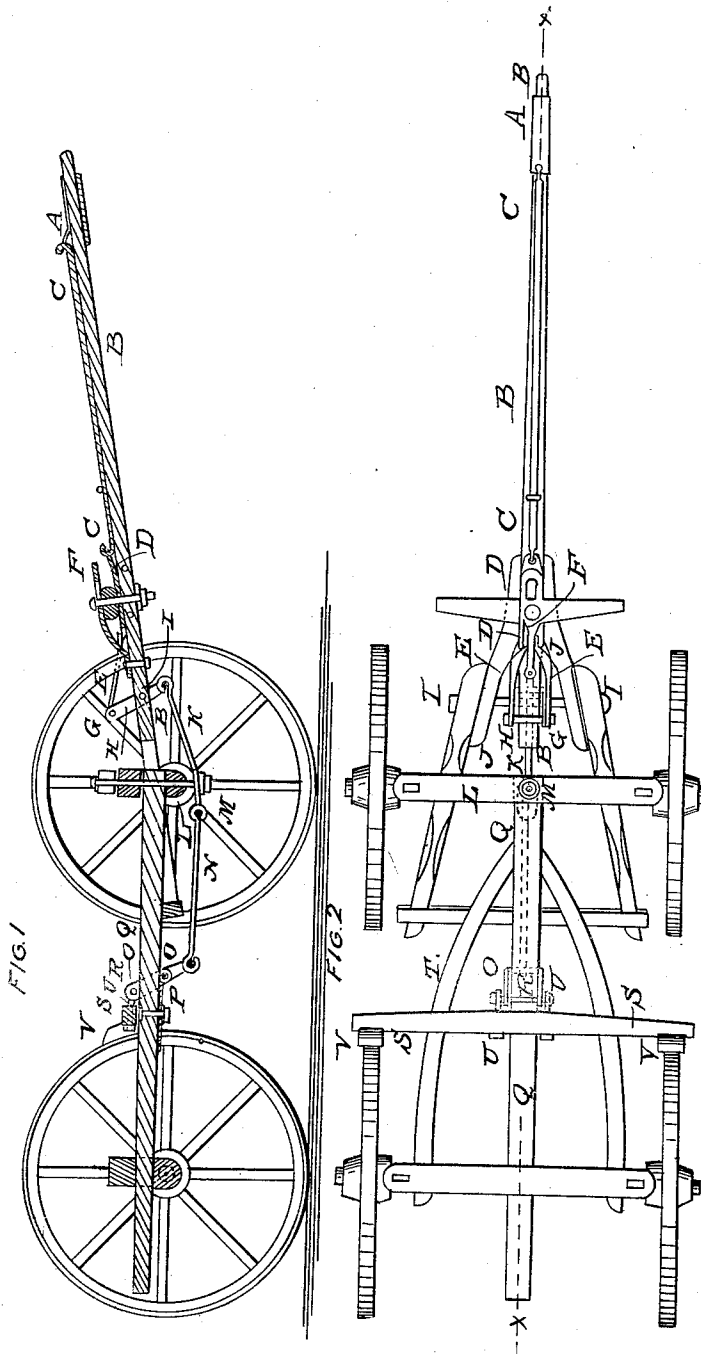


H. DAVIDSON.

Wagon Brake.

No. 81,882.

Patented Sept. 8, 1868.



WITNESSES
W. C. Ashkett
J. A. Chas. for
INVENTOR
Hugh Davidson
Attorneys.

United States Patent Office.

HUGH DAVIDSON, OF NEW SALEM, ILLINOIS.

Letters Patent No. 81,882, dated September 8, 1868.

IMPROVED 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, HUGH DAVIDSON, of New Salem, in the county of Pike, and State of Illinois, have invented a new and useful Improvement in Wagon-Brakes; and I do hereby declare that the following is a full, clear, 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, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of a wagon, to which my improved brake has been attached.

Figure 2 is a top or plan view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved automatic brake, which shall be so constructed as to adjust itself properly to all positions of the wagon, which can be easily and cheaply made by any blacksmith, which shall be more durable than other brakes now in general use, and which shall be capable of being applied to any wagon.

And it consists in the construction of the various parts of the brake, and in their combination with each other and with the running parts of the wagon, the whole being constructed and arranged as hereinafter more fully described.

A is a cap or tube, fitting upon the forward part of the tongue B, and the longitudinal movement of which may be limited by stop-pins attached to the said tongue.

In the upper side of the rear end of the cap A is formed a hole, into which hooks a hook formed upon the forward end of the bar C.

The bar C is formed of half-round iron, is secured to the upper side of the tongue B by two or more staples, one being placed near each end.

Upon the rear end of the bar C is formed a hook, which hooks into a hole formed in the forward end of the sliding plate D.

The plate D has a hole formed in its central part, into which fits the doubletree-bolt or hammer-handle, and upon its rear end are formed two hooks that hook into holes in the forward ends of the two bars or plates E.

The bars E should be sufficiently far apart to receive the hammer-strap F between them, and to be unimpeded in their movements by said hammer-strap.

The hammer-strap F and the rear part of the tongue B must be slotted to receive the doubletree-bolt or hammer-handle, so that the said bolt or hammer may move forward and backward with the movement of the plate D.

The rear ends of the bars E should have eyes formed in them to receive the bolt G, by which they are secured to the upper ends of the U or clevis-shaped lever H, the arms of which pass up upon each side of the rear end of the tongue B, and are secured in place by the bolt I, by which the tongue B is secured to the bounds J.

The lower or horizontal part of the lever H is rounded off to receive the hook formed upon the forward end of the rod or bar K.

The part of the lever H above the bolt I, in an ordinary wagon, should be about six inches long, and the part below said bolt should be about three inches long.

The rod or bar K passes back beneath the forward axle L, and has a slot or loop formed in its rear end, through which the king-bolt M passes, and the said rod is held up or supported by a washer and key attached to the lower end or point of said king-bolt.

N is a rod, which has a hook formed upon its forward end, which hooks upon the rear or slotted end of the bar or rod K, and which has a hook formed upon its rear end, which hooks upon the lower or horizontal part of the U or clevis-shaped lever O.

The lever O is similar in construction to the lever H, and is pivoted with its long end downward, in the position shown in fig. 1, to the forward end of the plate P, which is adjustably secured to the reach Q by a bolt

passing through said reach and through a slot formed in said plate, so that the brake may be adjusted nearer to or farther from the wheels, as may be desired.

The arms of the lever O pass up upon each side of the reach Q, and have eyes or holes formed in them for the reception of the bolt R, by which the said lever is connected to the brake-bar S.

The brake-bar S rests upon the reach Q, and upon the rear hounds T, which should be made as long as possible, so as to better support the said brake-bar.

U are eye-bolts, passing through the brake-bar S in such positions as to fit upon the outer side of the upper ends of the lever O, to which they are connected by the bolt R, thus forming a hinge for the brake-bar S to work upon.

V are the brake-shoes, which are made and attached to the brake-bar S in the ordinary manner, except that they should not descend below the said bar so as to allow the bar to turn up when backing the wagon, and thus relieve the wheels from the pressure of the brake.

In using this brake, as soon as the wagon presses forward against the horses, the action of the neck-yoke upon the cap A causes the brake to be applied to the wheels with a force proportioned to the forward pressure of the wagon.

In backing the wagon, the pressure of the neck-yoke forces the brake back, but the reverse movement of the wheels lifts the brake-bar, so that no pressure is applied to said wheels.

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

The arrangement, herein shown and described, of the brake-bar S, slotted plate P, U-shaped levers O H, connection N, rod K formed with an eye at its rear end, bolt G, arms E, slotted plate D formed with hooks, slotted strap F, rod C having a hook at each end, and sliding sleeve A, all constructed as described, and arranged with relation to the reach Q, king-bolt M, and pole B, to operate as set forth.

HUGH DAVIDSON.

Witnesses:

D. W. CROSSEN,
EVES PINE.