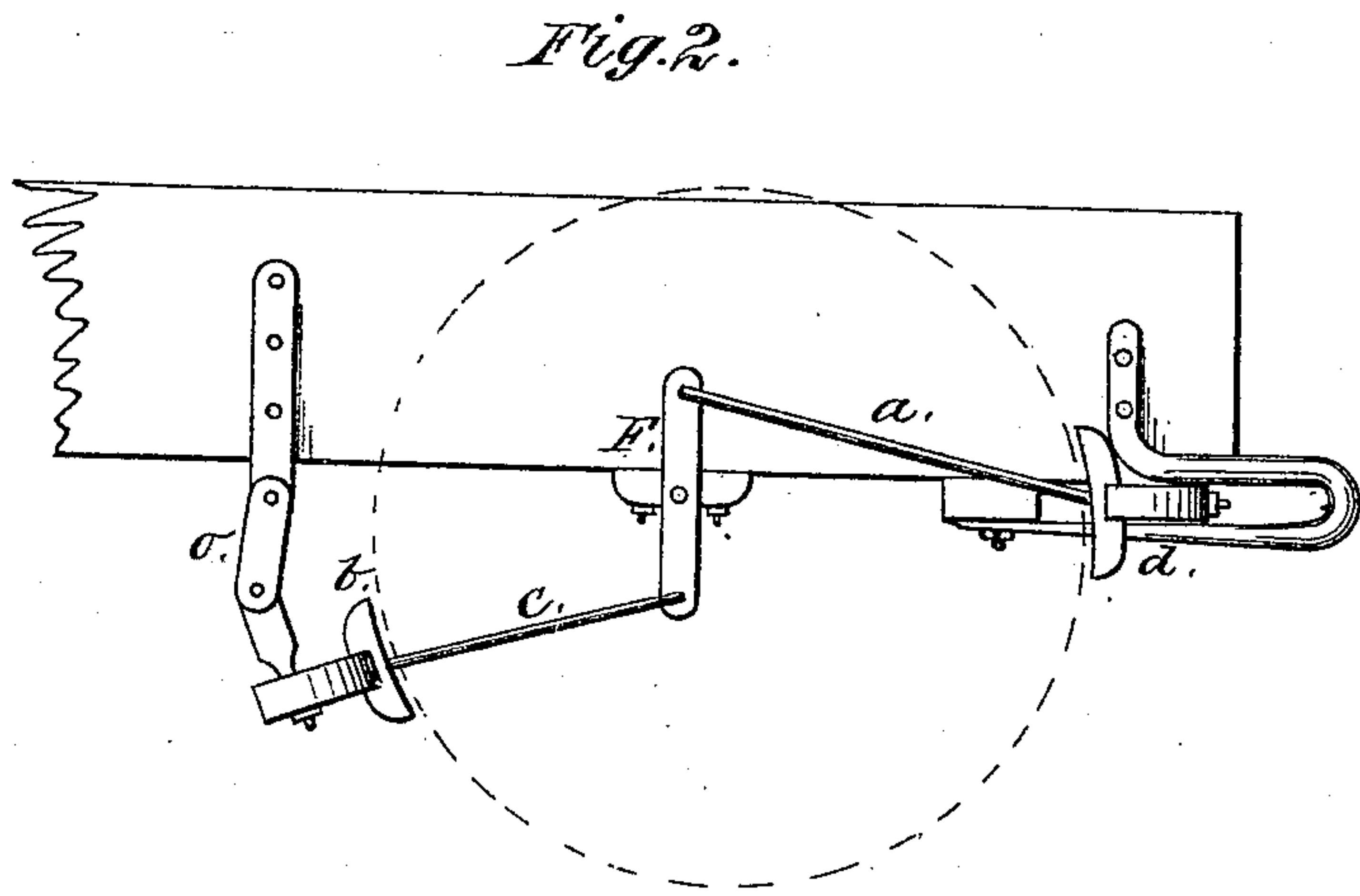
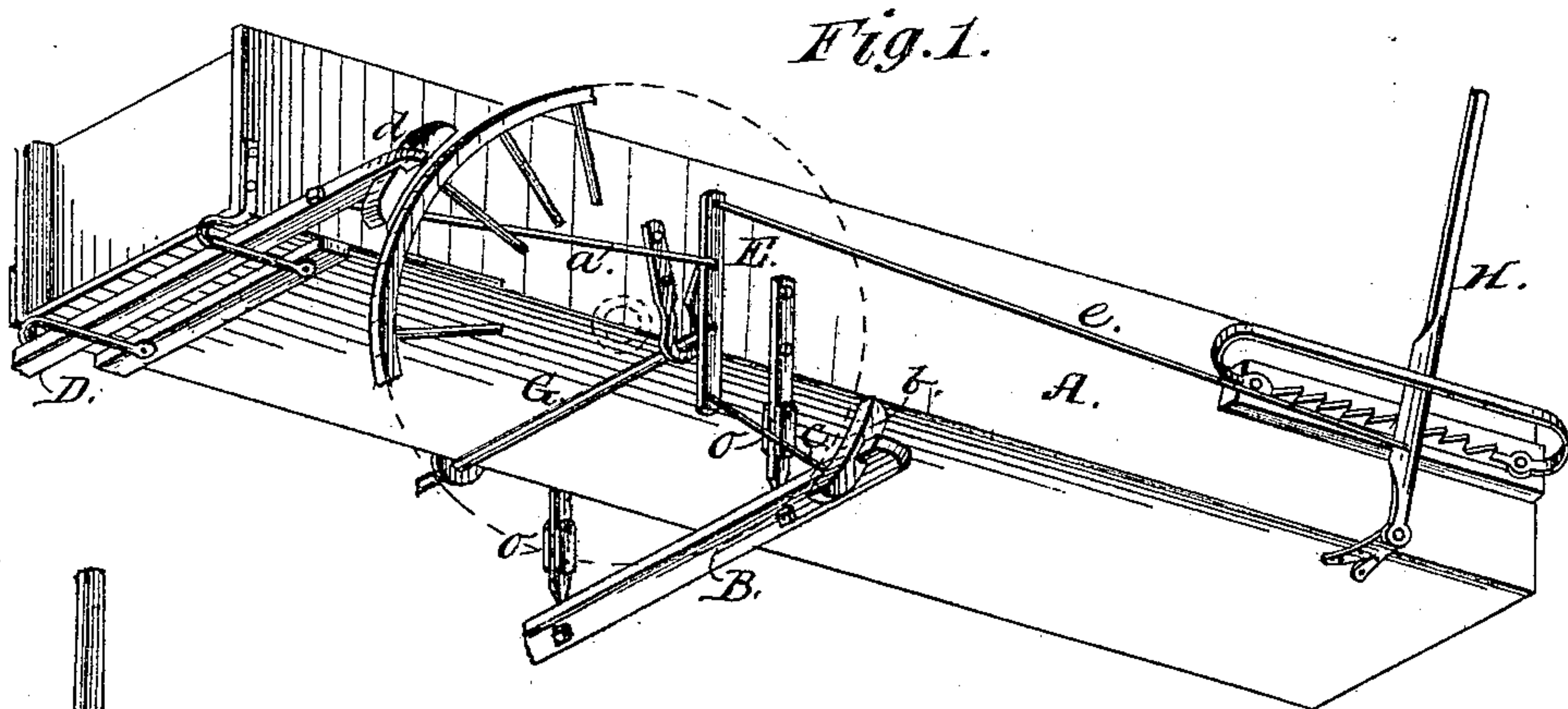


WAGON-BRAKE.

No. 175,799.

Patented April 4, 1876.



Witnesses:

Geo Burt  
W. A. Lewis

*Inventor,*

Lester B Welch  
by Jay A Merrill  
agt

# UNITED STATES PATENT OFFICE.

LESTER B. WELCH, OF MOUNT VERNON, COLORADO TERRITORY.

## IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **175,799**, dated April 4, 1876; application filed July 9, 1875.

*To all whom it may concern:*

Be it known that I, LESTER B. WELCH, of Mount Vernon, in the county of Jefferson and Territory of Colorado, have invented a new and Improved Wagon-Brake; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a wagon-box supplied with my invention. Fig. 2 is also a side view, showing the other side of the wagon-box. Fig. 3 is the hand-lever for applying the brake to the rear wheels of a wagon, showing that the whole device can be reversed and adjusted to either side of the wagon.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention relates to a wagon-brake employing two cross-bars or double-acting levers whereby a brake-shoe is pressed against the front and rear of each wheel on the same axle in place of the single cross-bar and brake-shoes that press only on the front of the wheels; and has for its object to provide a more effectual wagon-brake than has before been used, which shall be simple in construction, sure and efficient in operation, and that will stop instantly both wheels from turning when the wagon is going down the steepest hill.

To these ends the invention consists in the peculiar construction of the device as I will now proceed to describe.

In the drawings, A represents a wagon-box and B the front cross-bar lowered from the wagon-box so that the brake-shoes *b b* will press the wheels below the center, thereby having the greater pressure on the wheels. The double joint *o o* allows the forward and backward movement of the front bar B, at the same time holding it firmly in its proper place

below the wagon-box. D is the rear cross-bar in position against the bottom of the wagon-box, so that the brake-shoes *d d* will press the wheels above the center, thereby having the greater power on the wheels. E is the double-acting lever, as shown in Fig. 1. F is the double-acting lever, as shown in Fig. 2. G is the connecting rod under the wagon, at each end of which is fastened the double-acting levers E and F. H is the hand-lever by which the power is applied. The cross-bars B and D are connected with the double-acting levers E and F by rods *a a* and *c c*. The hand-lever is connected by rod *e*, as shown in Fig. 1. The cross bars B and D and the connecting-rod G can be held in proper position by any convenient device, as shown in Figs. 1 and 2.

To apply the brake the hand-lever H must be pressed forward, which will draw the rear cross-bar D forward and the front cross-bar B backward. The brake-shoes *b b* will then press the wheels in front and below the center, while the brake-shoes *d d* will press the wheels at the rear and above the center. By this arrangement a very small power at the hand-lever will stop both wheels from turning, however heavy the load or steep the hill may be. The whole arrangement of parts is simple and the operation is certain and effective.

I claim as my invention and desire to secure by Letters Patent—

The connecting-rod G, double-acting levers E and F, and connecting-rods *a a* and *c c*, in combination with the cross-bars B and D, substantially as described.

LESTER B. WELCH.

Witnesses:

CONSTANT DUHEM,  
JAY A. MERRILL.