J. ROBINSON.

Wagon Brake.

No. 109,761. Patented Nov. 29, 1870.

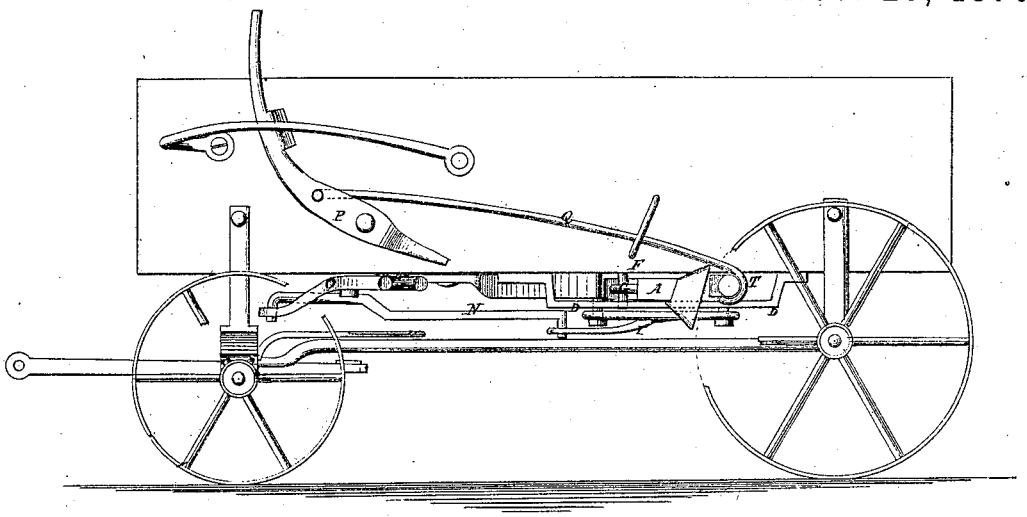
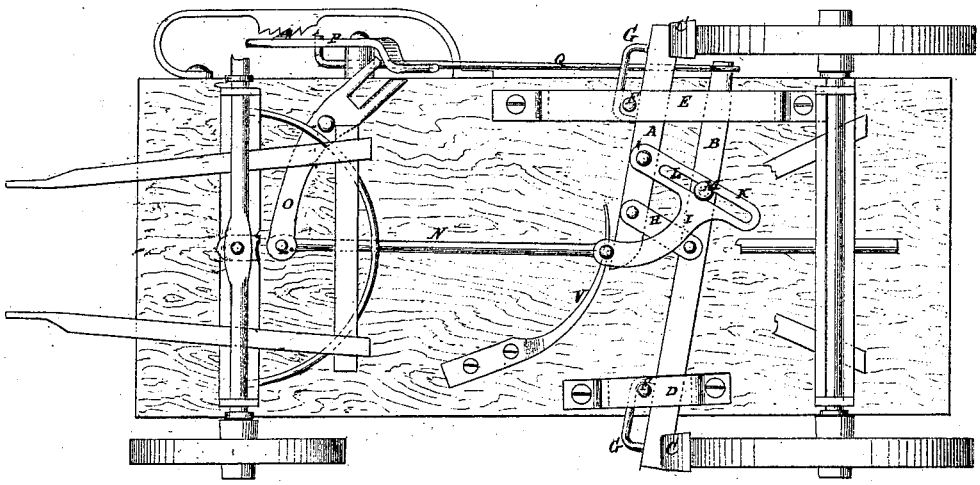


Fig. 2



Witnesses:

A. W. Almqvist

L. S. Mabee

Inventor:

J. Robinson

Per Munn & Co

Attorneys.

United States Patent Office.

JAMES ROBINSON, OF SEDALIA, MISSOURI, ASSIGNOR TO GEORGE SCHEER.

Letters Patent No. 109,761, dated November 29, 1870.

IMPROVEMENT IN WAGON-BRAKES.

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, JAMES ROBINSON, of Sedalia, in the county of Pettis and State of Missouri, have invented new and useful Improvements in Wagon-Brakes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in wagon-brakes; and

It consists in an arrangement of the brake-blocks on separate levers, mounted so that the blocks may be drawn under the box when released from the wheels, to prevent an accumulation of mud on them, and to be thrown out again previous to being forced onto the wheels, by a combination, with the said levers and the ordinary brake-operating lever, of apparatus for so operating the brakes by the said lever when applying or releasing the brakes.

Figure 1 is a side elevation of a wagon provided with my brake apparatus, and

Figure 2 is a plan of the bottom of the same.

Similar letters of reference indicate corresponding parts.

A and B represent the bars or levers on which the blocks or shoes C are mounted.

They are arranged at the under side of the box, parallel with each other or nearly so, in supporting guides D E, which hold them up snugly against the bottom of the box, but admit of their sliding out and in and vibrating as required for applying and releasing the blocks.

These guides have pivot-pins E passing through them, and the levers have long staples G, through which the pins pass, whereby the levers may both vibrate on these pins and slide back and forth, the pins serving for fulcrums for the levers.

The said levers are connected together by a link or bar, H, jointed to each, and lever A has a cranked lever, I, pivoted to it, which has an arm, K, extending across lever B, which arm has a long slot, L, in which a pin, M, projecting from lever B, works.

The arm of this lever, which is perpendicular to the slot or nearly so, is connected by a rod, N, with a lever, O, pivoted to the bottom of the box, near the front, so that one end, P, which is notched or forked, projects from under the box at one side to receive the lower end of the brake-actuating lever P, when moved for releasing the brakes from the wheels, said lever being connected by rod Q with the free end of brake-bar B for forcing the shoes against the wheels.

When this lever P is moved backward at the lower end to apply the brakes, it moves the lever O during the first part of its movement, and the latter, swinging the cranked lever I, throws the brake-bars A B outward so as to bring the shoes in front of the wheels before they are forced upon them by rod G, which is connected to bar B by a hooked end, T, which moves away from the said bar when the brakes are thrown off the wheels, so that the lever P may be moved some distance in throwing on the brakes before the lever B will be moved.

When the brakes are moved out endwise the lower end of lever P escapes from the forked end of lever O, and the movements of said lever O and the parts actuated by it cease. This takes place at or about the time the bar B is set in motion by rod G.

In throwing the brakes out of action the forward movement of the lower end of lever P brings it in contact with the forked lever O, by which the cranked lever I is thrown back so as to draw the bars A B and the brake-blocks under the wagon again.

The action of the lever I on the bars A B also has the effect to swing the shoes away from the wheels, but this is mainly done by a spring, U, which bears against the inner end of lever A.

It will be seen that, by this arrangement, the ends of the brake-bars and the shoes thereon are not exposed, when not in use, at the sides of the box, to accumulate mud from the wheels, which in some soils is of such a character as to greatly load the wagons, and any mud accumulating there when the brakes are out will be scraped off when they are withdrawn.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The arrangement of the brake-shoe supporting-bars or levers herein shown, for moving under the box when released from the wheels and out again when applied to the wheels, substantially in the manner specified.

2. The combination, with the brake-lever for forcing the brakes upon the wheels and the brakes arranged to slide under and out from under the box, of the cranked slotted lever I, rod N, and forked lever O, all substantially as specified

his
JAMES × ROBINSON.
mark.

Witnesses:
MARTIN REILLY,
F. WM. LIERMANN.