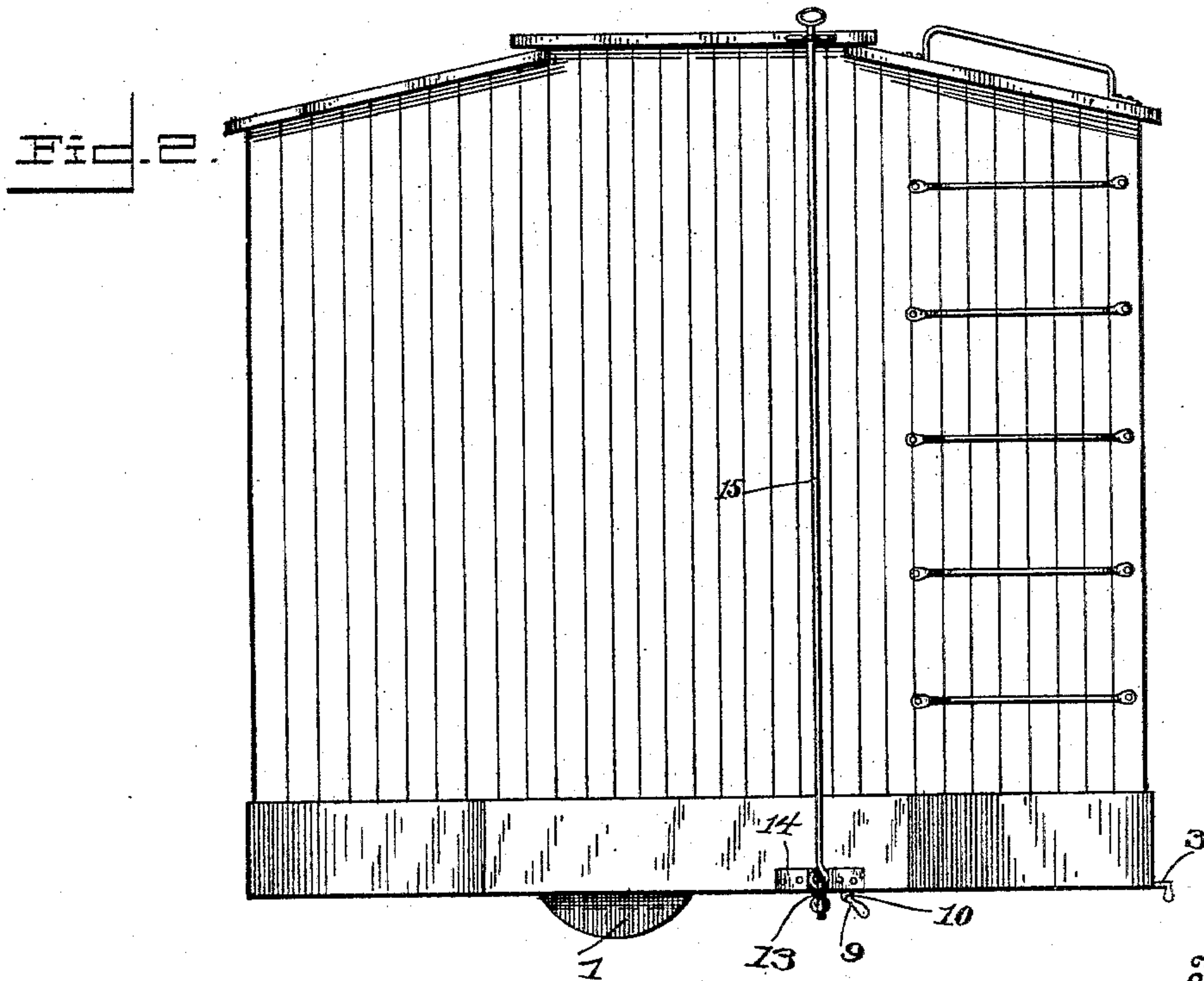
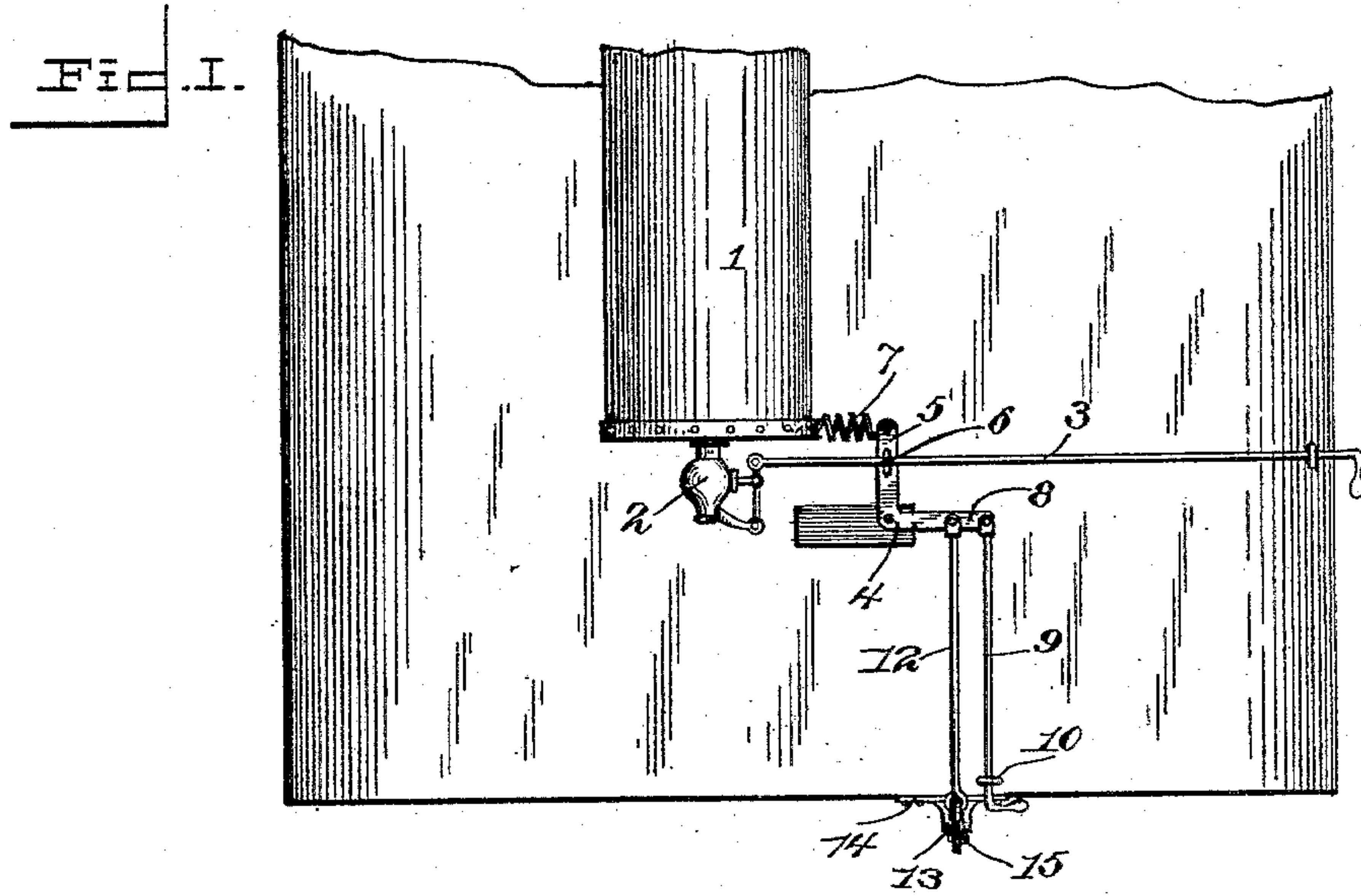


(No Model.)

R. H. CATLETT.
RELEASE ROD FOR AIR BRAKES.

No. 597,814.

Patented Jan. 25, 1898.



Witnesses:
Fenton S. Pelt,
J. H. Wilson.

Inventor:
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UNITED STATES PATENT OFFICE.

ROBERT H. CATLETT, OF TRINIDAD, COLORADO.

RELEASE-ROD FOR AIR-BRAKES.

SPECIFICATION forming part of Letters Patent No. 597,814, dated January 25, 1898.

Application filed October 12, 1897. Serial No. 654,959. (No model.)

To all whom it may concern:

Be it known that I, ROBERT H. CATLETT, a citizen of the United States, residing at Trinidad, in the county of Las Animas and State of Colorado, have invented certain new and useful Improvements in Release-Rods for Air-Brakes of Railway-Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the release-rods of the air-brakes employed on railway-cars, and more particularly to that class of air-brakes employed on box or freight cars; and the object is to provide a simple, convenient, and effective device for releasing the brakes from the roof of the car.

To this end the invention consists in the construction, combination, and arrangement of the device, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a plan view of one end of the bottom of a box, freight, or coal car, showing the release-cock and my improved release-rod applied thereto. Fig. 2 is an elevation of the car, showing the release-rod extending to the top of the car.

Heretofore the release-rod extended from the release-cock on the air-reservoir to the side of the car, and as the air-brakes often stick after being applied, when the car is in motion the wheels slide on the rails and become flattened on the tread before the train can be slowed down sufficiently to permit the train-hands to climb down from the car-roof and bleed the air from the reservoir by opening the release-cock through the medium of the release-rod extending to the side of the car.

In my invention I provide an auxiliary release-rod, which in the case of coal or platform cars extends longitudinally to the end of the car and in the case of box or similar cars extends from the end of the car, so that the release-cock may be operated from either point while the car is in motion and without the necessity of leaving the car and going

around to the side of the car, as is the present practice.

1 represents the air-reservoir, 2 the release-cock, and 3 the ordinary release-rod now in use.

4 represents a bell-crank lever conveniently fulcrumed to the bottom of the car, and its longitudinal arm 5 extends across the path of the rod 3, to which it is pivoted by a bolt 6, extending through a slot in the arm and fixed in the rod. The outer end of the arm 5 is provided with a retractile spring 7, as shown. The transverse arm 8 of said bell-crank lever is pivoted to a longitudinal rod 9, which extends through a guide-bracket 10, so as to be conveniently operated from the front of the car, and is the form employed on coal and platform cars. A second rod 12 is pivoted to the arm 8, and its forward end extends to the depending arm of a bell-crank lever 13, fulcrumed in the bracket 14, fixed to the end of the car, and from the horizontal arm of said bell-crank lever a vertical rod 15 extends through a guide-bracket near the car-roof.

From this construction it will be seen that the relief-valve can be operated in the usual manner from the side of the car by means of the rod 3, or in the case of coal and platform cars from the end of the car by the rod 9, and in the case of box-cars from both the end and roof of the car by the rod 15.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. The combination with a car, provided with an air-brake, the air-reservoir 1, the release-cock 2 and the transverse rod 3, of the bell-crank lever 4, formed with the slotted arm 5, the bolt 6 connecting said arm to the rod 3, and the rod 9 pivoted to the transverse arm 8 of said lever, and extending through the guide-bracket 10 to the end of the car.

2. The combination with a car, provided with an air-brake, comprising an air-reservoir

and a release-cock, of the rod 3, the bell-crank lever 4 formed with the slotted arm 5, the bolt 6 connecting said slotted arm to said rod 3 and the retractile spring connecting the outer 5 end of said arm to the car-body, the rod 12 pivoted at one end to the transverse arm 8 of said lever, the bell-crank lever 13 having its depending arm pivoted to said rod 12, and the vertical rod 15, pivoted at its lower end to the 10 horizontal arm of the bell-crank lever 13, and

its upper end extending through a guide-bracket fixed near the car-roof, substantially as shown and described.

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

ROBERT H. CATLETT.

Witnesses:

J. B. HERSHEY,

F. E. COLE.