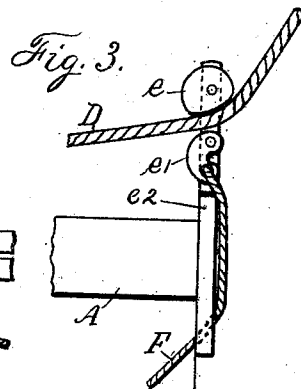
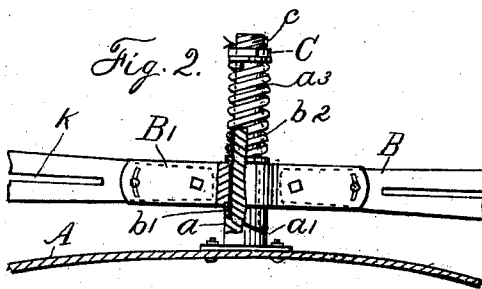
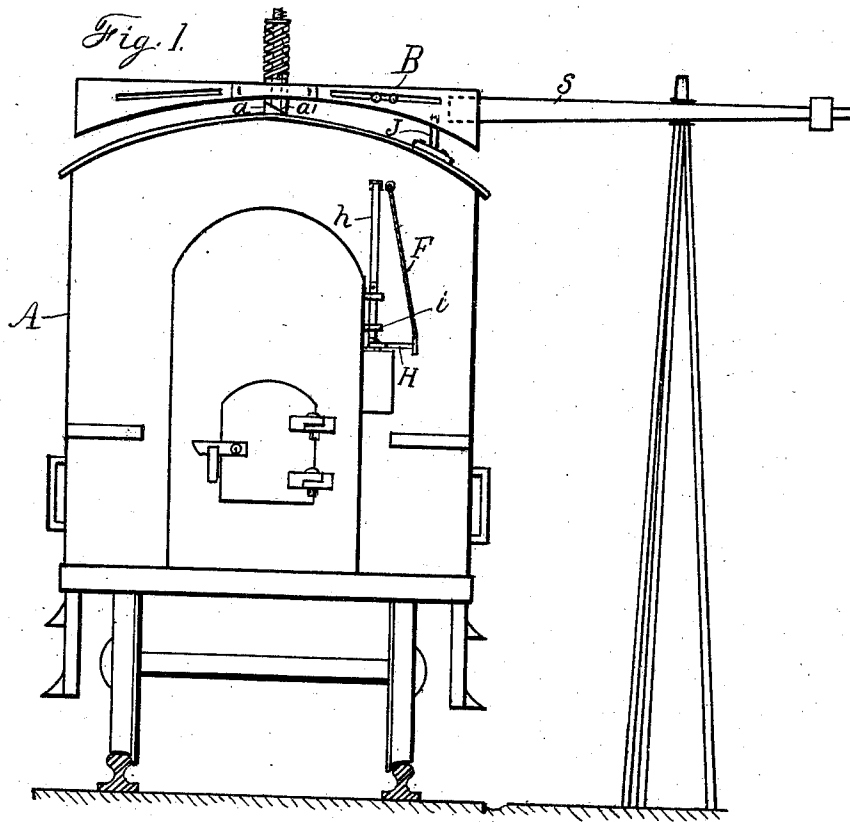


985,208.

Patented Feb. 28, 1911.

2 SHEETS—SHEET 1.



Witnesses

A. K. Swett
Machine Willis

By

Daniel H. Rowley
Chas. D. Swett

Inventor

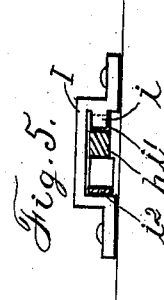
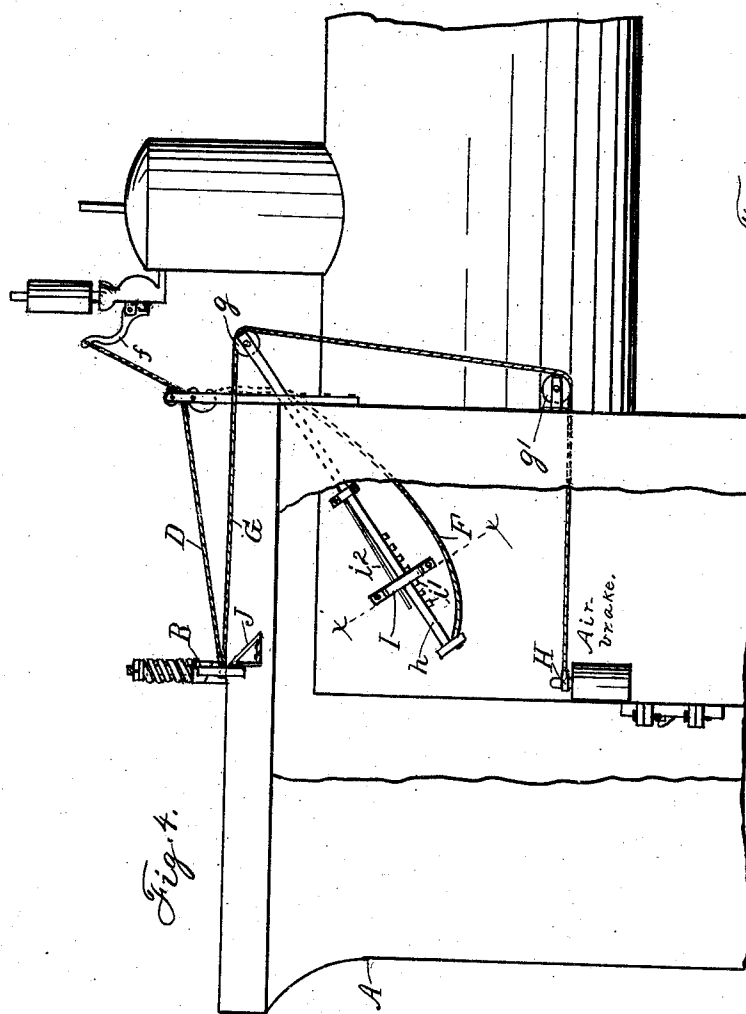
Attorney

D. H. ROWLEY.
RAILWAY SIGNAL.
APPLICATION FILED MAR. 28, 1910.

985,208.

Patented Feb. 28, 1911.

2 SHEETS-SHEET 2



Witnesses

A. K. Swett.
Mehin Willis

Inventor

Daniel H. Rowley.
By Chas. D. Swett.

Attorney

UNITED STATES PATENT OFFICE.

DANIEL H. ROWLEY, OF SODA SPRINGS, IDAHO.

RAILWAY-SIGNAL.

985,208.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed March 28, 1910. Serial No. 552,034.

To all whom it may concern:

Be it known that I, DANIEL H. ROWLEY, a citizen of the United States, residing at Soda Springs, in the county of Bannock and State of Idaho, have invented certain new and useful Improvements in Railway-Signals, of which the following is a specification.

My invention relates to railway signals which give warning to the engineer of danger ahead, and that automatically sound the whistle on the engine and apply the brakes to the train.

The device is designed primarily to be used in connection with the "block signal" system, but is not limited to such use, as it is only necessary to provide a trip at the proper altitude to actuate the mechanism of the device.

The invention is especially effective when it is so dark and stormy that the usual signals cannot be seen by the engineer: even when a light is used it sometimes becomes so covered with snow and ice as to be invisible; then the danger signal which may be a red semaphore trips my mechanism and the whistle immediately sounds and the brakes are set.

The accompanying drawings illustrate the various features of the device, Figure 1 being a rear elevation of an engine cab with my device thereon. Fig. 2 is a fragmentary enlarged front elevation partly in section of a part of the invention on the cab. Fig. 3 is a side elevation of the cam lock with one side of the bearings broken away, Fig. 4 is a general view in side elevation of the device, and Fig. 5 is an enlarged cross section on line $x-x$ of Fig. 4.

The reference letter A designates an engine cab and B, a cross arm mounted thereon. This arm is in two members, each seated adjustably in a casting B^1 , having an inclined base b^1 which is rotatable on the annular shoulder a^4 of the post a said shoulder being inclined at an angle to the major axis of the post a . The part a^3 of post a above the shoulder a^4 , is of reduced diameter and extends upwardly through the perforated casting B^1 , and is provided with a coil spring b^2 held in place by a threaded nut C, and pin c . The downward pressure of this spring and the inclination of the parts a , a^1 ,

cause the arm B when released, to return at once to its normal position against the rest J. A cord D connects the whistle lever f with arm B, which causes the whistle to blow when the arm B is forced back. The cord D passes between two cams e , e^1 , journaled in a support e^2 , and is automatically locked in operative position until released by the engineer pulling a cord F extending into the cab. Another cord G is connected to the arm B, and passing around the pulleys g and g^1 , connects with the lever H of the air brake. In order to throw the brake controlling mechanism out of gear, a rod h , is provided to carry at its outer end, the pulley g . The rod h , is extended into the cab, and held adjustably in the guide I, which has a lug i , to engage teeth i^1 , on said rod h , a flat spring i^2 releasably holding the rod in engagement with said teeth, through the lug i . A longitudinal slot K in the cross-arm B permits lateral adjustment of the cords D and G, and also the taking up of slack.

The device operates automatically as follows:—When the engine enters a block at the entrance to which the danger signal S is set this arm S strikes and forces back the cross arm B on the cab. This movement of the arm B, because of the connecting cords D and G, immediately causes the whistle to blow and the air brakes to be applied, and the train is stopped. The arm B at once after clearing the trip S, swings back against its rest b^2 , and the whistle and brake controlling mechanism restored to normal adjustment by the engineer as already described.

What I claim and desire to secure, is,—

1. A railway signal comprising a rotatable arm on the engine cab adapted to be struck by a trip, cords connecting said arm with the whistle and brakes respectively to operate the same, means to hold said whistle cord in the position into which said arm moves it when struck and means to release the tension of said whistle cord, as herein set forth.

2. In a railway signal a post on the engine cab, an annular shoulder on said post inclined at an angle to the major axis thereof, a hub on said post having its lower end at an angle to cooperate with said shoulder, arms on said hub adapted to strike a sta-

tionary trip and means by which said arms operate a train controlling device, as set forth.

3. In a railway alarm a rotatable arm on the engine cab, a trip to actuate said arm, a whistle lever, a cord connecting said arm and said whistle lever, cams to hold said cord in a taut position and means to release

said cams from engagement with said cord, as described.

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

DANIEL H. ROWLEY.

Witnesses:

ED. M. MERRELL,
JOE H. DE WITT.

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