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J. H. BROWN, E. BELL & J. SHAW.

FASTENING FOR END GATES FOR PIT CARS.

(Application filed Dec. 4, 1899.)

(No Model.)

Fig. 1.

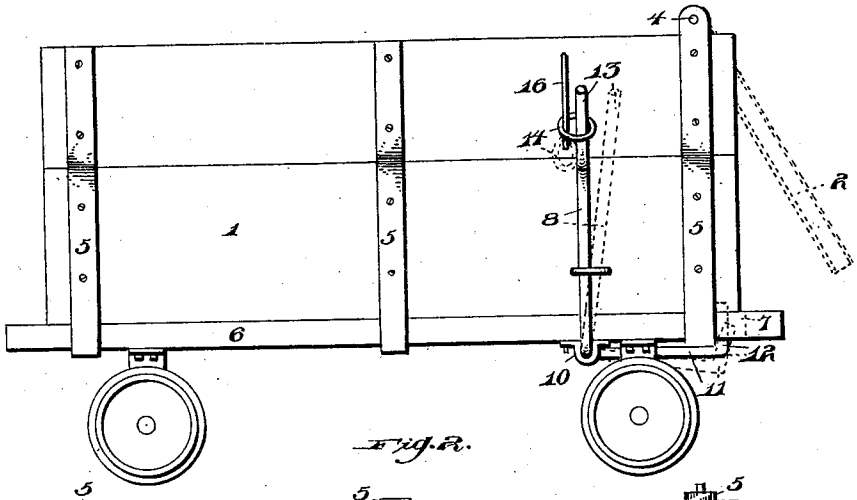


Fig. 2.

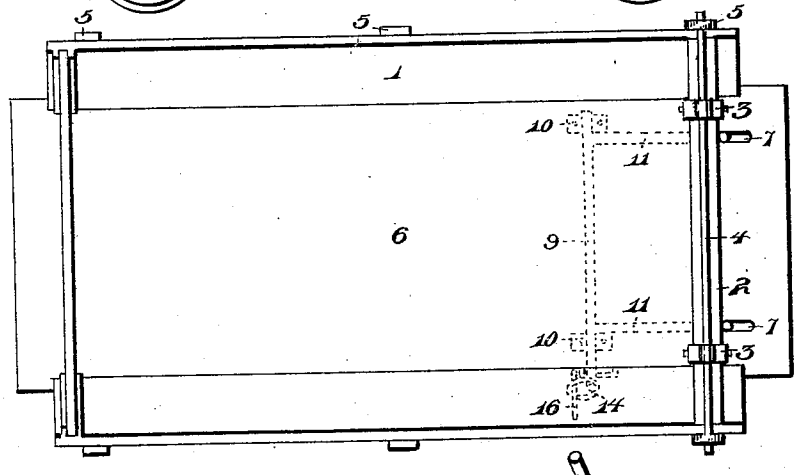


Fig. 3.

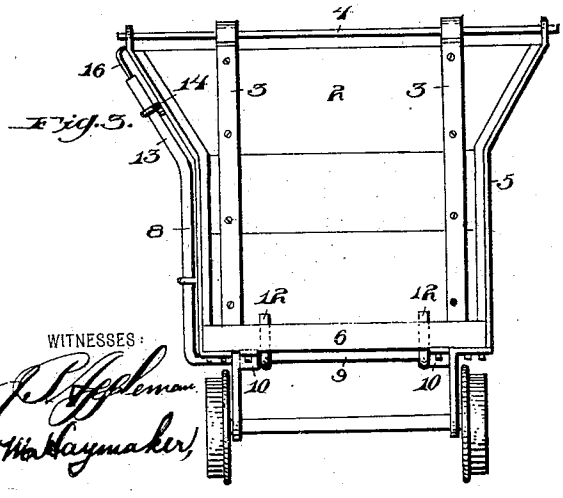
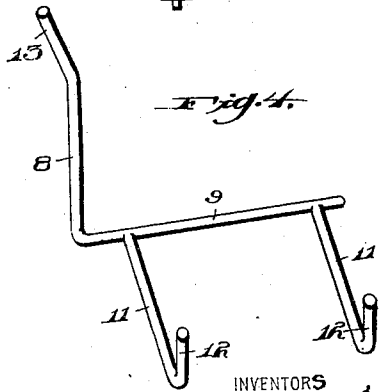


Fig. 4.



WITNESSES:

J. L. Hoffeman.

A. W. Baymaker,

INVENTORS

James H. Brown

Edward Bell

John Shaw

BY

Wm. Everett & Co.

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES H. BROWN, EDWARD BELL, AND JOHN SHAW, OF YOHOGHANY, PENNSYLVANIA.

FASTENING FOR END-GATES FOR PIT-CARS.

SPECIFICATION forming part of Letters Patent No. 644,054, dated February 27, 1900.

Application filed December 4, 1899. Serial No. 739,072. (No model.)

To all whom it may concern:

Be it known that we, JAMES H. BROWN, EDWARD BELL, and JOHN SHAW, citizens of the United States of America, residing at Yohoghany, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Fastenings for End-Gates for Pit-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to certain new and useful improvements in fastening devices and is particularly adapted for use upon pit or other cars.

One object of our invention is to construct a device of this character for releasing the end-gate of a pit or other car when desired to tilt the same for removing the contents thereof.

A further object of our invention is to provide a suitable locking means for the fastening device for securing the same in position to prevent the end-gate of the pit or other car from tilting.

Briefly described, our invention consists of an elongated rod or bar of suitable material having a portion thereof bent at an angle and this portion pivotally secured by a pair of keepers to the underneath face of the bottom of the car, a pair of horizontally-extending retaining-arms formed integral with said angle portion and having their free ends bent upwardly to extend through the floor of the car and retain the tilting gate in position, and suitable means to prevent the operation of the fastening device.

Our invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a side view of a pit-car, showing our improved fastening device connected thereto, the same being shown in dotted and full lines, also showing in dotted lines the end-gate when tilted. Fig. 2 is a top plan view of a pit-car, showing in dotted and full lines our improved fastening device. Fig. 3 is an end view of a car, showing our improved fastening device connected thereto. Fig. 4 is a perspective view of the fastening device.

Referring to the drawings by reference-numerals, 1 indicates a pit-car provided with an end-gate 2, connected to the hangers 3 for pivotally supporting the gate upon the cross-rod 4, which is secured in the upper end of the rear standards or studding 5 of the car. The car-bottom 6 has arranged in its rear end a pair of oblong slots 7, the function of which will be hereinafter set forth.

Our improved fastening device for retaining and releasing the end-gate 2 of a car consists of an elongated rod or bar 8, of suitable material, having the lower portion thereof bent at an angle thereto, as shown at 9, and which is adapted to be pivotally connected to the underneath face of the bottom of the car by means of the keepers 10.

11 indicates a pair of horizontally-extending retaining-arms having their free ends bent upwardly, as at 12, and extending through the slots 7 to prevent the outward movement of the gate. The upper end of the rod or bar 8 is bent to conform to the shape of the side of the car, as at 13, and is secured in a vertical position by means of a ring 14, mounted upon the same, and a suitable bracket 16, connected to the side of the car.

The operation of our improved device is as follows: When the ring is released from the upper end of the rod or bar 8, the same is swung backwardly, which releases the ends of the retaining-arms and permits the end-gate to swing outwardly when the car is tilted and which allows of the contents contained therein to be discharged. This movement is illustrated in dotted lines in Fig. 1.

It is thought that the many advantages of our improved device can be readily understood from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of our invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a pit or other car, of a rod or bar having its lower portion bent at an angle to the remaining portion, means for pivotally connecting the lower portion to the underneath face of the car, and a pair of horizontally-extending retaining-arms formed integral with said lower portion having the free ends thereof bent upwardly and adapted to extend through the bottom of the car for retaining the end-gate in position, substantially as set forth.

2. The combination with a pit or other car, of a rod or bar having its lower portion bent at an angle to the remaining portion, means for pivotally connecting the lower portion to the underneath face of the car, a pair of horizontally-extending retaining-arms formed integral with said lower portion having the free ends thereof bent upwardly and adapted to extend through the bottom of the car for retaining the end-gate in position, and means for securing said rod or bar in a locked position, substantially as set forth.

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

JAMES H. BROWN.
EDWARD BELL.
JOHN SHAW.

Witnesses:
F. G. HARRISON,
S. F. LYNCH.