

(No Model.)

J. GALLAGHER, Jr.
ROCKET HOLDER FOR RAILWAY CARS.

No. 503,234.

Patented Aug. 15, 1893.

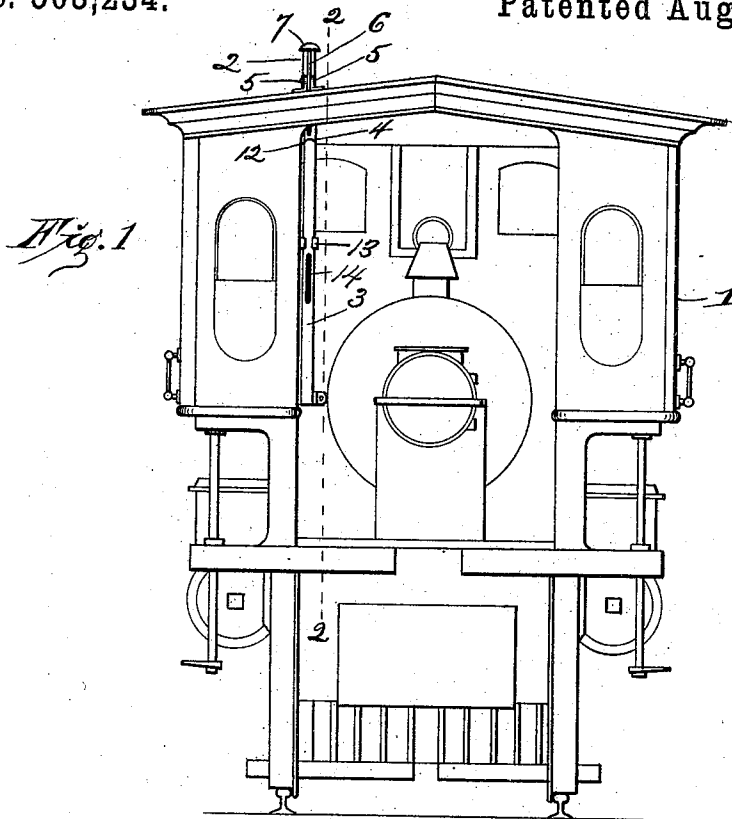
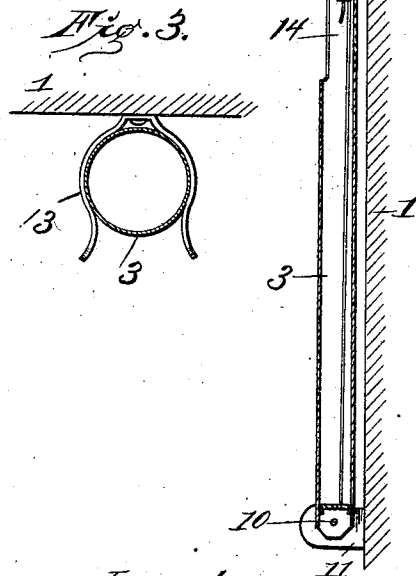
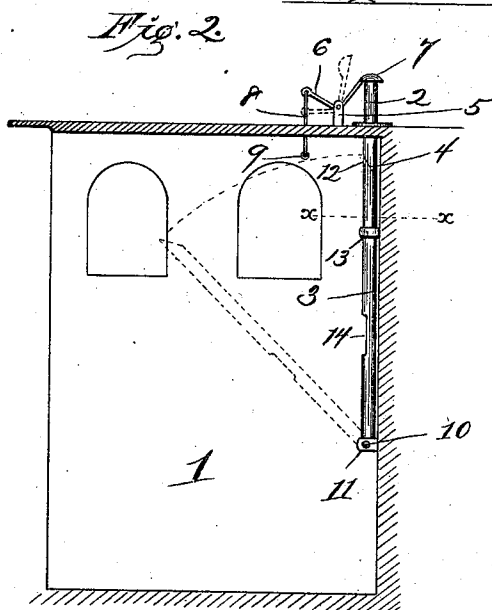


Fig. 4.



Witnesses: -
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UNITED STATES PATENT OFFICE.

JOHN GALLAGHER, JR., OF KANSAS CITY, KANSAS.

ROCKET-HOLDER FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 503,234, dated August 15, 1893.

Application filed January 6, 1893. Serial No. 457,507. (No model.)

To all whom it may concern:

Be it known that I, JOHN GALLAGHER, Jr., of Kansas City, Wyandotte county, Kansas, have invented certain new and useful Improvements in Danger Rocket Signals for Railway-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in rocket signal mechanism, for train service purposes, and the object of my invention is to provide a simple and efficient device or receptacle from which the rockets are discharged, for communication between trains, for notice of danger and for a variety of other purposes; and also to provide a mechanism or device, which is simple and inexpensive of construction, and which can be quickly, easily and inexpensively applied to the cab of an engine and to the caboose of a train.

To the above purposes my invention consists in certain peculiar and novel features of construction and arrangement, as will be hereinafter fully specified and pointed out in the claims.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1, represents a rear view of a locomotive, and looking into the cab thereof, and showing in operative position the tube or sleeve from which the rocket is discharged. Fig. 2, represents a vertical sectional view, taken on the line 2—2 of Fig. 1. Fig. 3, represents a horizontal sectional view, taken on the line *x—x* of Fig. 2. Fig. 4, represents a vertical sectional view of a portion of the lower or pivotal member of the guide sleeve, and showing therein a rocket in operative position.

Before entering on a detailed description of my invention, I will state that the device is designed more especially to be used on trains when running in sections, and when it is necessary and desirable that the said sections should run a certain distance apart; also in case of a wreck between two stations, and where a second train is known to be on the way, and also in case a train parts and where the nature of the road is such, that there is danger of the rear portion crashing into the

forward section, should the said forward section slacken speed too soon.

Referring to the drawings, where similar numerals designate similar parts in all the figures, 1 designates the cab of an engine. The guide sleeve or tube for the rockets consists of the upper and lower members or sections 2 and 3. The upper member or section 2, is secured rigidly and vertically through an opening in the roof of the cab, in any suitable manner, and the lower end of the said member or section is beveled downwardly and rearwardly at 4. Pivotaly supported between brackets 5—5 secured to the upper side of the roof of the cab, is the inverted bell-crank lever 6, the forward end of which is provided with a cap or cover 7, which in its normal position closes the upper end of the member 2 of the guide sleeve, and thus prevents the entrance of inclement weather.

To the rear or opposite end of the bell-crank lever is secured the upper end of a pendent cord or chain 8, which passes through a hole in the roof of the cab, and is provided with a suitable handle 9 at its lower end. To raise the cap or cover from the upper end of the member 2 of the guide sleeve, the operator grasps the handle 9, and pulls downward, operating the bell-crank lever and lifting the cap to the position shown by dotted lines in Fig. 2.

The lower member or section of the guide sleeve or tube 3, is pivoted at its lower end at 10 between the brackets 11—11 which are secured by screws or other suitable means to the wall of the cab. The upper end of the lower member or section 3, is beveled at 12 to fit against and conform to the bevel at the lower end of the upper member or section, and a spring clip or band 13 is secured to the wall of the cab and holds the lower member or section securely against the lower end of the upper member, and in its normal vertical position. The lower member is also provided with a slot 14, a suitable distance from its lower end, the object of which will be hereinafter explained.

The apparatus above described, is to be secured in the cab and also in the caboose of every train, and a supply of rockets the different colors of which represent diversified meanings, is kept in any suitable receptacle for the purpose.

The operation of firing the rockets is very simple, the lower member of the guide sleeve, is grasped and moved outward to the position shown in dotted lines Fig. 2, a rocket is then
5 inserted into the tube, the stem of the rocket being of such length, that the fuse is opposite the slot 14, the said member is then moved back to its original position, where the spring retaining clip securely holds it; the handle 9,
10 is now pulled downward to raise the cap from the upper end of the upper member of the guide sleeve, and the fuse of the rocket ignited, by introducing a lighted match or a live coal into the slot 14. The rockets used in this
15 connection, when discharged are adapted to burn for a considerable length of time, and at a considerable altitude, therefore producing a very effective signal, and which can be discerned at a considerable distance.

20 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A rocket signal mechanism, comprising a guide sleeve, consisting of an upper sta-

tionary section or member projecting through 25 the roof of the car, and having a beveled lower end, and a lower movable section or member, having a beveled upper end, adapted to bear against the beveled lower end of the upper section or member, and a spring-clip, secured 30 to the car and adapted to hold the lower movable section or member in alignment with the upper section or member, substantially as set forth.

2. A rocket signal mechanism, comprising 35 an upper stationary member or section, secured through the roof of the car, and a lower movable member or section, pivoted at its lower end and adapted to be thrown into and out of alignment with the upper member or 40 section, and a slot provided in said lower member or section, substantially as described.

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

JOHN GALLAGHER, JR.

Witnesses:

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