

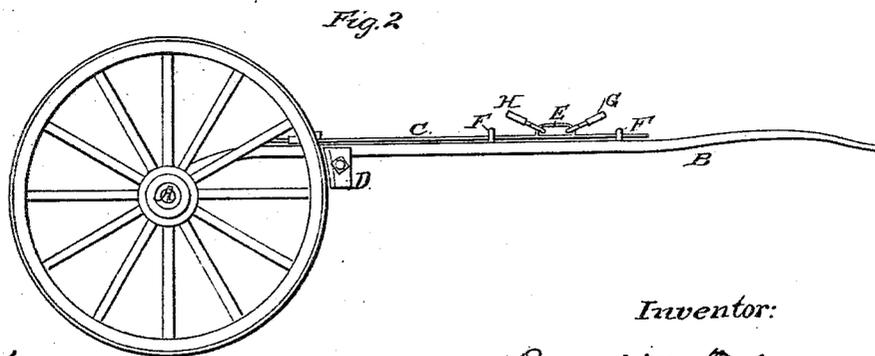
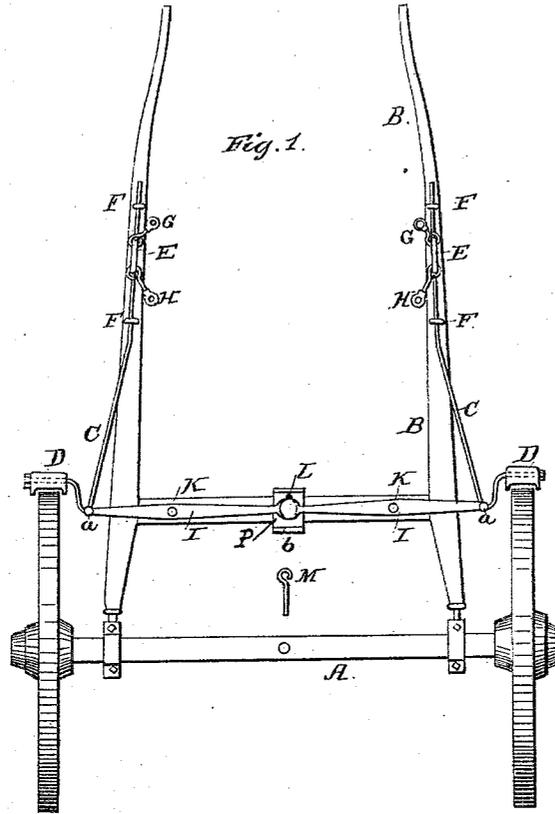
(No Model.)

R. J. McFARLAND.

WAGON BRAKE.

No. 303,029.

Patented Aug. 5, 1884.



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UNITED STATES PATENT OFFICE.

ROBERT J. MCFARLAND, OF PARIS, TENNESSEE.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 303,029, dated August 5, 1884.

Application filed January 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, R. J. MCFARLAND, a citizen of the United States, residing at Paris, in the county of Henry and State of Tennessee, have invented certain new and useful Improvements in Automatic Wagon-Brakes, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 represents a plan view of the shafts or thills and front wheels of a vehicle to which my improvements have been applied. Fig. 2 is a side elevation of the same.

My invention relates to automatic wagon-brakes in which the draft necessary to draw the wagon keeps the brakes off, while any retardation of the movement of the wagon by the animal hitched to it instantly puts on the brakes. Means are also applied for preventing the action of the brake when desired.

With the above objects in view, my improvement consists in the following construction and arrangement of devices, which will be first fully described, and the points of novelty then pointed out in the claims.

To enable those skilled in the art to make and use my invention, I will now proceed, in connection with the drawings, to describe it in detail.

A represents the forward axle of a one-horse carriage, provided with shafts or thills B, hinged in the usual way. To the cross-bar of the thills, to which the single-tree is commonly attached, are pivoted two levers, I I, by bolts K K. The inner ends of these levers project past each other, and lie one above the other at said ends.

P is a short centrally-arranged cross-bar secured upon the cross-bar to which the shafts are attached. The bar P has two raised lugs or projections, *b*, at either end, which limit the movement of the levers I in both directions by the contact therewith. For this purpose the inner ends of the levers are made preferably of disk shape. The bar P has a hole, L, pierced therein, in which may be inserted the pin M, to prevent the action of the levers, and consequently keep the brakes off. The outer ends of the levers I I carry curved arms, to which are attached the brake-shoes D D. A swiveling pivotal connection is also

made with the rods C C at the points *a a*. These rods, extending from the outer ends of the levers, pass forwardly along the top sides of the thills, and have an endwise motion through the staples F F.

E E are irons—one attached to each rod C—to which the sliding eyebolts G G and H H, snap-hooks, or other suitable connections are secured for attaching the traces and holdback-straps.

My invention dispenses with the single-tree and permits the use of a short trace or tug. Both the traces and holdback-straps may be provided with snap-hooks to enter the eyes in the fastenings G G H H.

My invention is of especial use in rolling countries, where there are many hills. The braking-power applied is in direct proportion to the steepness of the grade of the road. A steep hill, by throwing an increased weight upon the horse, at the same time increases the braking-power, the brakes being taken off the instant that the weight or momentum of the vehicle ceases the pull upon the holdback-straps. The brake-shoes are arranged in front of the forward wheels. The present device is designed more particularly for one-horse vehicles.

Having described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In an automatic wagon-brake, a pair of levers arranged upon the thill-frame end to end, and pivoted to the frame at or near the midlength of the levers, in combination with the bar P, having the lugs or projections *b*, the whole arranged for operation as set forth.

2. The combination of the levers I I, arranged as described, the bar P, having lugs *b*, and a pin or stop for preventing the movement of the levers when desired.

3. The combination of levers I I, arranged end to end, bar P, having lugs *b*, and the rods C, having suitable fastening devices.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT J. MCFARLAND.

Witnesses:

J. L. LEMONDS,

JNO. R. CROSSWELL.