the track. As the bar extends transversely of the car, one end or the other thereof may contact with the rail or roadbed so that regardless of the side of the track on which the car travels in leaving the track, the said bar will operate for the purpose of actuating the valves.

One hanger 8 is connected to a link 11 and the other hanger 8 is connected to a link 12, the link 11 being connected to a valve 13 and the link 12 being connected to a valve 14 in the train line. The valves are of such construction as to be in communication with the train line and the atmosphere although they may be cut off so that they will make the train line continuous so long as the valves remain in normal position but upon turning of the valves through the actuation of the yoke and the links the valves are moved to establish communication between the train line and the atmosphere, thus exhausting the air in the train line and causing the application of the brakes in the same manner as the brakes would be applied on there being a separation or fracture in the train line, due to the parting of the cars or other like occurrence.

The link 11 has a stud 15 thereon and the link 12 has a stud 16 thereon which studs are designed to be engaged by the latches 17 and 18, respectively, which operate to hold the links elevated when the valves are open in order that the parts may be held in such position until reset by an operator. The latches may be of any appropriate type but I have shown them as being provided with springs 19 and 20, respectively, which hold the latches normally in engagement with the studs.

In the operation of this device it is apparent that upon the car jumping or leaving the track, the bar 9 would be displaced thus communicating motion to the links and move
5 the members of the valves so as to open the said valves and due to the presence of the latches the valves would be held in the position to which they are forced by the movement of the bar and the parts would remain
10 in such position until the latches were manually released. As the air in the train line is permitted to escape, the brakes are set and the train or car is stopped, and thereafter the operation of the air brake system can
15 only be reestablished by resetting the valves and completing the circulation of air through the train line.

I claim—

In an air brake system, the combination with a train line, of valves interposed in the
20 said line and normally establishing communication between the sections of the line and having means for exhausting air from the line, links for operating the valves, hangers
25 on the links, a bar extending transversely of the car, and means for holding the bar normally against movement.

In testimony whereof, I have hereunto affixed my signature in the presence of two witnesses.

GEORGE A. MORRIS.

Witnesses:

LOTTIE E. BARKLEY,
ELLA M. MOORE.