L. B. MORGAN.

Wagon-Brake.

No. 162,092. Patented April 13, 1875.

Fig. 1.

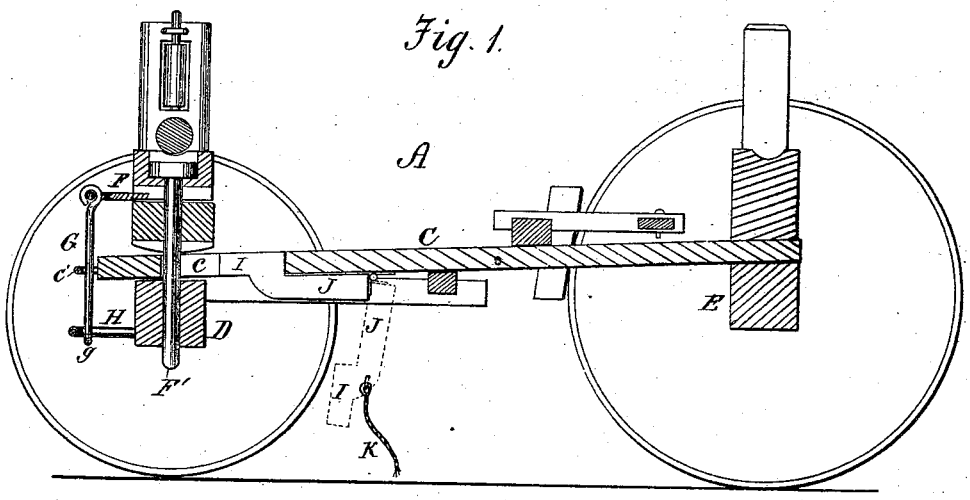
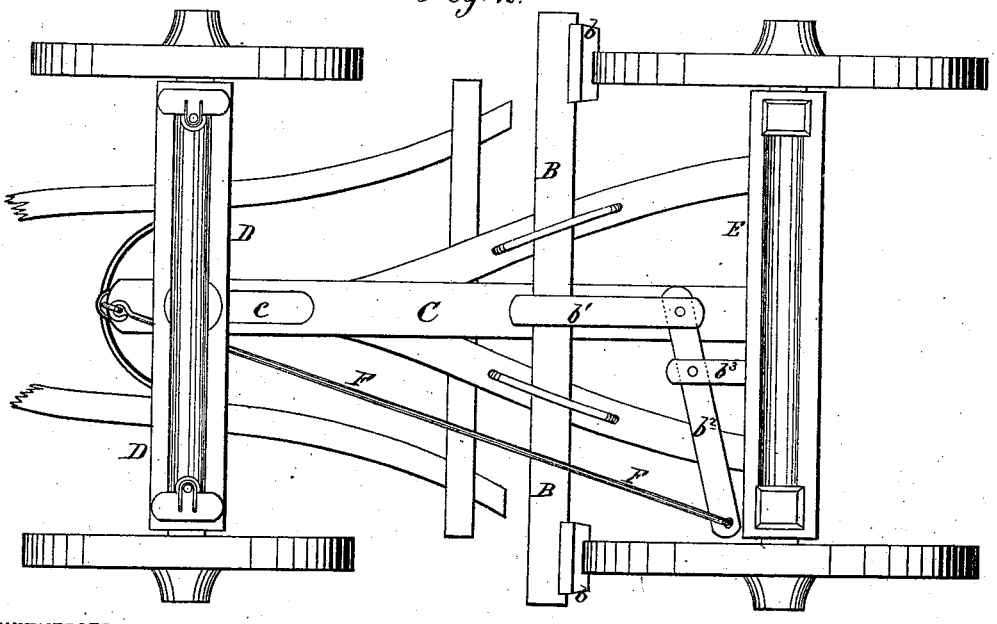


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LEWIS B. MORGAN, OF WEST LIBERTY, WEST VIRGINIA.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **162,092**, dated April 13, 1875; application filed March 5, 1875.

To all whom it may concern:

Be it known that I, LEWIS B. MORGAN, of West Liberty, in the county of Ohio and State of West Virginia, have invented a new and Improved Wagon-Brake; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a longitudinal vertical section; Fig. 2, a plan view.

The invention relates to that class of automatic wagon-brakes wherein the weight on wagon applies the brakes through a sliding reach; and consists in the features of improvement hereinafter described and claimed.

A represents an ordinary wagon having the brake-bar B, with shoes *b b*, median bar b^1, and lever b^2 fulcrumed in a stud, b^3. This is the common brake mechanism used for many years upon wagons, and is operated by a hand-lever connected with the lever b^2. C is the reach, which couples the two axles D E, and to the latter of these it is fixed, while to the former it is connected by a bolt, F, that passes through a front slot, *c*. This enables the reach to slide in the front axle.

I do not, however, claim any invention on my part in a sliding reach, whether it moves on the front or rear axle, the same having been long known to the public.

First. My invention consists in connecting the end of lever b^2 with the front axle D by the long horizontal rod F, the perpendicular second-class lever G, that passes through an eye, c', of reach, and the arc-rod H, made fast to the front of axle, and to which the lever G is fulcrumed by a loop, *g*. By this means, as the reach C is moved forward on the front axle, it pushes the lever G and moves rod F so as to operate the brake, while the loop *g* and arc-rod H enable the lever G and rod F to turn with the front part of running-gear.

Second. In order to lock the front and rear axles at their maximum distance apart, and thus enable the wagon to be backed without putting on the brakes, I apply a filling, I, in the end slot *c* of reach and attach this filling rigidly to the small hinged bar J that hangs, ordinarily, pendent below the reach, but which may be lifted into position to fill the slot *c* in a moment by a hand-cord or equivalent device, K.

These improvements in brake mechanism have been found, practically, to make it certain that the brakes will be applied at exactly the proper time, while they do not in the least interfere with the turning, backing, or any ordinary movement or use of the wagon.

Having thus described my invention, what I claim as new is—

1. The combination of brake-lever b^2, axle D, slotted reach C, eye c', rod F, lever G, and arc H, substantially as and for the purpose set forth.

2. The combination of the slotted reach, hinged bar J, filling I, and cord K, substantially as and for the purpose set forth.

LEWIS B. MORGAN.

Witnesses:

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