No. 642,304. Patented Jan. 30, 1900.

J. DOBLER.

WAGON BRAKE.

(Application filed Oct. 16, 1899.)

(No Model.)

Fig 2.

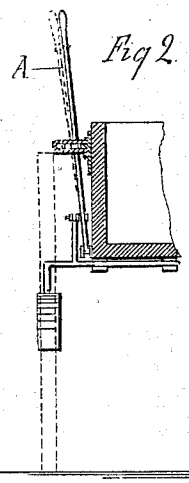


Fig 1.

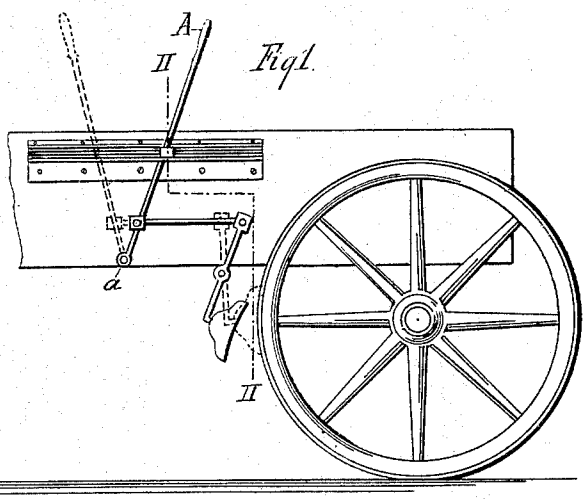


Fig 4.

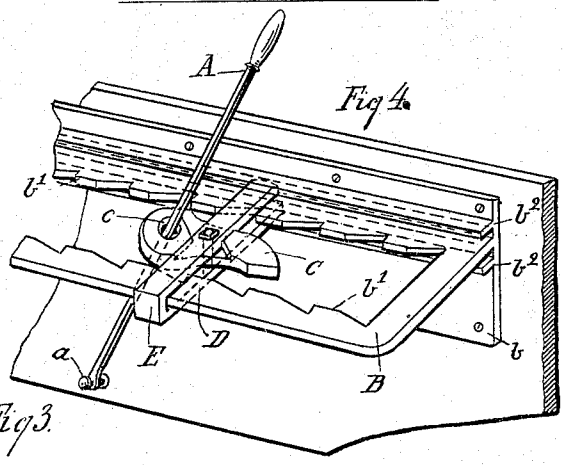
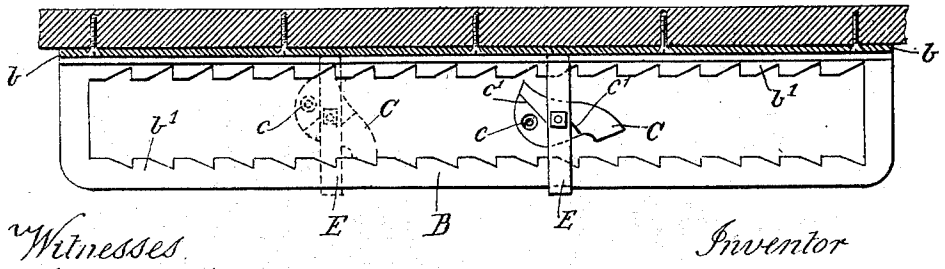


Fig 3.



Witnesses.
B. Bark.
H. A. Spencer.

Inventor
Jacob Dobler.
by his Attorneys.
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JACOB DOBLER, OF GALENA, KANSAS.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 642,304, dated January 30, 1900.

Application filed October 16, 1899. Serial No. 733,819. (No model.)

To all whom it may concern:

Be it known that I, JACOB DOBLER, of Galena, Cherokee county, Kansas, have invented certain new and useful Improvements in Wagon-Brakes, of which the following is a specification.

My invention relates to improvements in wagon-brakes, and especially to an improved ratchet-frame and duplex pivoted pawl for throwing the brake-shoe in and out of lock with the wheel.

In the accompanying drawings, Figure 1 is a side view of a wagon, showing my improvement in position on the side of the box in connection with ordinary brake-block mechanism. Fig. 2 is a cross-section on the zigzag line II II of Fig. 1. Fig. 3 is a plan view of the ratchet-frame and the pawl operating therein, also showing in horizontal cross-section the vertical or flange portion of said frame, by which it is secured on the box. Fig. 4 is an enlarged perspective view of my device in operative position.

A designates the brake-lever, which is loosely pivoted at *a* to the side of the box and is connected to a brake-rod or other ordinary means of operating the brake-shoe.

B is an open rectangular frame extending horizontally from the box, to which it is rigidly attached by bolts or screws passing through the vertical flange portion *b* of said frame. The inner side edges of said frame upon each side are provided with ratchet-teeth *b'*, adapted to be engaged by the points of the duplex pivoted pawl C, which is mounted on a bolt or pin D between the two parallel members of the sliding cross-bar E. The forward end of the pivoted pawl is provided with a circular opening *c*, through which the brake-lever A loosely passes.

The sliding cross-bar E at its outer end surrounds the outer side of the ratchet-frame B, but at its inner end simply incloses the inner side of said frame between its two parallel members, so that said inner end has some freedom of movement on the frame, but owing to the adjustment of the parts can under no circumstances become entirely disengaged from said frame. In order to give still firmer support to the inner end of said sliding bar, low flanges b^2 are also provided on the vertical plate *b* above and below the inner side of the ratchet-frame, thus forming longitudinal slots in which the said inner end of the bar moves. The inner ends of said bar have rounded corners to avoid binding. The pawls C are also provided with projecting shoulders *c'*, with straight edges placed at such an angle that when the brake is applied said shoulders press against the cross-bar upon each side of the latter and force it into its normal position at a right angle to the ratchet-frame.

The operation has been substantially indicated. When the brake is to be applied to the wheel, the lever A is first pushed forward, drawing the cross-bar E after it along the ratchet-frame. When the contact of the brake-block with the wheel arrests this movement, the lever is pushed outwardly, throwing both points of the pawl C into engagement with the ratchet-teeth of the frame. Reversing these movements releases the brake.

I claim as my invention and desire to secure by Letters Patent—

1. In a wagon-brake mechanism, the combination of a pivoted brake-lever, an open rectangular ratchet-frame mounted horizontally on the side of the box, and provided with ratchet-teeth on its inner edges, a sliding cross-bar on said frame and a pawl pivoted on said bar in position to engage the teeth of the frame and operatively connected to said brake-lever, substantially as set forth.

2. In a wagon-brake mechanism, the combination of a pivoted brake-lever, an open frame mounted horizontally above the pivotal point of said lever and provided with ratchet-teeth on its inner edges, a sliding cross-bar on said frame with its inner end moving in slots in the vertical portion of said frame, a doubly-pointed pawl pivoted on said bar in position to engage the teeth of the ratchet-frame, with an opening in the end of said pawl through which said brake-lever passes, substantially as set forth.

3. In a wagon-brake mechanism, the com-

bination of a pivoted brake-lever, an open frame mounted horizontally above the pivotal point of said lever and provided with ratchet-teeth on its inner edges, a sliding cross-bar on said frame, a doubly-pointed pawl pivoted between the upper and lower members of said bar, with shoulders on said pawl to engage the side edges of said bar, and operative connection between said pawl and brake-lever, substantially as set forth.

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

JACOB DOBLER.

Witnesses:
ED FRIEND,
C. D. ASHLY.