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G. W. HUNT & J. KINNEY.

MEANS FOR AUTOMATICALLY STOPPING TRAINS.

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Fig. 1.

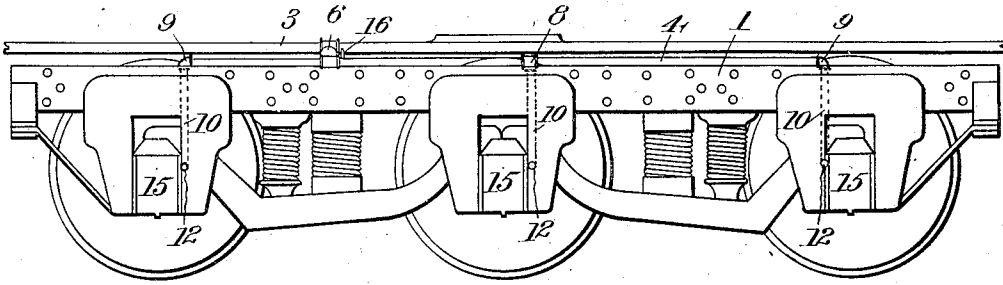


Fig. 2.

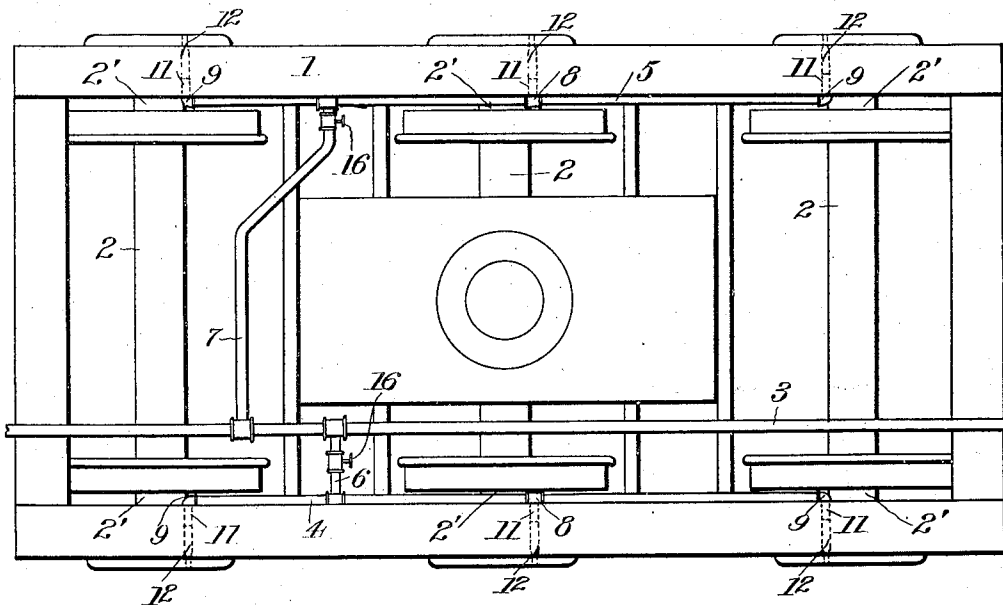
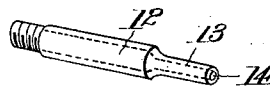


Fig. 3.



Witnesses

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GEORGE W. HUNT AND JERRY KINNEY, OF POCATELLO, IDAHO.

MEANS FOR AUTOMATICALLY STOPPING TRAINS.

No. 891,341.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, GEORGE W. HUNT and JERRY KINNEY, citizens of the United States, residing at Pocatello, in the county of Bannock and State of Idaho, have invented certain new and useful Improvements in Means for Automatically Stopping Trains, of which the following is a specification.

This invention relates to means for automatically stopping trains.

The main object of the invention resides in the provision of means suitably connected with the air brake mechanism adapted to apply the brakes in the event of a hot box so that trainmen may be warned to remedy the defect prior to further damage such as the breaking of a journal.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details, without departing from the spirit or sacrificing any of the advantages thereof.

In the drawings:—Figure 1 is a side elevation of a truck illustrating the application of our invention. Fig. 2 is a plan view. Fig. 3 is a detail perspective view of the tampion holder.

Referring now more particularly to the accompanying drawings, the reference characters 1 indicate the side sills of the truck, 2 the axles including their journals 2', and 3 the main train line of the air brake mechanism.

Branch pipes 4 and 5 have communication with the main train line 3 through the pipe connections 6 and 7 respectively, the branch pipes 4 and 5 being preferably disposed to rest upon the inside edge of the side sills. Intermediate the ends of each branch pipe 4 and 5 is disposed a T-connection 8 and at the ends thereof an L-connection 9, and to each of these connections is secured a downwardly directed pipe 10 which terminates on a line adjacent the upper surface of the corresponding journal 2'. Each pipe is then directed outwardly longitudinally of the journal and in engagement therewith, as indicated by reference character 11. The outer end of this portion 11 is screw threaded for the engagement therewith of the tampion holder 12, whose outer end is preferably reduced to provide a hole 13 of suitable size to permit of the

escape of air from the air brake mechanism in the event of fusing of the tampion 14 incident to a hot box.

It will be seen that the portion 11 of the branch pipes 4 and 5 extends through the box bearing 15 and since they have their tampion holder connections lying adjacent the journal, the tampion is liable to fuse incident to heat due to a hot box. It is desired that this tampion be of such character as to melt or fuse to permit of the escape of air from the brake mechanism prior to a complete burning away of the journal. If the tampion fuses prior to burning of the journal, the trainmen will be immediately warned for the reason that all air will immediately escape from the brake mechanism resulting in an automatic application of the brakes. Thus if the train stops without the assistance of the engineer, the head brakeman on a train knows at once that they have a very hot box that should be attended to. On a long train with the wind blowing from right to left across the train, the hot box could not be smelled, and in cold weather when brakemen do not like to go over a train very often, the proper attention to this matter is not given; hence, the importance of the present invention.

If the tampion fuses and relieves the air brake mechanism of air, resulting in an automatic application of the brakes, and the trainmen are not supplied with one of the tampion holders, it will simply be necessary to operate the valves 16 disposed in the connections 6 and 7 of the branch line pipes 4 and 5.

One of the main features of the present invention resides in the fact that it is entirely unnecessary to bore the axles and thereby weaken them. In the use of the present invention the journals are not weakened, but retain their normal strength regardless of the application of the invention herein described.

What is claimed is:—

1. The combination with a truck including an air brake mechanism, of an open-ended tampion holder having communication with the air brake mechanism and containing a tampion fusible in the event of a hot box to permit of the escape of the air from the air brake mechanism.

2. The combination with a truck including an air brake mechanism, of a branch pipe communicating with the main train line of the brake mechanism, and an open-ended

tampion holder detachably secured to the branch pipe and containing a tampion fusible in the event of a hot box to permit of the escape of the air from the air brake mechanism.

3. The combination with a truck including an air brake mechanism, of open-ended tampion holders communicating with the main train line of the brake mechanism and containing a tampion fusible in the event of a hot box to permit of the escape of the air from the air brake mechanism.

4. The combination with a truck including an air brake mechanism, of a branch pipe communication with the main train line of the brake mechanism, a tampion holder having communicating with the branch pipe and lying adjacent the end of a journal of the truck and containing a tampion fusible in the event of a hot box to warn the trainmen of the latter condition.

5. The combination with a truck including an air brake mechanism, of valved branch pipes communicating with the main train line of the brake mechanism, open-ended tampion holders detachably secured to the branch pipes, and containing a tampion fusible in the event of a hot box to permit of the escape of the air from the air brake mechanism.

6. The combination with a truck including an air brake mechanism, of a pipe arranged upon each side of the truck, valved connections between said pipes, depending pipe connections communicating with each of the aforesaid pipes and terminating adjacent the journals of the truck, and a tampion holder detachably connected to the end of each pipe which terminates adjacent the journals of the truck and constructed to contain a tampion fusible in the event of a hot box to warn trainmen of the latter condition.

7. The combination with a truck including an air brake mechanism, of an open-ended tampion holder having communication with the main train line of the air brake mechanism and constructed to contain a tampion fusible in the event of a hot box to permit of the escape of the air from the air brake mechanism, said tampion holder having an opening at its outer end.

8. The combination with a truck including an air brake mechanism, of an open-ended tampion holder having communication with the main train line of the air brake mechanism and constructed to contain a tampion fusible in the event of a hot box to permit of the escape of the air from the air brake mechanism, said tampion holder having an opening at its outer end, and the inner end of the tampion holder being screw threaded.

9. The combination with a truck including an air-brake mechanism, of a tampion holder having communication with the air-brake mechanism and lying adjacent a journal of the truck and containing a tampion fusible in the event of a hot box to permit the escape of air from the brake mechanism.

10. The combination with a truck including an air-brake mechanism, of tampion holders having communication with the air brake mechanism lying one holder adjacent each journal of the truck and containing a tampion fusible in the event of a hot box to permit the escape of the air from the air-brake mechanism to set the brake mechanism.

11. The combination with a truck including an air-brake mechanism, of tampion holders having communication with the air brake mechanism lying one holder adjacent each journal of the truck and containing a tampion fusible in the event of a hot box to permit the escape of the air from the air brake mechanism to set the brake mechanism, each tampion holder having its inner end screw-threaded.

12. As a new article of manufacture, an open-ended tampion holder comprising a body portion having one end reduced and its reduced end screw threaded and its opposite end also reduced, said tampion holder being constructed to contain a tampion to close one end of the holder fusible incident to heat to clear the opening.

In testimony whereof we affix our signatures, in presence of two witnesses.

GEORGE W. HUNT.
JERRY KINNEY.

Witnesses:

EARLE C. WHITE,
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