

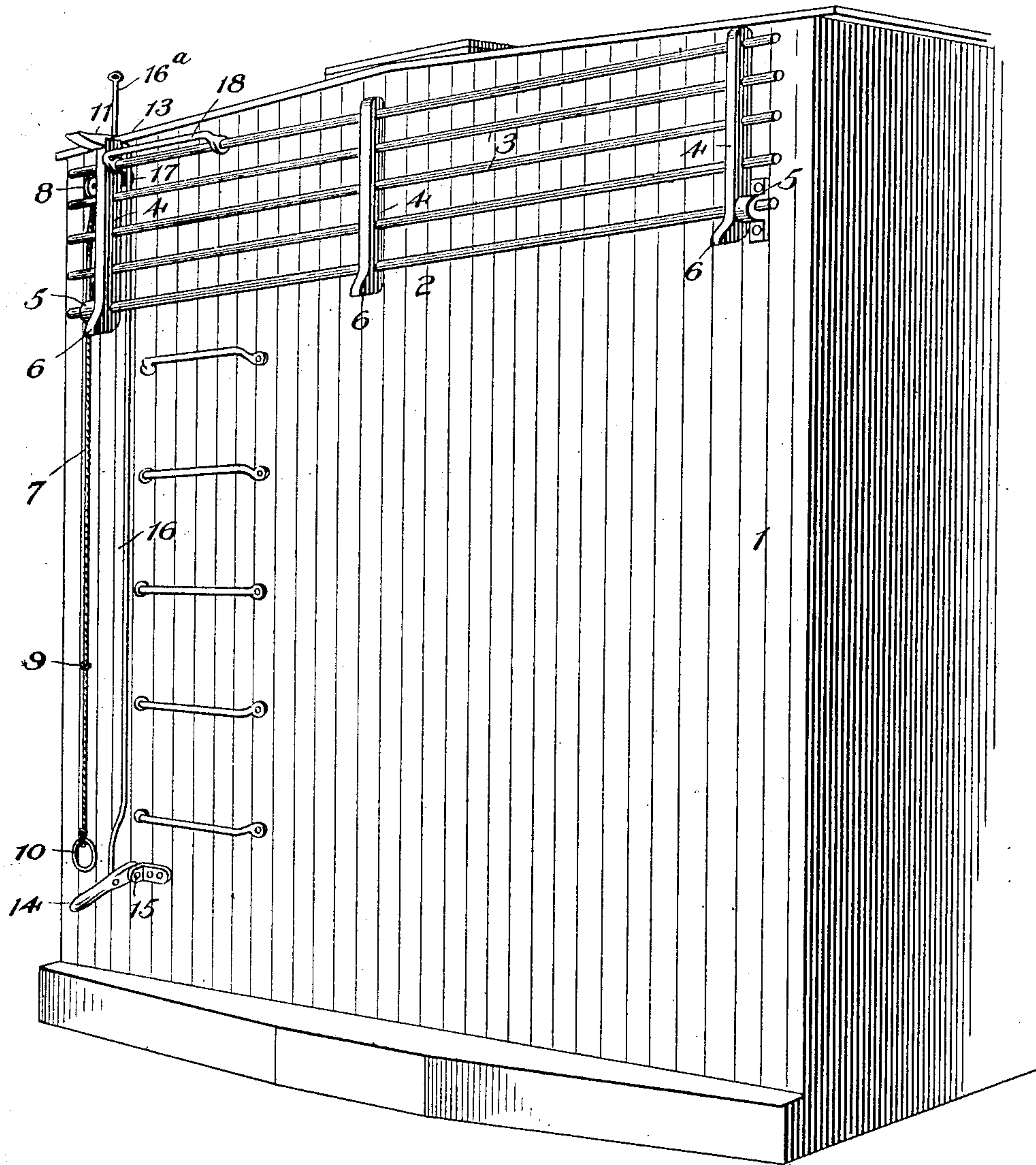
No. 869,658.

PATENTED OCT. 29, 1907.

G. W. SAYRE.
SAFETY DEVICE FOR CARS.
APPLICATION FILED MAY 22, 1907.

2 SHEETS--SHEET 1.

Fig. 1.



Witnesses
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2 SHEETS—SHEET 2

Fig. 2.

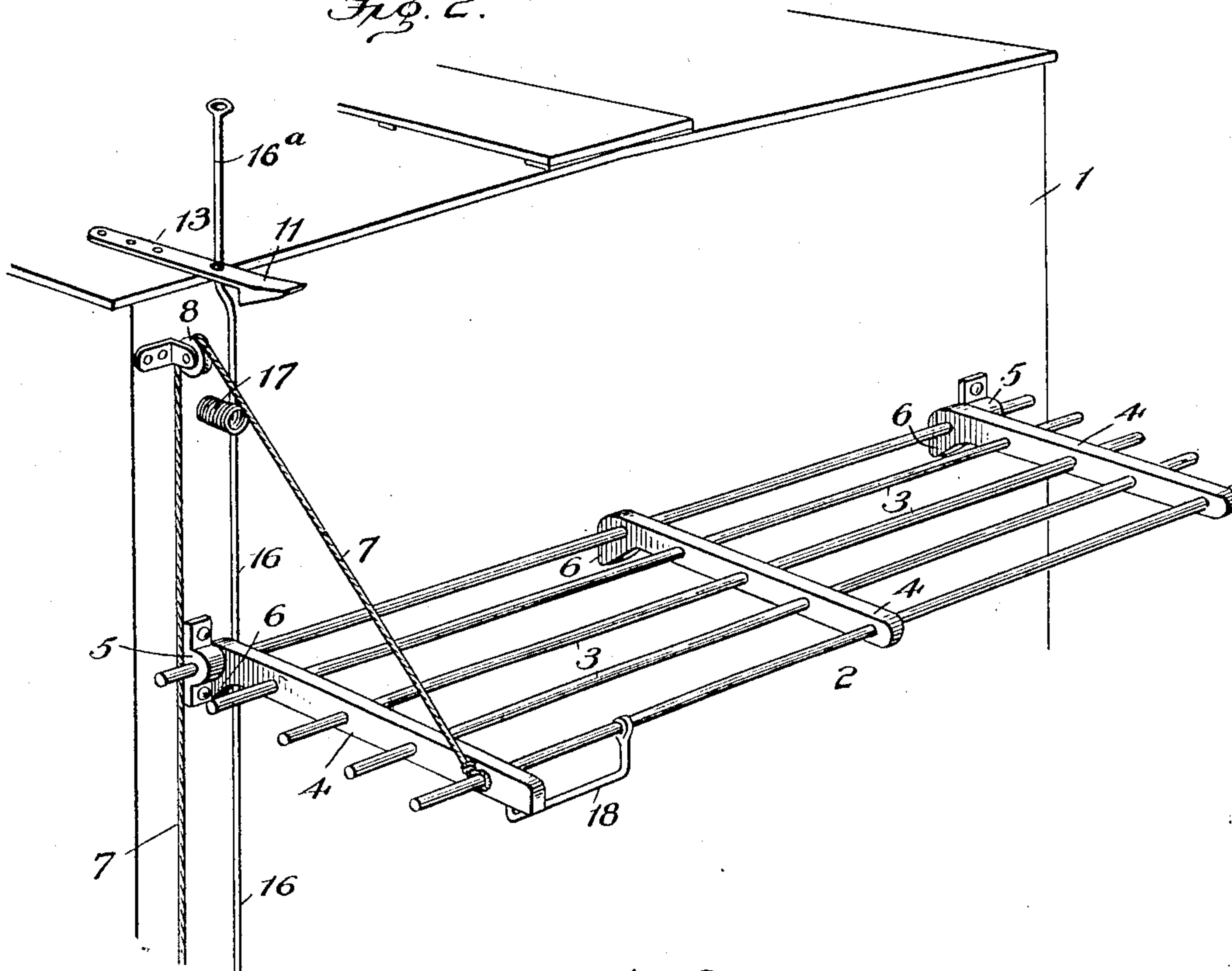
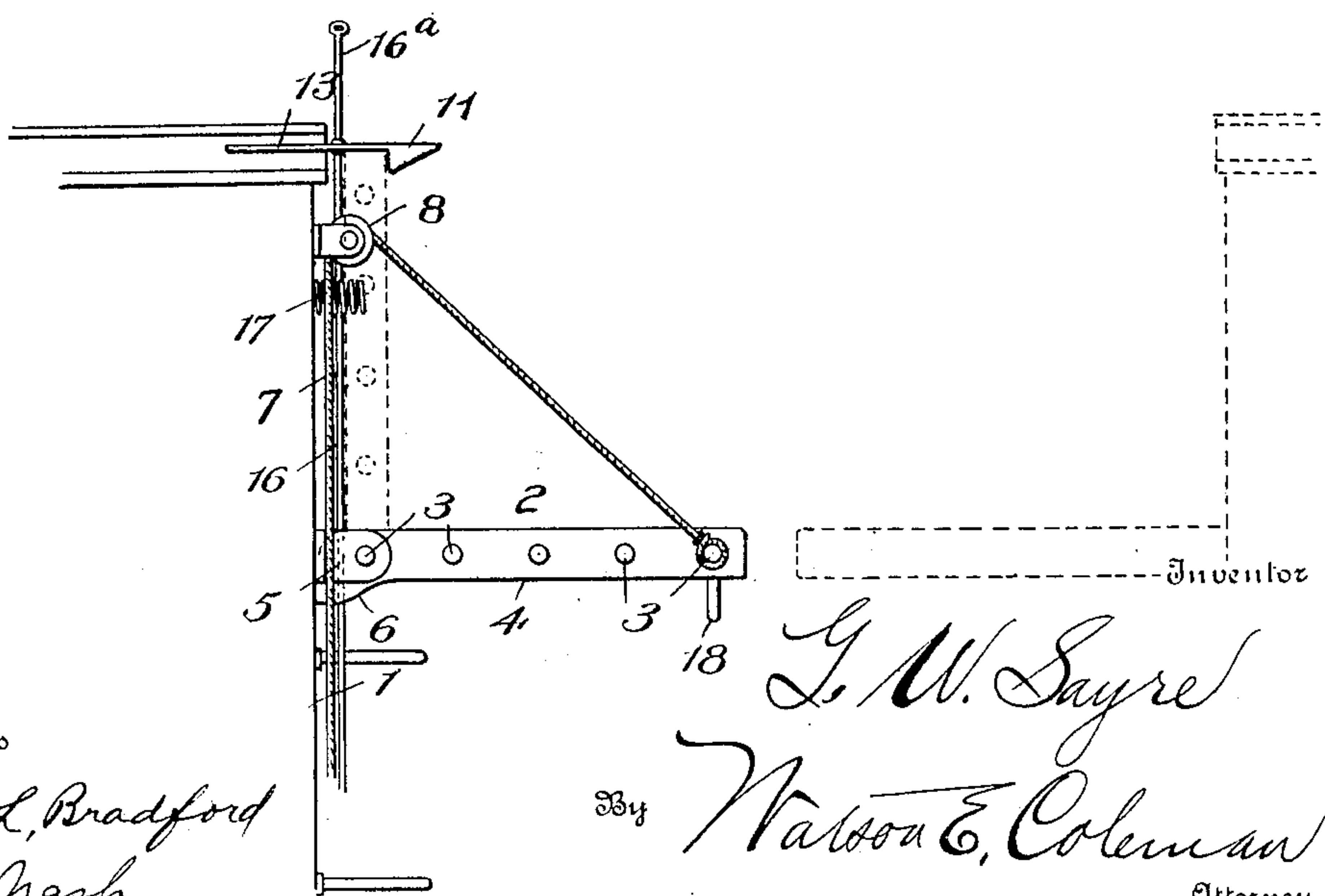


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE W. SAYRE, OF STEVENS, WEST VIRGINIA.

SAFETY DEVICE FOR CARS.

No. 869,658.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed May 22, 1907. Serial No. 375,077.

To all whom it may concern:

Be it known that I, GEORGE W. SAYRE, a citizen of the United States, residing at Stevens, in the county of Mason and State of West Virginia, have invented certain new and useful Improvements in Safety Devices for Cars, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to guards or safety devices for use on railway cars and more particularly those which will prevent trainmen from falling down between the ends of freight cars.

One object of the invention is to provide a guard of this character which may be readily mounted upon the end of a car in such manner that it may be folded up against the same to occupy but little space but which when let down to an operative position will form a bridge or support from one car to the next over which a trainman may pass without danger of falling down between the cars.

Another object of the invention is to provide a guard of this character which is simple and practical in construction and easy and convenient to operate.

With the above and other objects in view the invention consists in the novel features of construction and combination and arrangement of parts hereinafter described and claimed, and illustrated in the accompanying drawings, in which

Figure 1 is a perspective view of the end of a freight or box car with my improved guard or fender applied thereto; Fig. 2 is a detail perspective showing the guard or fender in its lowered position; and Fig. 3 is an end view of the parts shown in Fig. 2.

In the drawings, the numeral 1 denotes one end of a freight car or the like and 2 my improved guard or fender which is in the form of a grating adapted to be supported in a horizontal position or to be folded to a vertical position against the end of the car. The guard 2 is of a length corresponding, preferably, to the width of the car and of such width that when in its lowered or horizontal position it will project over half of the space between the abutting ends of two cars, but it will be understood that it may be of greater width so as to cover the entire space between two cars. It may be of any suitable form and construction, but I preferably make it of parallel longitudinal bars or rods 3 united and spaced apart by transverse bars 4 through which latter the bars or rods 3 project, as shown. The guard may be hinged in any suitable manner and at any desired elevation upon the car but I preferably employ hangers or bearings 5 which are suitably secured upon the car and are adapted to receive the innermost longitudinal bar 3 which latter thus serves as a pivot for the guard. The downward swinging movement of the guard is limited, so that it will be supported horizontally when lowered, by forming at the inner ends of the

transverse bars 4 enlargements or shoulders 6 adapted to abut against the end of the car.

For the purpose of raising the guard, I preferably employ a cable or flexible element 7 and pass it around a guide pulley 8 suitably journaled upon the car. One end of the cable is attached to one of the rods 3 and its other end depends from the pulley, passes through a guide eye 9 and has a hand loop or bail 10 secured upon it. It will be seen that when the hand loop is pulled downwardly, the guard will be swung upwardly to its folded or elevated position shown in Fig. 2. It is retained in this elevated position by means of a spring latch bar 11 having a shoulder and beveled projecting outer end and its inner end suitably secured, as at 13, upon the top of the car. As the guard is swung upwardly, one of its transverse bars 4 swings under the beveled end of the latch and elevates it until said bar 4 passes in rear of the shoulder of the latch which latter then springs downwardly and locks the guard elevated. For the purpose of actuating the latch bar 11 I provide a hand lever 14 which is pivoted at 15 upon the end of the car adjacent to its bottom and is connected by a rod or link 16 to the inner portion of the latch bar, as clearly shown in the drawings. When the lever 14 is swung upwardly the latch will be elevated to release the guard. To facilitate the opening or the dropping of the guard when thus released, I preferably arrange a coil spring 17 upon one end of the car so that it will be engaged and compressed by one of the bars 4 as the guard is folded. This spring will expand as soon as the guard is released and will start the latter in its downward swinging movement.

Upon the outer end of the guard are arranged hand loops 18 which will facilitate trainmen climbing up and down upon the usual hand loops or bails arranged upon the ends and tops of freight cars.

From the foregoing it will be seen that when freight cars are equipped with my improved guard it will be practically impossible for trainmen to fall down between the ends of the same since the guards when lowered, form a bridge which spans the entire space between the ends of the cars. It will also be noted that the guard may be easily and conveniently operated and that it is simple in construction and durable in use.

Having thus described my invention what I claim and desire to secure by Letters Patent is:—

1. The combination with a car, of bearings arranged upon one end thereof, a swinging guard consisting of parallel longitudinal bars and parallel transverse bars, the latter being apertured to receive the longitudinal bars and being formed at their inner ends with enlargements or shoulders to engage the end of the car and limit the downward swinging movement of the guard, the innermost longitudinal bar being rotatable in said bearings to serve as a pivot for the guard, a guide arranged upon the upper portion of the car and an operating cable attached to the outer portion of the guard and passed over said guide, substantially as described.

2. The combination with a car, of a swinging guard mounted upon one end of the same, means for retaining the guard in its elevated position and a spring for projecting the guard when released.
- 5 3. The combination with a car, of a swinging guard mounted upon one end of the same, means for supporting the guard in a horizontal position, means for elevating the guard to a vertical position, a latch for retaining the guard in its vertical position and means for projecting the
- 10 guard when released by said latch.
4. The combination with a car, of hangers projecting from one end of the same, a guard consisting of longitudinal and transverse bars, one of said longitudinal bars being rotatable in said hangers to serve as a pivot for the
- 15 guard and said transverse bars having shoulders to engage the end of the car and limit the downward swinging movement of the guard, a guide, a cable passed around said guide and attached to the guard for elevating the same, a spring latch for holding the guard in its elevated
- 20 position, means for operating said latch and a spring for projecting the guard when released by the latch, substantially as described.
5. The combination with a car, of a swinging guard

mounted upon one end of the same and intermediate its top and bottom, a holding means for retaining the guard 25 in its elevated or retracted position, and means for actuating said holding means for either the top or the bottom of the car.

6. The combination with a car, of a swinging guard mounted upon one end of the same, a latch for holding the 30 guard in its elevated or retracted position and an operating member projecting upwardly from the latch whereby the latter may be operated from the top of the car.

7. The combination with a car, of a swinging guard mounted upon one end of the same, a spring latch adapted 35 to engage the guard and hold it in its elevated or retracted position, an operating lever arranged adjacent to the bottom of the car, and a link connecting said lever and said spring latch for the purpose set forth.

In testimony whereof I hereunto affix my signature in 40 presence of two witnesses.

GEORGE W. SAYRE.

Witnesses:

MARY RAY,
TENA THORNTON.