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G. H. METZLER

TRAIN STOP

Filed March 3, 1924

Fig. 1.

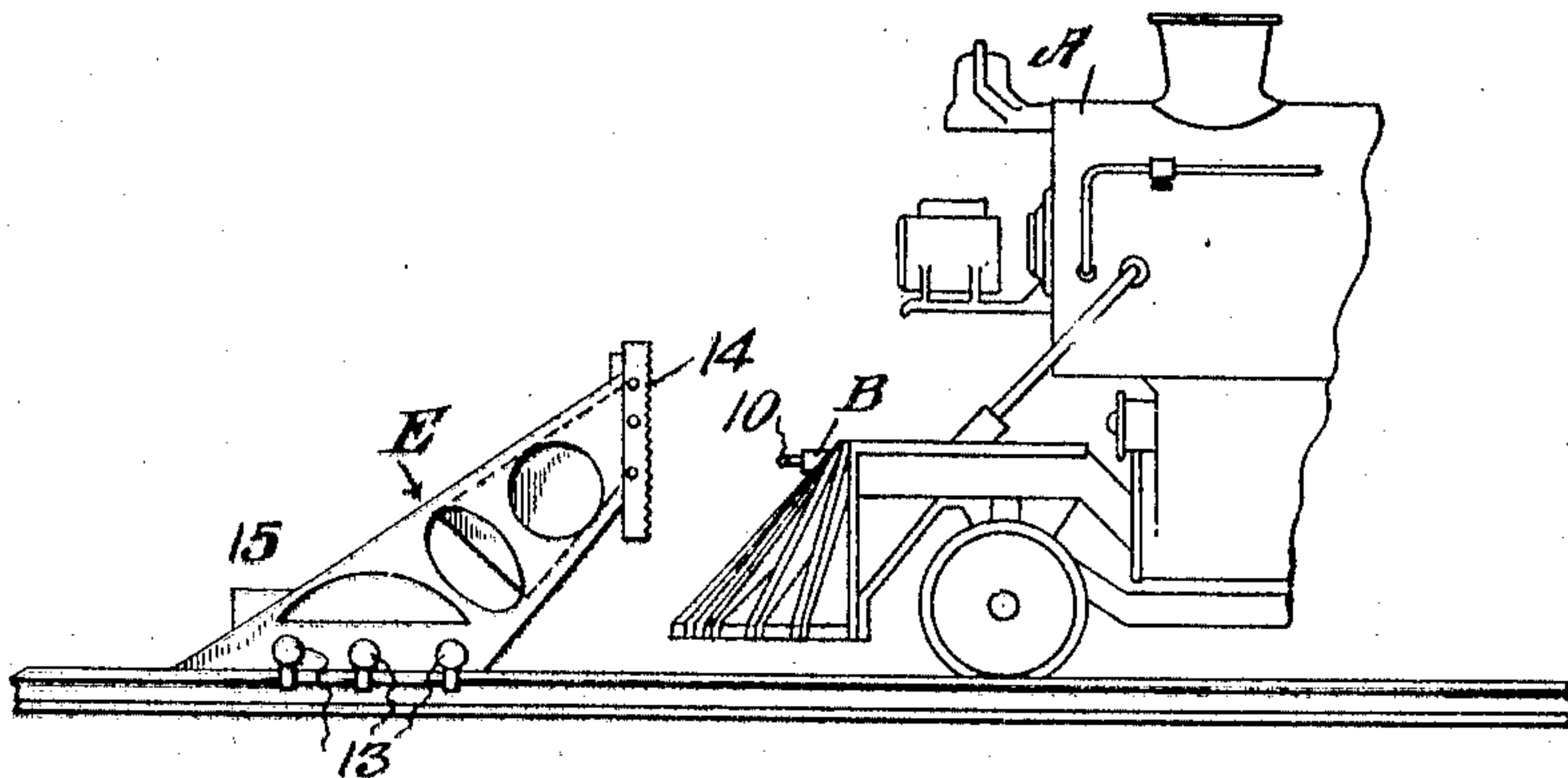


Fig. 2.

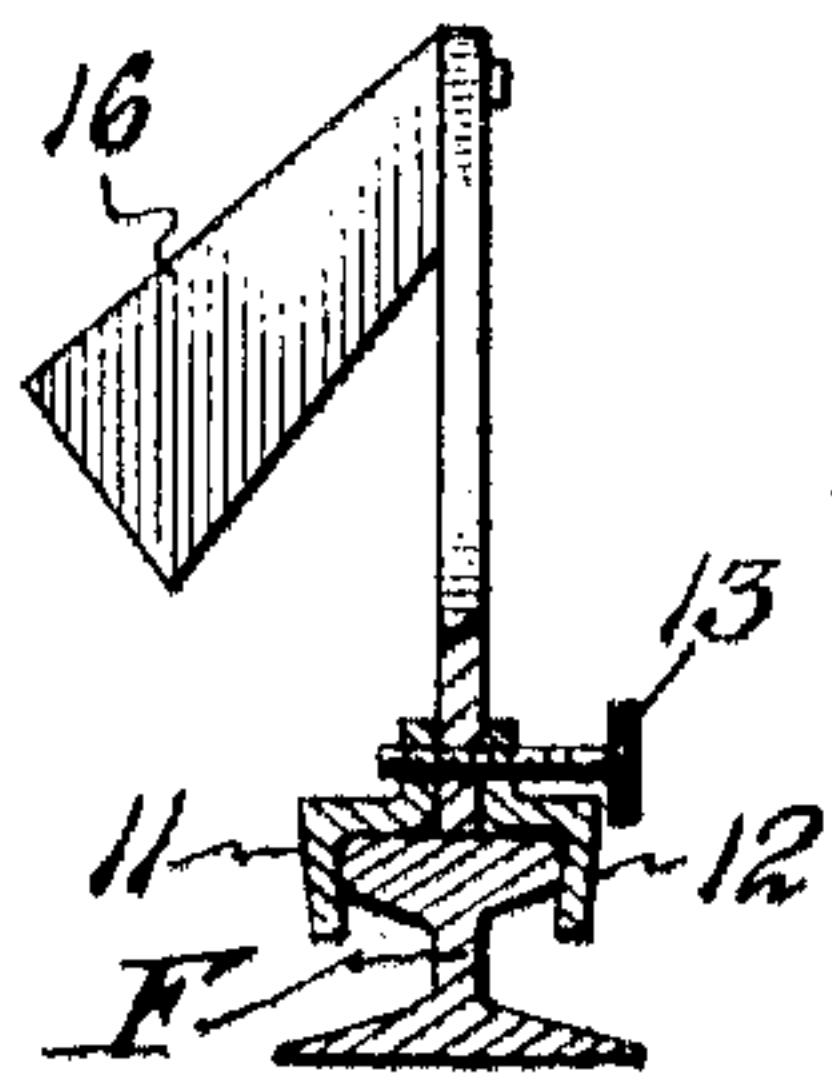
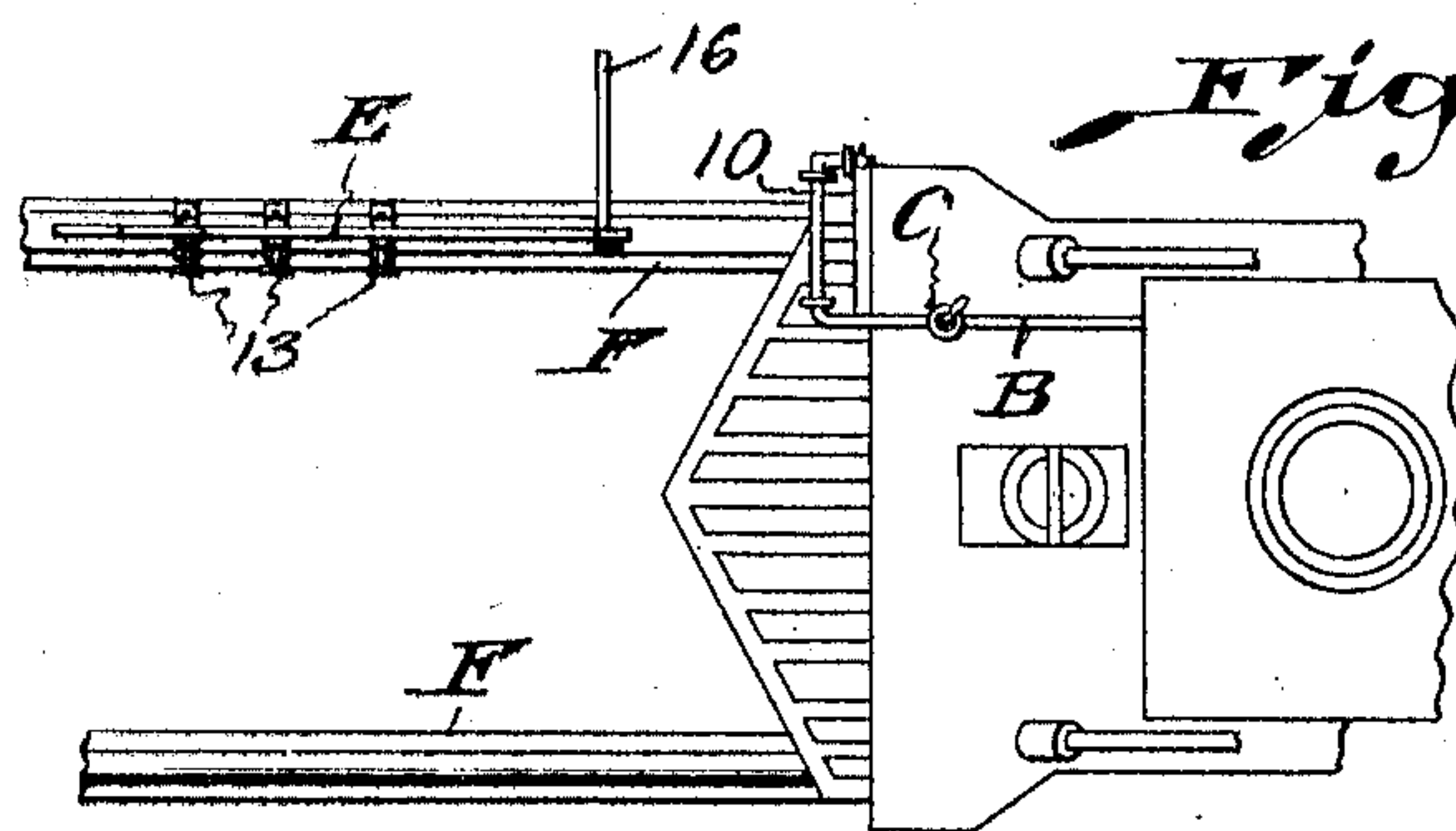


Fig. 3.

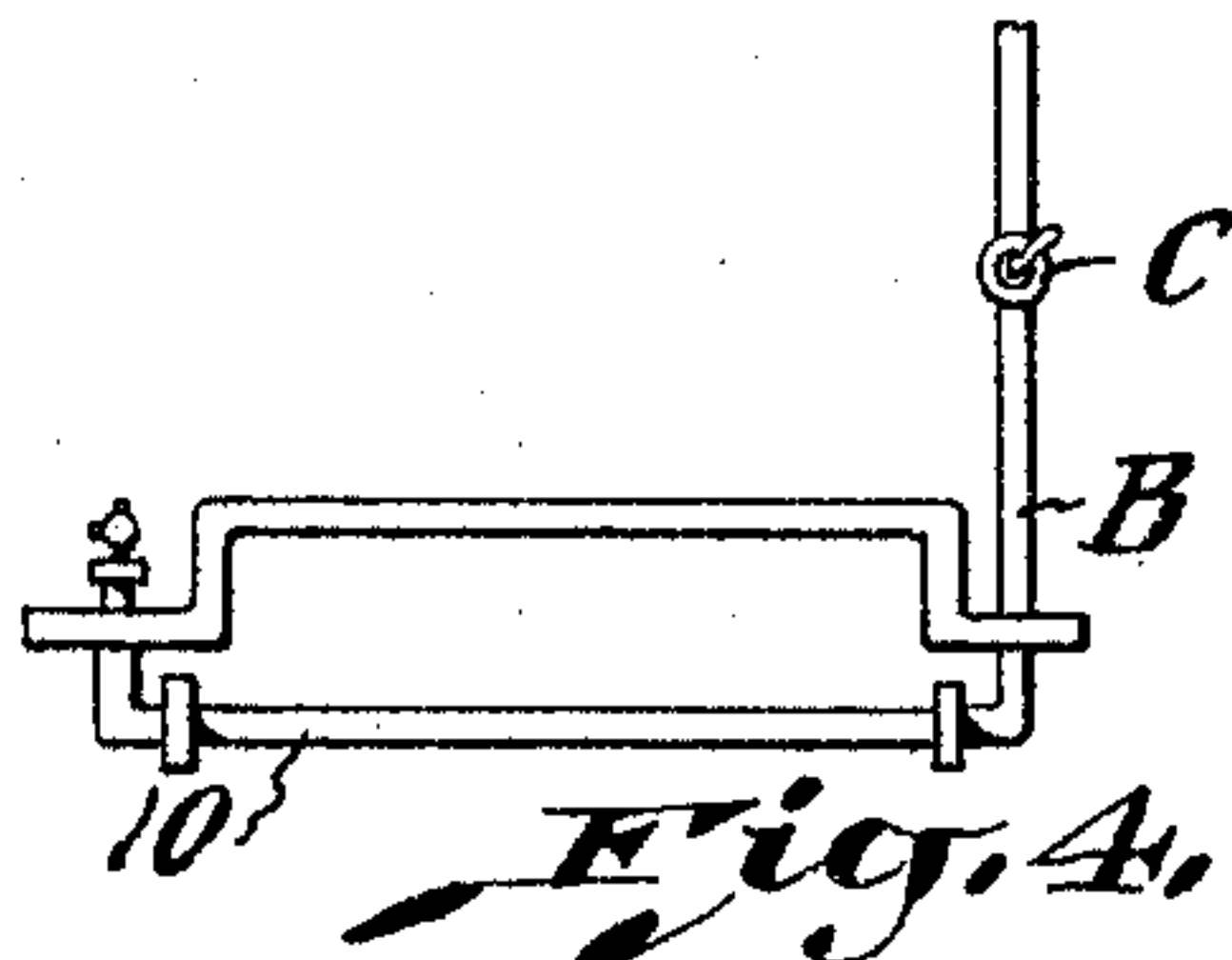


Fig. 4.

Inventor:
George H. Metzler.

UNITED STATES PATENT OFFICE.

GEORGE H. METZLER, OF WHITE PLAINS, NEW YORK.

TRAIN STOP.

Application filed March 3, 1924. Serial No. 896,672.

To all whom it may concern:

Be it known that I, GEORGE HUMISTEN METZLER, a subject of the King of Great Britain, a resident of the city of White Plains, New York, have invented certain new and useful Improvements in Train Stops, of which the following is a specification.

This invention relates to improvements in train stops.

The system of stopping trains to prevent accidents on the railways today usually is to place red flags or lights for the engineer to see or torpedoes to make a noise for him to hear, if he fails to see or hear the signals, nothing can be done to stop the train.

The present invention is an addition to signals already in use and provides a positive stop by setting the air brakes on the locomotive which controls the whole train.

The following specification and drawings will make clear the improved train stop.

The invention consists of a skeleton frame $\frac{3}{8}$ inch iron, 25 inches high above the rail; strongly constructed, weighing 8 pounds; and can be adjusted to rail by flagmen in less than a minute in winter or summer.

Figure 1 is a side view of the front of a locomotive showing plate with brass tube attached at end of the train line and showing my improved train stop clamped on track in front of locomotive.

Figure 2 is a plan view of the same.

Figure 3 is a cross view or as the engineer sees my train stop, and showing the means whereby it is clamped to the rail.

Figure 4 is a plan view of plate with brass tube attached, showing shut-off valve C on train line and try cock on the end of the train line. When the tube is broken a new one can be placed in the same manner as a gage glass.

Referring to drawings:

A represents a locomotive; the said locomotive being provided with a train line—B (which carries the air) on the end of which the plate with the brass tube 10 is mounted. I provide a skeleton frame E to break the tube, the frame being angularly disposed towards the advancing train and on the lower end of this skeleton frame side clamping members 11 and 12 are provided which embrace the ball of the rail F the clamps being tightened to the rail by thumb screws 13, which pass through the clamping members and also through the lower members of the skeleton frame E on the front of the skele-

ton frame E, I provide a vertically disposed serrated bar 14 from the back edge of which a rigid flag 16 swings out to danger and is held in position by a button and can be closed when not in use. A red lamp is placed on bar at night. On back of skeleton frame E, I provide an upright 15, 8 inches high so in case of train coming in opposite direction the frame will be thrown from track. The flagman secures the frame to the rail by means of the clamps 11 and 12 and the thumb screws 13, and should the engineer not see the danger the train will be stopped by the serrated bar 14 coming in contact with the brass tube 10 and breaking tube which lets the air escape from the train line B, causing a service application of the brakes to the locomotive and train, the frame E, is released from the rail and thrown to the side of the track and the train stopped.

This portable train stop will be carried on every train, and the brakeman will in the event of the train being stalled on the track, run over the track to a safe distance from the stalled train and place the skeleton frame E, so that if another train were following closely it would be stopped by the frame E operating in the manner above disclosed, and prevent a rear end collision.

My improved sure stop train signal can be used in all cases of flagging where a positive stop is wanted. Light, portable, quick and easily adjusted by flagman; it can also be worked by levers and wires at stations where one railway crosses another instead of a derailing switch; and can also be worked by electricity.

The frame would also be in the custody of trackmen, station masters and all men connected with the moving of trains.

This portable train stop is an addition to flag and torpedoes, and in foggy or stormy weather will prevent accidents when other signals fail to give warning.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention within the scope of the claim constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specification and drawings shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:

A train stop comprising a tube attached to a plate, mounted on train line of the loco-

motive, angularly disposed skeleton frame
side clamping members and bolts securing
the skeleton frame to the rail in advance of
the locomotive, a serrated bar on front of
5 skeleton frame designed to break said tube
and release the air, and signaling means at-
tached to skeleton frame.

In witness whereof I have hereunto set
my hand in the presence of two witnesses.

GEO. H. METZLER.

Witnesses:

W. J. DUNN,

W. A. MACLEAN.