

No. 659,777.

Patented Oct. 16, 1900.

A. C. WALTERS.  
MINE CAR LATCH.

(Application filed June 28, 1900.)

(No Model.)

Fig. 1

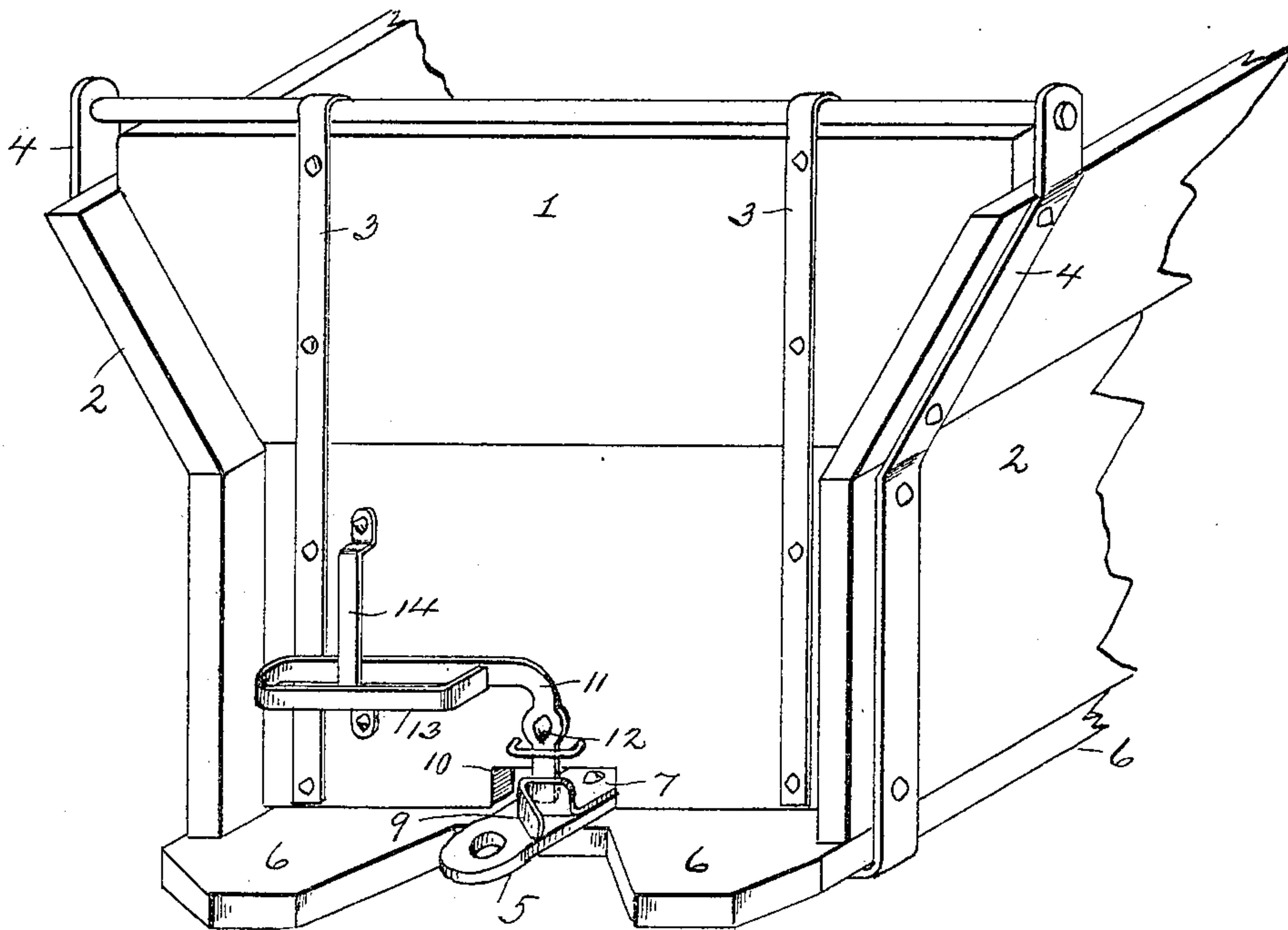


Fig. 2

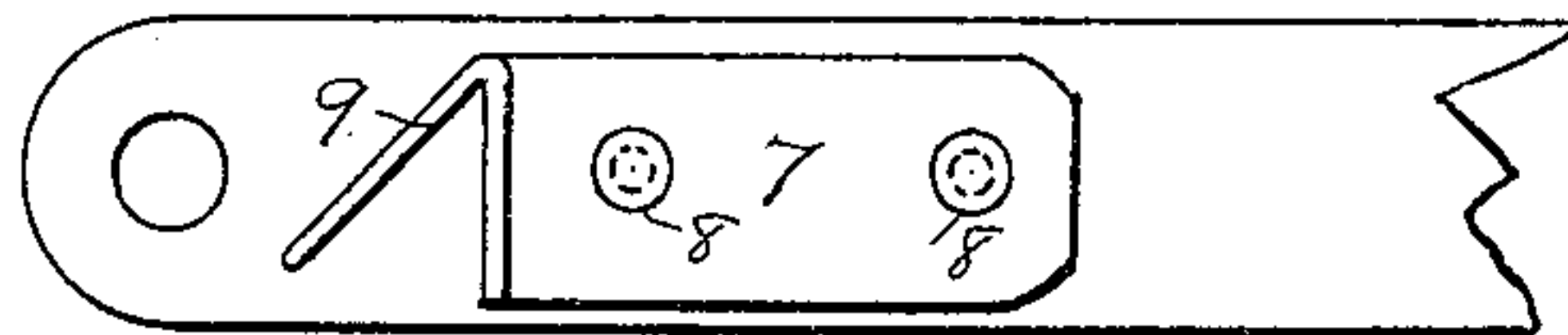
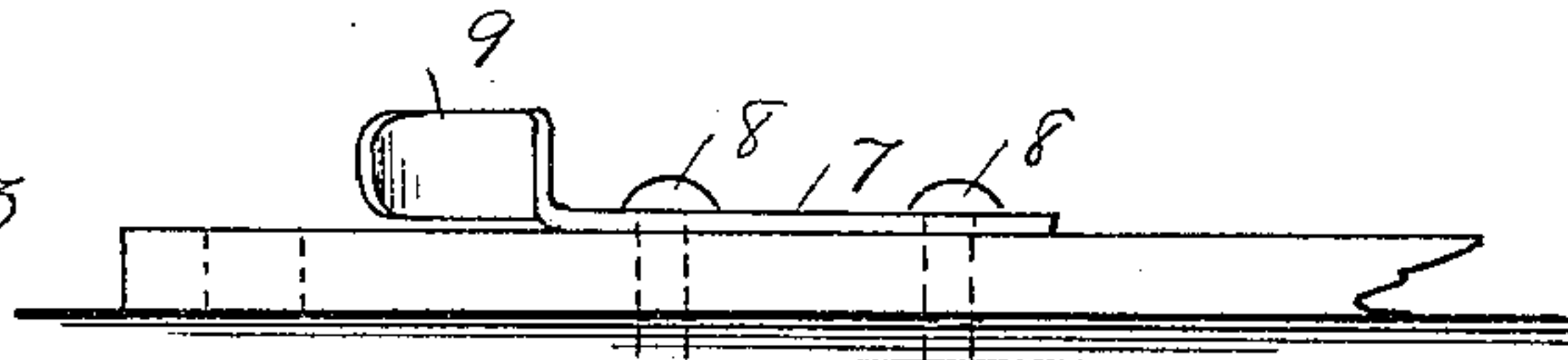


Fig. 3



Witnesses:

M. E. Harrison,  
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Inventor,

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Att'y.

# UNITED STATES PATENT OFFICE.

ALFRED C. WALTERS, OF UNIONTOWN, PENNSYLVANIA.

## MINE-CAR LATCH.

SPECIFICATION forming part of Letters Patent No. 659,777, dated October 16, 1900.

Application filed June 28, 1900. Serial No. 21,963. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED C. WALTERS, a citizen of the United States of America, residing at Uniontown, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Mine-Car Latches; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an improved mine-car latch; and it consists in certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a perspective view of the front portion of a mine-car, showing the end-gate of the same and having arranged thereon my improved latch for locking the said gate, which is constructed in accordance with my invention. Fig. 2 is a plan view of the keeper of the latch. Fig. 3 is a side elevation of the same.

To construct a mine-car latch in accordance with my invention, the said car consists of the side walls 2, the bottom or floor 6, the coupling-bar 5, the end-gate 1, hinged to the brace 4 by means of straps 3, and other well-known features common to this class of cars. Attached to the coupling-bar 5 in the proper position by means of bolts 8 is a keeper formed from a plate 7, the forward end of which is bent upward at a right angle, and a portion 9, inclined to form a slide, against which the bolt 11 operates. This bolt consists of a bar 11, pivoted at 12 immediately above the keeper above described and to the end-gate 1, and the said bar 11 bent to a horizontal position to form a handle 13. This handle portion 13 is guided and kept in the proper position by a strap 14, attached in a vertical position to the end-gate.

In operation the end-gate 1 is held from a forward movement by the lower end of the

bar 11 engaging with the keeper 7 and may be released by an upward movement of the handle 13. When the car is dumped and brought back to a horizontal position, the end-gate brings the bar 11 in contact with the inclined portion 9, passing along the same, drops back of the keeper, and locks the end-gate, preventing it from swinging outward, but leaving it free to swing inward (when the car is not loaded) from outside pressure, the gate being so hung that by its own weight it swings against the keeper from the inside and remains closed.

One of the principal advantages of this latch is that by not preventing the gate, when the car is not loaded, from swinging inward it reduces to the minimum the resistance, and in consequence the damages otherwise occasioned by the wreck of a train of empty cars when stiff locks are used.

Slight modifications and changes may be made in the details of construction without departing from the spirit of the invention.

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

The herein-described latch for mine-cars, consisting of the keeper, formed from a plate 7, and attached to the coupling-bar 5 of the car, the said keeper having a portion bent at a right angle and an inclined part 9, the latch-bar 11, pivoted to the end-gate, adapted to engage with the keeper, and provided with a handle portion 13, and the strap 14 for guiding and holding the bar in position, all arranged and combined for service, substantially as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

ALFRED C. WALTERS.

Witnesses:

I. H. MINERD,  
R. W. DAWSON.