W. GLAZE.

Wagon-Brake.

No. 48,169. Patented June 13, 1865.

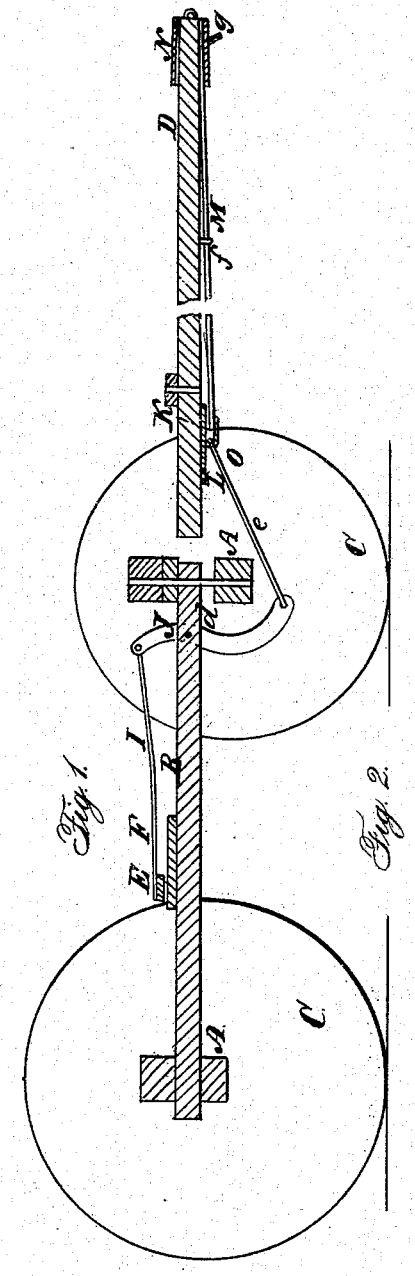

Fig. 1.

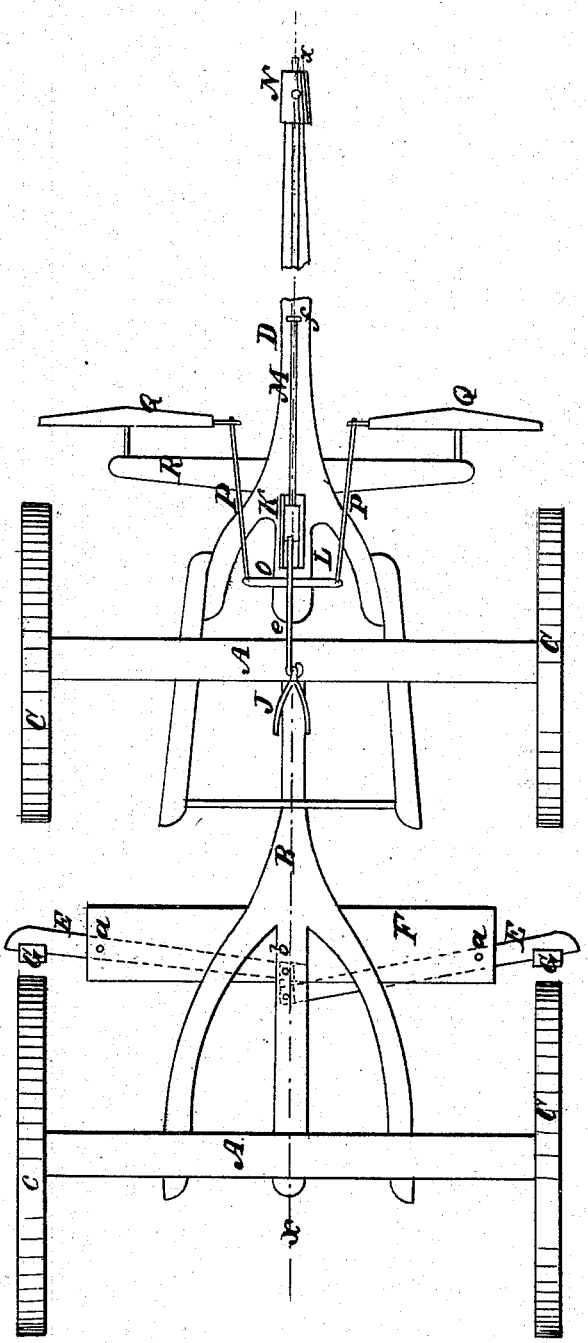

Fig. 2.

Witnesses:

Theo Tusch

W. Brewn

W Glaze Inventor.

By Munn & Co

UNITED STATES PATENT OFFICE.

WILLIS GLAZE, OF ROCHESTER, INDIANA.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **48,169**, dated June 13, 1865.

To all whom it may concern:

Be it known that I, WILLIS GLAZE, of Rochester, in the county of Fulton and State of Indiana, have invented a new and Improved Self-Acting Wagon-Brake; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, an inverted plan of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved self-acting brake for wagons; and it consists in a novel arrangement of parts, as hereinafter set forth, whereby a very simple brake of the kind specified is obtained, and one which may be applied at a moderate expense.

A A represent the axles, B the perch or reach, C the wheels, and D the draft-pole, of a vehicle. These parts may be constructed and arranged in the usual way, and therefore do not require a minute description.

E E represent two levers, which are secured by pivot-bolts *a* to a cross-bar, F, at the rear of the perch B. The inner ends of these levers are connected by a link, *b*, and at the outer ends of said levers shoes G are attached to bear or act against the rear wheels, C C.

To the inner end of one of the levers E a rod, I, is attached by a pin, the front end of said rod being connected to the upper end of a curved forked lever, J, the fulcrum-pin *d* of which passes through the reach or perch B. The lower end of this lever J is below the front axle, A, and it is connected by a rod, *e*, with a slide, K, which is fitted and allowed to work freely in a guide-plate, L, attached to the under side of the draft-pole D. This slide K also has a rod, M, attached to it, which works in a guide, *f*, underneath the draft-pole, and extends along to the front part of the same, and is connected to a thimble, N, which is fitted loosely on the draft-pole, said thimble being provided with a pendent pin, *g*, against which the breast or holdback straps bear.

To the rod *e* a bar, O, is pivoted centrally, each end of the latter being connected by a rod, P, with the inner ends of the whiffletrees Q Q, which are attached to a double-tree, R, as usual.

From the above description it will be seen that as the wagon is drawn along the outer ends of the levers E E, and consequently the shoes G G, will be thrown or moved out from the wheels C. This result is due to the connection of the whiffletrees with the rod *e*, which causes the lever J and rod I to press back the inner ends of the levers E E and force out the shoes G from the wheels. The shoes G are applied to the wheels whenever the team holds back on the thimble N, as in descending a hill, for instance, or when the wagon moves forward under its momentum and the speed of the team checked, the gravity of the wagon giving it a tendency to descend, or the momentum moving it forward, which causes the shoes to bear or press against the rear wheels, which are instantly relieved from the shoes when the whiffletrees are acted upon under the pull of the team.

I do not claim, broadly, the employment or use of shoes attached to levers connected with a rod so as to be acted upon by the breast-straps or holdbacks in connection with the gravity of the wagon or its momentum, for that has been previously used; but

I do claim as new and desire to secure by Letters Patent—

1. The connecting of the whiffletrees Q to a bar, O, pivoted to a rod, *e*, which is connected with the lever J for the purpose of relieving the rear wheels of the pressure of the shoes G under the pull of the team, as set forth.

2. The arrangement of the slide K, fitted in the guide-plate L, lever J, and rods *e* M, and thimble N, all arranged to operate in connection with the levers E E, substantially as and for the purpose specified.

3. The combination of the levers E E, rod I, lever J, rod *e*, slide K, rod M, and thimble N with the bar O, connected by rods P P to the whiffletrees Q Q, for the purpose set forth.

WILLIS GLAZE.

Witnesses:

MILO R. SMITH,

A. F. SMITH.