(No Model.)

J. W. WILCOX & J. WILLIAMS.

WAGON BRAKE.

No. 414,665. Patented Nov. 5, 1889.

Fig. 1.

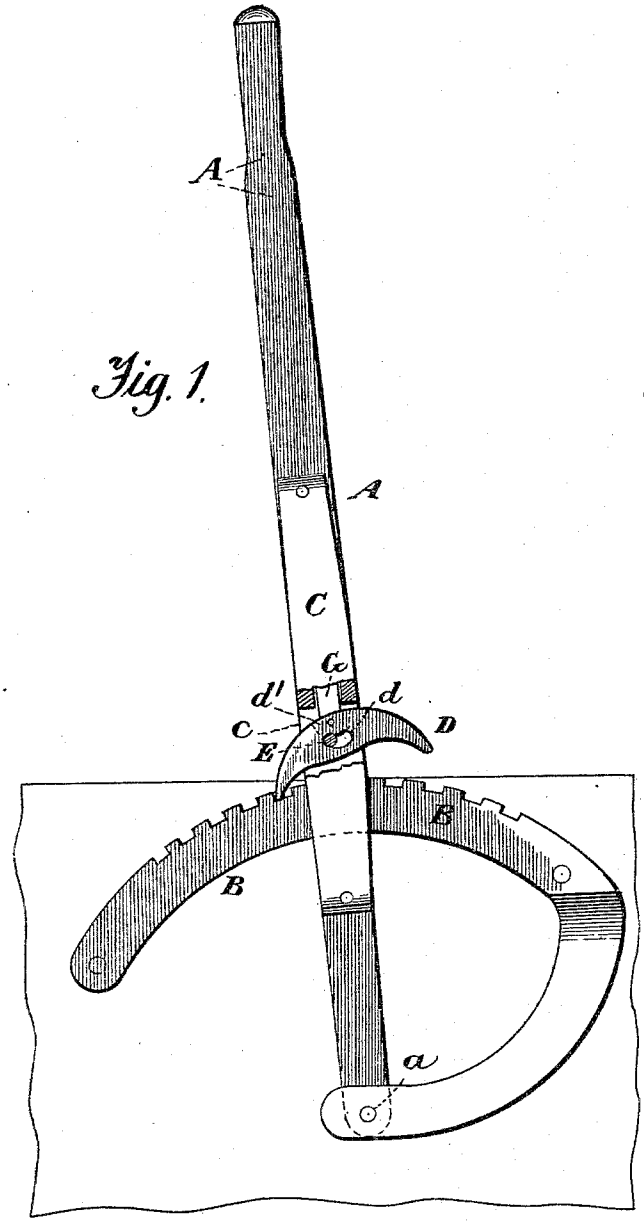
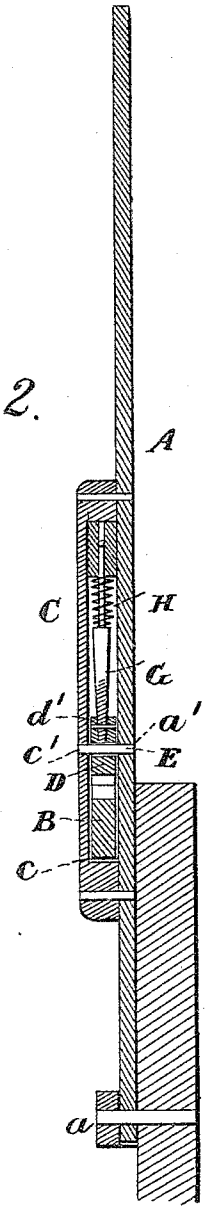


Fig. 2.



Witnesses.
A. Ruppert.
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Inventors.
J. W. Wilcox,
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Per
Thomas P. Simpson
atty

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN WILLIAM WILCOX AND JOHN WILLIAMS, OF SMITHVILLE, MISSOURI; SAID WILCOX ASSIGNOR OF ONE-HALF OF HIS RIGHT TO SYLVANUS A. RILEY, OF SAME PLACE.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 414,665, dated November 5, 1889.

Application filed April 25, 1889. Serial No. 308,559. (No model.)

To all whom it may concern:

Be it known that we, JOHN WILLIAM WILCOX and JOHN WILLIAMS, citizens of the United States, residing at Smithville, in the county of Clay and State of Missouri, have invented certain new and useful Improvements in Wagon-Brakes; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention, relating to wagon-brake levers, will first be described in connection with the drawings, and then pointed out in the claim.

Figure 1 of the drawings is a side elevation, and Fig. 2 a transverse vertical section.

In the drawings, A represents a brake-lever fulcrumed at *a*, and B the curved rack in which it works on one side of a wagon.

C is a cleat made fast to one side of a wagon, and slotted at *c*, so as to receive therein both the curved rack and the double-ended pawl D.

E is a pin which passes through the lever-hole *a'*, cleat-hole *c'*, and the median transverse slot *d* of the pawl.

The rack B does not have the usual inclined teeth, but is provided with such as are perpendicular to the center of the circle of which it forms an arc, the object being to allow the opposite ends of the pawl to lock with equal facility. The pawl D has an elongated vertical slot *d'*, extending to the slot *d*, to receive the presser-pin G, which is operated by the spiral spring H, so as to assist gravity in holding the pawl D to the rack B. When the lever A is moved to one end of the slot *d*, the pin E presses the nearest end of the pawl into the rack, while the farther end rises therefrom.

In driving a four-horse team the driver may ride one of his horses and with a rope put the brakes on and off the wheels, said rope being used to actuate the lever.

We are aware that a double-ended pivoted pawl working in a rack with perpendicular teeth is not new; but the construction of our pawl with the two slots *d d'* and the spring-pressed pin G working therein are believed to constitute a new feature and one which gives utility to the device.

We are acquainted with the brake described in Patent No. 383,187; but that is specially applicable to endless cables and requires a grip to operate the lever, while ours is specially applicable to wagons. It has not our slots *d d'*, by which the pawl D automatically adjusts itself to the rack and to the spring-pin G, which constitute the new features of our invention. Again, the purpose of our pawl is different from that described in Patent No. 383,187, the purpose of that being to rotate a gear-wheel, while ours is to lock a ground-wheel.

What we desire to protect by Letters Patent is—

In brake-lever mechanism, a middle-pivoted double pawl D, provided with slots *d d'* and spring-pin G, whereby the pawl automatically changes its position with respect to the rack and spring-pin, as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN WILLIAM WILCOX.
JOHN WILLIAMS.

Witnesses:
E. A. BROOKS,
I. C. PETERS.