G. & W. BENCH.

Wagon-Brake.

No. 51,684. Patented Dec. 26, 1865.

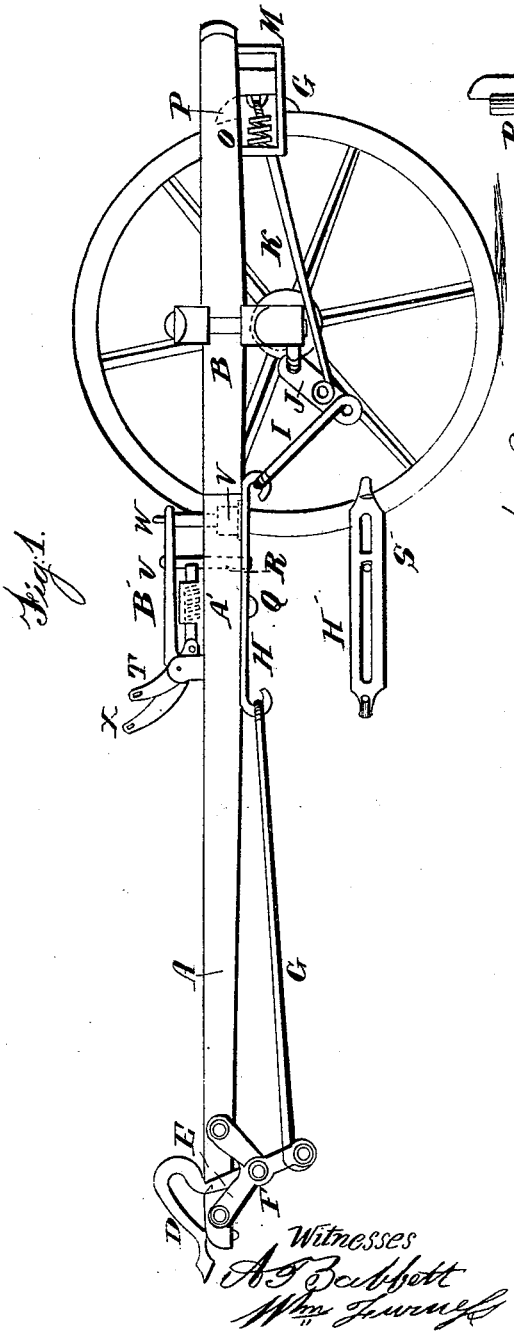

Fig. 1.

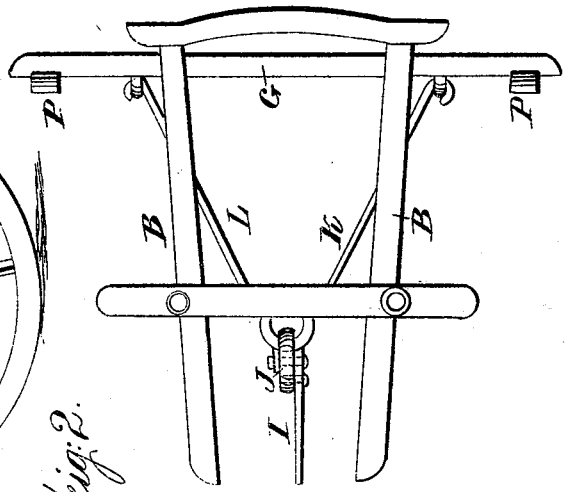

Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE BENCH AND WILLIAM BENCH, OF AUBURN, NEW YORK.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **51,684**, dated December 26, 1865.

To all whom it may concern:

Be it known that we, GEORGE BENCH and WILLIAM BENCH, of the city of Auburn, Cayuga county, and State of New York, have invented a new and improved mode of constructing a break for lumber-wagons, or any wagons where the same may be useful; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

The object of this invention is to so arrange certain mechanical devices and connect the neck-yoke of the horse's harness therewith in such manner that whenever the wagon is descending a hill, by means of said device a brake shall be applied to the forward wheels of the wagon of sufficient force to hold the same in check, and also to lock the said device and prevent the brakes being applied whenever it is desirable to back the wagon; and in order that others skilled in the art may know how to make and use our invention, we will proceed to describe its construction and mode of operation.

Figure 1 is an elevation of the pole and fore wheels of the wagon, showing the several parts of the device attached thereto. Fig. 2 is a plan of the rear portion of the above, showing the construction of the second part and their relations to each other.

In Fig. 1, A is the pole or tongue. B B is the hounds, and C is the brake-bar.

On the front end of the pole A is a goose-neck lever, D jointed to the stand E at F. The connection G is jointed to said lever at the lower end and to the slide H at the other. The under side of the slide H is shown at H. The connection I is jointed to the slide H at one end and at the other to the levers J. Jointed to these levers J are two connections, K and L, both of which connect the lever J with the brake-bar C. The brake-bar is held close against the lower side of the hounds B B by means of the loop M.

In front of slide-bar, and between it and the end of the loop, is a spiral spring, O. This spring is for the purpose of releasing and keeping the brake-pieces P P from acting against the wheel when the brake is not in use.

The slide H is held against the under side of the pole A by means of the bolt Q, and is allowed to slide freely thereon. Whenever it becomes important to back the wagon the brake is locked.

The bolt R runs down through the pole and enters the slot in the slide H, (shown at H′,) just forward of the cross-bar S. So long as this bolt is in this slot the brake cannot act.

By raising the end of the lever T the bolt U will be withdrawn from the notch in the side of the bolt R, and the rubber spring V, (shown in dotted lines,) acting on the stud W, will release the slide or unlock it, and it will continue to operate effectively as a brake until again locked.

Whenever it is required to lock the brake back it may be done by raising the end of the lever X and forcing down the bolt R until the notch in its side comes opposite the bar U, when the spring A in the socket B will force the said bolt into said notch and lock it, as before.

Having above described the construction and mode of operating our invention, what we wish to secure by Letters Patent, is—

The combination of the locking device with the wagon-brake when constructed and operated in the manner above described.

GEORGE BENCH.
WILLIAM BENCH.

Witnesses:
A. BABBETT,
WM. FURNESS.