

J. F. REYNOLDS.
 AUTOMATIC BRAKE SETTING MECHANISM.
 APPLICATION FILED FEB. 1, 1910.

986,407.

Patented Mar. 7, 1911.

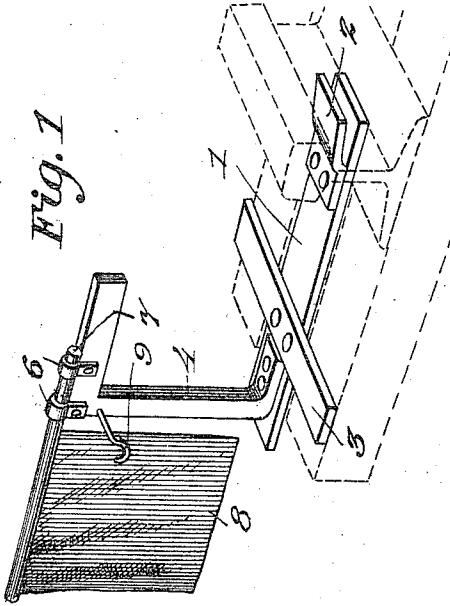


Fig. 1

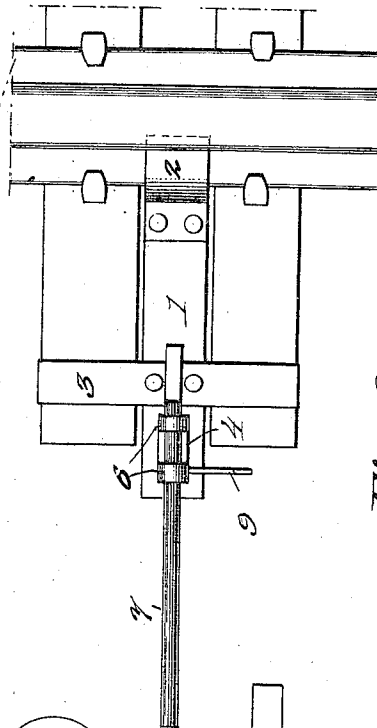


Fig. 3.

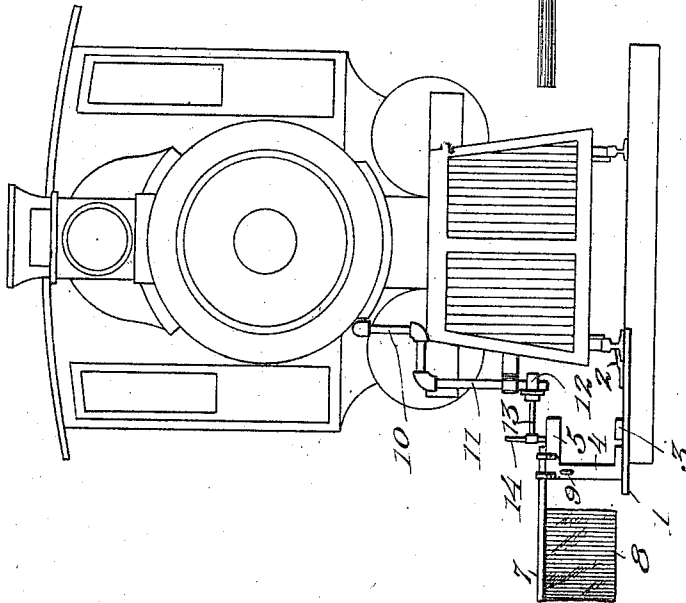


Fig. 2.

Witnesses

Phil E. Barnes
Mr. Bagger

Inventor
James F. Reynolds

By *Victor G. Evans,*
 Attorney

UNITED STATES PATENT OFFICE.

JAMES F. REYNOLDS, OF CRETE, NEBRASKA, ASSIGNOR TO THE AMERICAN RAILWAY
DEVICE COMPANY, OF CRETE, NEBRASKA, A CORPORATION OF ARIZONA TERRITORY.

AUTOMATIC BRAKE-SETTING MECHANISM.

986,407.

Specification of Letters Patent.

Patented Mar. 7, 1911.

Original application filed September 10, 1909, Serial No. 517,350. Divided and this application filed
February 1, 1910. Serial No. 541,356.

To all whom it may concern:

Be it known that I, JAMES F. REYNOLDS, a citizen of the United States of America, residing at Crete, in the county of Saline and State of Nebraska, have invented new and useful Improvements in Automatic Brake-Setting Mechanism, of which the following is a specification.

This invention relates to a device for automatically operating or actuating the brake setting mechanism of a moving train when it approaches a point of danger such as an open switch, a bridge or the like or a place where the road for any reason is impassable, said mechanism being adapted to operate in conjunction with a signal attached to or connected therewith; the particular object being, by automatically actuating the brake setting mechanism to stop the train in case the signal should escape the notice of the engineer.

This invention is a division of the application for Letters Patent Serial Number 517,350, which was filed by myself on September 10, 1909, and with the aforesaid ends in view the invention consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawing,—Figure 1 is a perspective view illustrating the improved brake-setting and signaling mechanism. Fig. 2 is a front elevation of a locomotive showing the same approaching the brake-setting mechanism illustrated in Fig. 1, the same being mounted upon the track. Fig. 3 is a plan view showing a small portion of a track with the improved device in position for operation.

Corresponding parts in the several figures are denoted by like characters of reference.

The improved device comprises in its construction a plate 1 of suitable width to lie between two railroad ties, said plate being provided near its inner end with a clip 2 adapted to overhang the rail flange under-

neath which the end of the plate is inserted, as will be seen in dotted lines in Fig. 1. The plate 1 is provided at a point intermediate its ends with a cross piece 3 adapted to rest upon the proximate ties. An upright 4 secured adjacent to the outer end of the plate is provided with a laterally extending arm or bracket 5 directed toward the track; said post or upright 4 is also provided with supporting means such as sockets or keepers 6 wherein the staff or handle 7 of a signal flag 8 may be supported. Means, such as a hook, 9 for supporting a signal lantern or the like may also be provided.

As in the original application to which reference has hereinbefore been made, the air pipe 10 of a train is provided with a branch 11 having a relief valve 12, the stem of which 13, is provided with a lever 14 which, when the valve is closed, occupies an approximately vertical position, a portion of said lever extending downwardly in the path of the arm 5 of the actuating device when the latter is in position upon the track. When a train thus equipped approaches the brake-actuating mechanism, the arm 5 upon engaging the lever 14 will oscillate the valve stem 13, thus causing the setting of the brakes.

The improved device herein described may be carried by crews working upon the railroad, and it may also be carried by train crews, so that when the road for any reason, such as necessary repairs, break down of a train, wash-outs or the like is found to be impassable, one of the working crew or the train crew may be despatched in any direction from which a train may be expected to be coming toward the impassable point. By adjusting the device in proper position upon the track, and placing the signal flag by day or a light signal by night, the engineer of the approaching train will be warned in time to slacken speed and to stop his train. If the signal for any reason should escape the attention of the engineer, the arm 5 upon contacting with the lever 14 will actuate the latter to open the relief valve, thus setting the brakes and stopping the train.

Having thus described the invention, what is claimed as new, is:—

1. A device of the character described including a base having a rail-engaging clip

and a tie-engaging cross bar, an upright rising from said base, and an arm upon said upright extending in the direction of the rail-engaging clip.

- 5 2. A train having a train controlling device provided with a downwardly extending actuating lever, and an obstructing device movably supported adjacent to the track in the path of said lever, said obstructing device comprising a base adapted to lie be-
 10 tween two ties, a rail-engaging clip upon

said base, a cross bar upon said base engaging the upper faces of the ties, and an upright rising from the base and having an arm extending in the direction of the track. 15

In testimony whereof I affix my signature in presence of two witnesses.

JAMES F. REYNOLDS.

Witnesses:

BENNETT S. JONES,
 K. ALLEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
