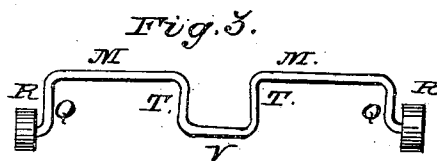
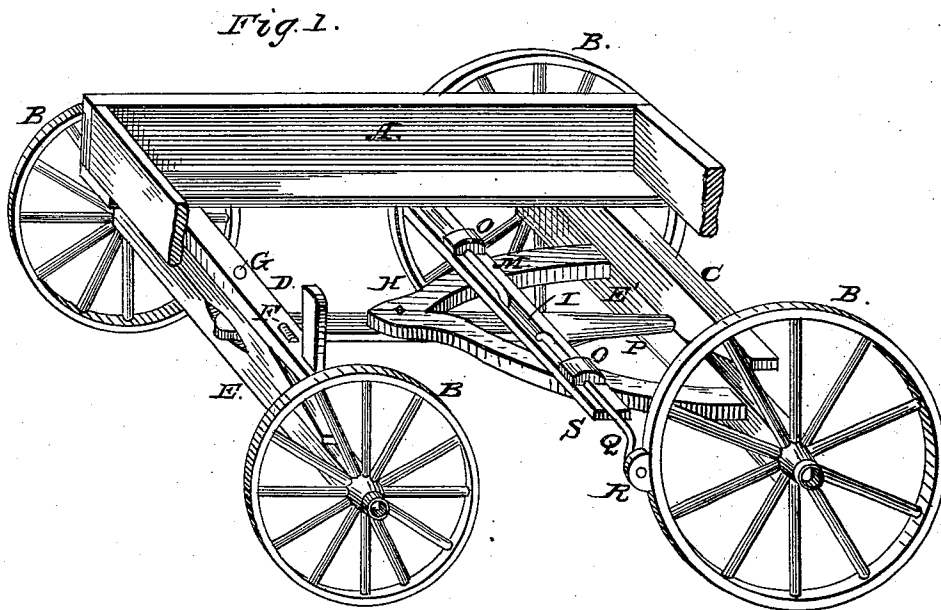
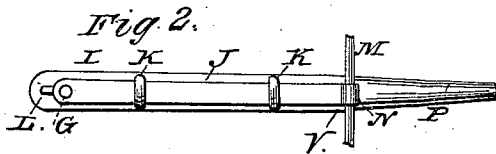


F. M. PICKERILL.

Wagon Brake.

No. 102,589.

Patented May 3, 1870.



Witnesses

*Ed. Chapin,*  
*E. Gibson*

Inventor

*Frank M. Pickervill*

# United States Patent Office.

FRANK M. PICKERILL, OF INDIANAPOLIS, INDIANA.

Letters Patent No. 102,589, dated May 3, 1870.

## IMPROVED AUTOMATIC WAGON-BRAKE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, FRANK M. PICKERILL, of Indianapolis, in the county of Marion and State of Indiana, have invented an Improved Automatic Wagon-Brake; and I do hereby declare that the following is a full and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings and letters marked thereon making a part of this specification, in which—

Figure 1 is a perspective representation of a wagon with my improved automatic brake attached.

Figure 2 is a view of the under side of the reach and sliding bar, showing how the bar is held in place to operate the brake-rod.

Figure 3, an elevation of the brake-rod detached from the other parts.

The present invention relates to an improved automatic wagon-brake, by means of which the gravity of the load checks the rotation of the wheels, and its nature will be fully understood by the following description.

E represents the forward, and  
E', the hind axle-tree of an ordinary wagon; and  
D is the front, and  
C, the rear bolster.  
H are the hounds.  
P, the reach.  
A, the box, and  
B, the wheels.

S represents an ordinary cross-bar, securely fastened to the hounds H, and slotted out at I, fig. 1, so that the crank-rod M may operate freely.

This rod has bearings on the cross-bar S at O O, and it is provided with cranks Q, which support brake-shoes R, and with a loop-crank, V, which is operated by means of a sliding bar J, fig. 2, which is arranged as follows:

This bar is made of metal or other suitable material, and it is held so as to slide longitudinally on the under side of the reach P by means of loops K, fig. 2, and one of its ends is jointed to the loop-crank V of the rod M, and the other end is provided with a hole,

through which the king-bolt G is put to hold it in place. This arrangement is such, that when the forward end of the reach P is slotted, as shown at L, fig. 2, and the box A rests upon friction-rollers F, pivoted to the front bolster D, fig. 1, the said reach will so move, by means of the slot, as to shorten the distance between the wheels B. This movement will cause the sliding bar J to turn the loop-crank V, and consequently bring the brake-shoes R against the hind-wheels by means of the cranks Q Q.

In practice, the rod M may run straight across the bar S, if a loop-crank, V, is attached to it, so that the bar J will turn it in its bearings O.

In any case, however, the cross-bar S must be slotted, so as to allow the loop V to pass through it and around the reach P.

I have thus described the complete brake as I now construct it; but I do not, however, claim the looped crank-bar V, as that is used in the patent of S. Warren, No. 66,917. Neither do I claim the slotted reach, as that is a common device well known to the art; but I rely on the fact that the loop-crank V is materially strengthened by means of the slotted bar S, as a crank-rod thus supported may be made of much lighter iron than when no bar is used, and on the improvement consisting of placing the connecting-rod under the reach, and supporting it by loops, so that it need not be made of so heavy iron as would otherwise be necessary, while at the same time it is out of the way of dumping loads, and no extra frame-work is necessary.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent of the United States, is—

In the construction of wagon-brakes, the slotted bar S, arranged to support the loop-crank bar V, when used in combination with the sliding bar J, operating in loops attached to the under side of the reach, and with brake-shoes R, as described.

FRANK M. PICKERILL.

Witnesses:

G. L. CHAPIN,  
E. E. GIBSON.