N. LEZAT.

Wagon-Brake.

No. 49,771. Patented Sept. 5, 1865.

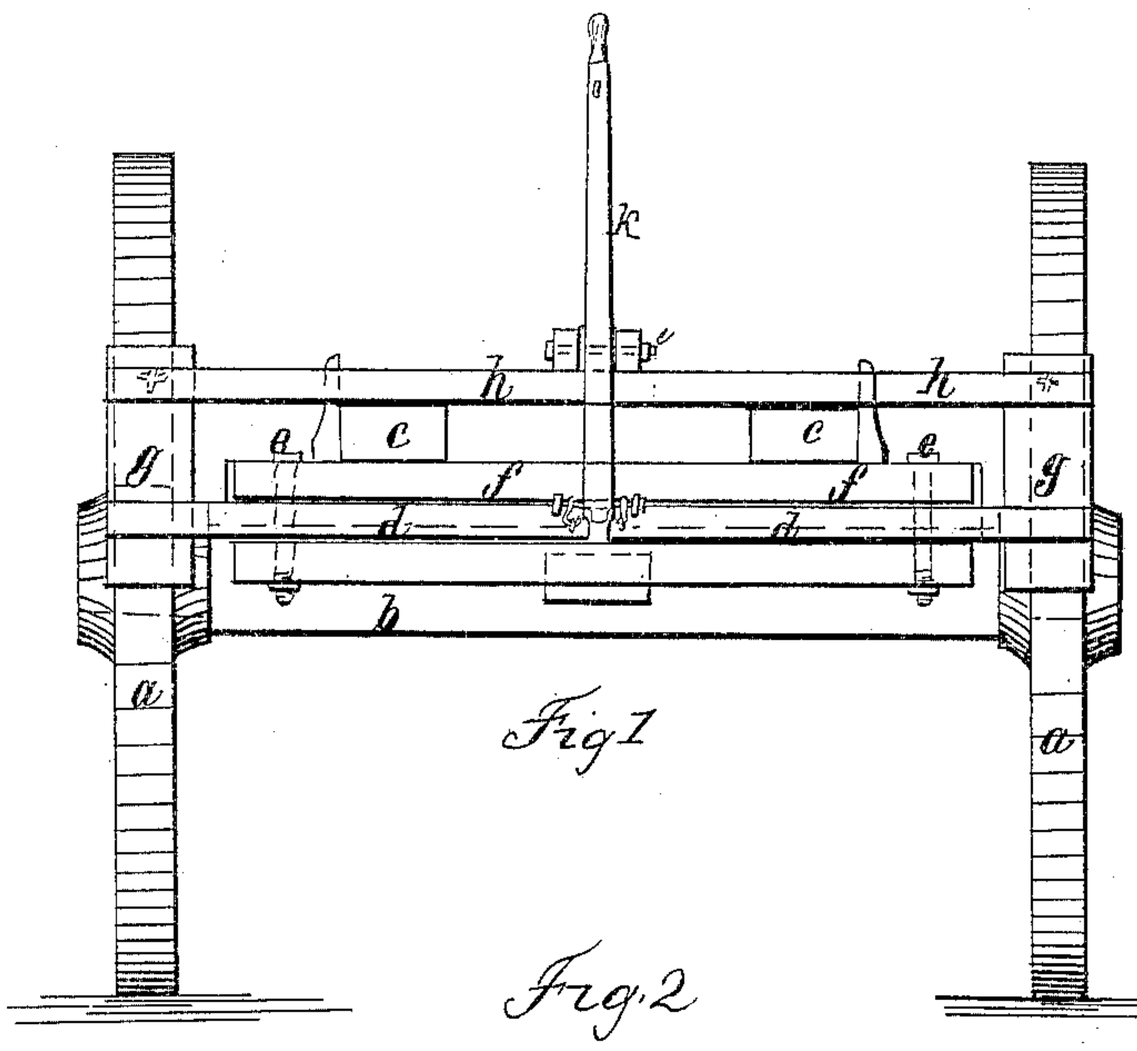
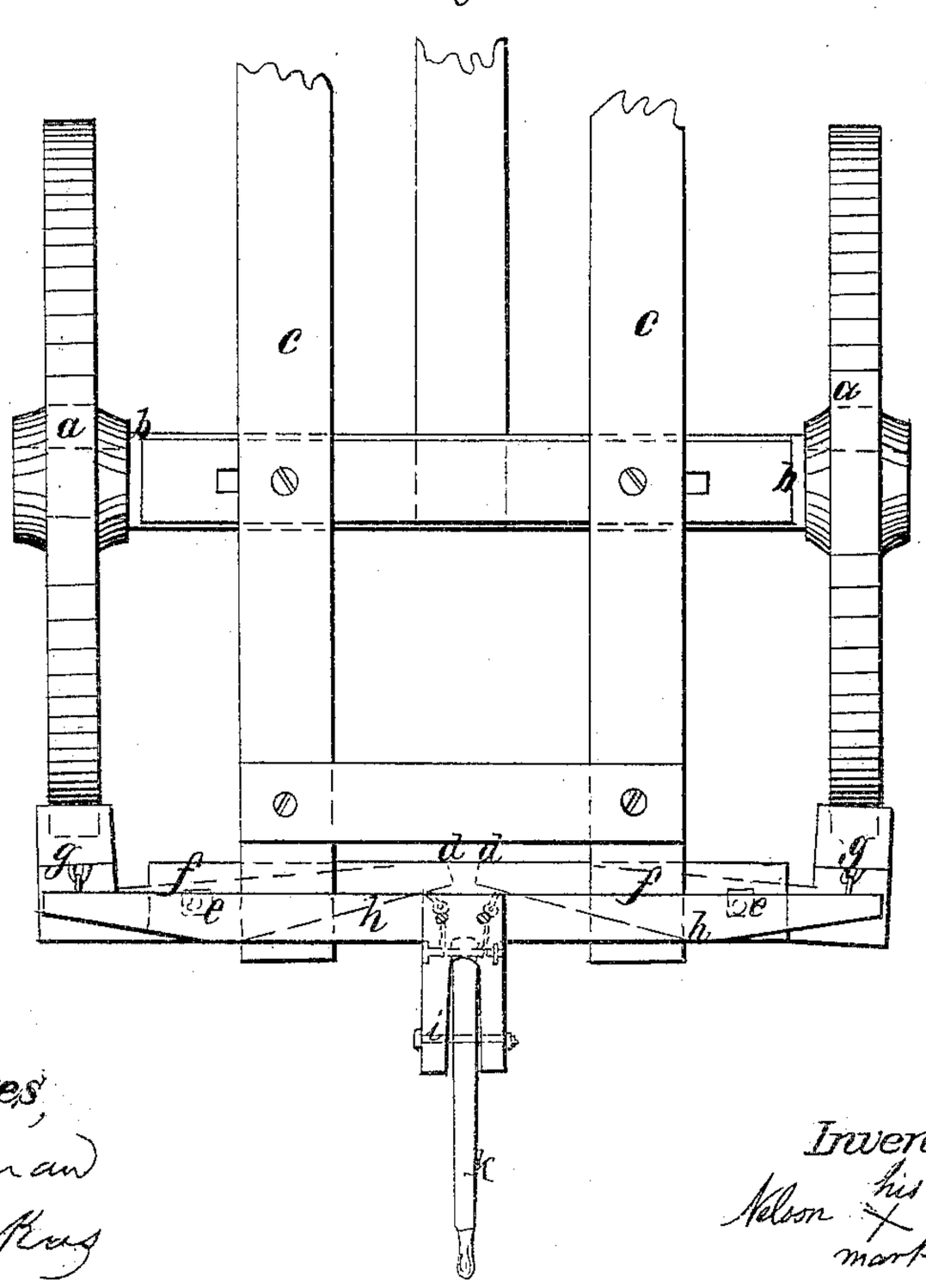


Fig 1

Fig. 2



Witnesses,
Wm Thomson and
John Backus

Inventor;
Nelson his ✕ Lezat
mark

UNITED STATES PATENT OFFICE.

NELSON LEZAT, OF NEW BALTIMORE, NEW YORK.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **49,771**, dated September 5, 1865.

To all whom it may concern:

Be it known that I, NELSON LEZAT, of New Baltimore, in the county of Greene and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Brakes for Wagons, &c.; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is an elevation of the said brake, and Fig. 2 is a plan of the same as applied to a pair of wheels.

Similar letters denote the same parts.

Brakes for carriages, wagons, &c., have heretofore been fitted to act on the wheels, both in front and at the back of either pair of wheels, and the brake-blocks have been attached at the outer ends of horizontal levers sustained on fulcra on the wagon-frame, and said horizontal levers have been actuated by a vertical lever, also having its fulcrum on the wagon-frame. In this instance the pressure of the vertical lever against its fulcrum is a force that does not aid in applying the brake-blocks to the wheels, but is an injurious strain upon the wagon-frame.

The nature of my said invention consists in the combination of the pair of horizontal levers carrying the brake-blocks and the secondary lever acting upon said horizontal levers with a cross-bar that extends from the brake-block on one side to that on the other and carries the fulcrum of said secondary lever, so that the power applied thereto shall operate at its fulcrum through said cross-bar to press the brake-blocks to the wheels with greater force, whereby the frame of the wagon is not exposed to so much strain and all the force is expended in pressing said brake-blocks to the wheels, thereby arresting the movement of the wagon with much greater ease than has heretofore been the case.

In the drawings, *a a* are the wheels on the axle *b*. *c c* are the horizontal hounds or frame of the wagon.

I have shown my brake applied at the rear of the hind wheels; but it might be applied to the front of the same wheels or to the front wheels, the parts being shaped and sustained accordingly.

d d are horizontal levers on fulcra *e e* to the cross-piece *f* or frame of the wagon, and *g g* are the brake blocks or shoes attached at the ends of the levers *d d*.

h is a bar from one shoe *g* to the other, and connected with them by suitable links or joints.

i is the fulcrum for the secondary lever, *k*, which fulcrum *i* is near the center of the cross-bar *h*, and the short end of the lever *k* is connected by links with the long ends of the levers *d d*, and the longer end of the lever *k* may be formed with a handle or a hole or loop, into which a rope may be attached to pass to the driver or pers n in the wagon or other vehicle. This mode of fitting is particularly adapted to hay and grain wagons, &c., as the rope can lead up the back to the driver, and a slight pull on the lever *k* causes the brakes to operate powerfully, as the pressure of the fulcrum of *k* is applied from the cross bar *h* directly to the brake-blocks, as well as the power from the levers *d d*, also acting on the said brake-blocks, so that there is none of the force that is not applied to the brake-blocks.

What I claim, and desire to secure by Letters Patent, is—

The cross-bar *h*, carrying the fulcrum *i* of the secondary lever *k*, in combination with the horizontal levers *d d* and brake blocks or shoes *g g*, as and for the purposes specified.

In witness whereof I have hereunto set my signature this 7th day of June, 1865.

his
NELSON + LEZAT.
mark.

Witnesses:

A. KLOMAN,

JOHN BACKUS.