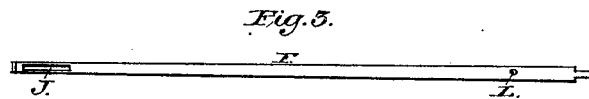
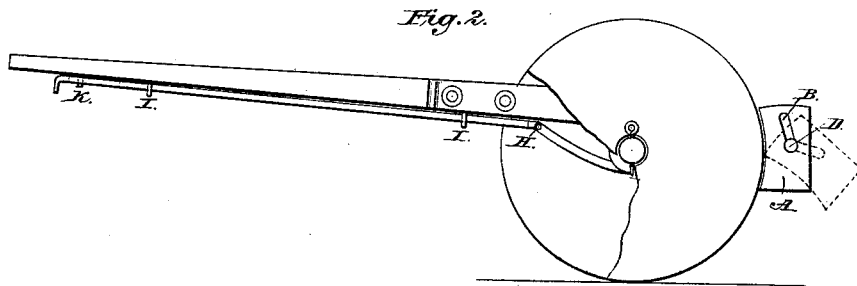
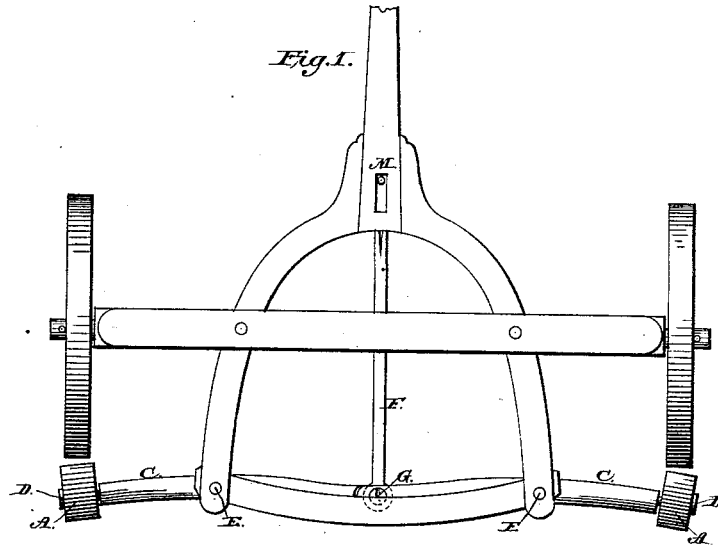


E. BENNETT.
WAGON-BRAKE.

No. 185,885.

Patented Jan. 2, 1877.



Attest:

A. G. D. Long,
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Inventor:

Erasmus Bennett,
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His Attorney:

UNITED STATES PATENT OFFICE.

ERASMUS BENNETT, OF INDEPENDENCE, NEW YORK.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. 185,885, dated January 2, 1877; application filed November 7, 1876.

To all whom it may concern:

Be it known that I, ERASMUS BENNETT, of Independence, Allegany county, in the State of New York, have invented certain new and useful Improvements in Wagon-Brakes, of which the following is a specification:

My invention belongs to that class of brakes which are automatically operated; and has for its object simplicity, cheapness, durability, and the capability of being readily applied to either the drop or stiff tongue wagons.

In the accompanying drawings, Figure 1 is a plan or top view of the forward portion of a stiff-tongue wagon with my improved brake applied thereto; Fig. 2, a side view thereof, showing the positions assumed by the brake-blocks in braking and backing, the outer wheel being broken away to show the hinge in the brake-operating rod; and Fig. 3 is a plan or top view of the brake-operating rod from its hinge forward.

Brake-blocks A A, each having a slot, B, oblique or tangential to its concave or bearing surface, are secured to the ends of levers C C by means of bolts D D, passing through the slots into the levers, or in any other well-known way. These levers are secured to the rear ends of the wagon-hounds by bolts E E, passing vertically through them and the hounds, which serve as their pivots and fulcras. They are also lap-joined, and connected with a brake-operating rod, F, by means of a bolt, G, passing vertically through them and the rod. This rod is jointed or hinged at H, and is held to the under side of the wagon-tongue by means of staples I I, or other well-known means which will admit of its endwise movement. A longitudinal slot, J, is made in the rod, near its forward end, to admit the holdback K of a wagon-tongue. A hole, L, is made in the rod, a little forward of its hinge, so as to come directly under or opposite the slot M in the rear end of the wagon-tongue, for the admission of a whiffletree-bolt, by which means it will be observed, that, as the brake-operating rod moves backward, (whiffletrees being attached thereto,) the slacking of traces will be prevented, and all liability of their becoming disengaged from their hooks or fastenings on that account is obviated.

It will also be observed that by the joint in the brake-operating rod it can readily be applied to a drop-tongue.

Furthermore, it will be seen that as the brake-blocks are slotted obliquely or tangentially to their concave or bearing surfaces, they are not only capable of a vertical movement, but have a backward or forward movement, bodily, at the same time, so that in the operation of the brake the blocks have a tendency to move upward and forward, with the forward and upward turning of the wheels, against which they bear, and thus act as a wedge to brake or lock the wheels, as shown in Fig. 2.

In backing, although the levers to which the brake-blocks are hung are operated in the same manner as when braking or locking the wheels, it will be seen that as the upward forward edges of the brake-blocks strike the wheels the backward movement or turning of the wheels will cause them to tilt or turn, as shown in dotted lines in Fig. 2, and, consequently, their wedging function is entirely overcome, and their bearing upon the wheels less than their weight.

The brake-operating rod is flanged or bent downward at its forward end, to form a bearing against which a neck-yoke ring is to act in operating the brake.

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

1. The combination, in a wagon-brake, of an endwise-moving brake-operating-rod underneath the wagon-tongue, brake-levers, joined to each other, and connected with the rear end of said rod by means of a bolt passing vertically through said rod and levers, and brake-blocks slotted obliquely or tangentially to their concave or bearing surfaces, and pivoted to the outer ends of said levers, substantially as shown and described.

2. The combination of the brake-operating rod F, moving endwise underneath the wagon-tongue, and brake-levers C C, joined to each other, and connected with the rear end of said rod by means of the bolt G, as shown and described.

3. The endwise-moving brake-operating-rod F, slotted at its forward end to receive the

holdback of a wagon-tongue, hinged at its rear, and having an opening, L, for the admission of a whiffletree-bolt, in combination with the brake-levers C C, connected therewith, and pivoted to the rear ends of the wagon-hounds, and brake-blocks slotted obliquely or tangentially to their concave or bearing

surfaces, and pivoted to the outer ends of said levers, substantially as shown and described.

ERASMUS BENNETT.

Witnesses:

J. M. CHURCH,
A. G. DE LONG.