J. O. FARRELL.

End Gate.

No. { 32,163. {

Patented Apr. 23, 1861.

Fig. 1.

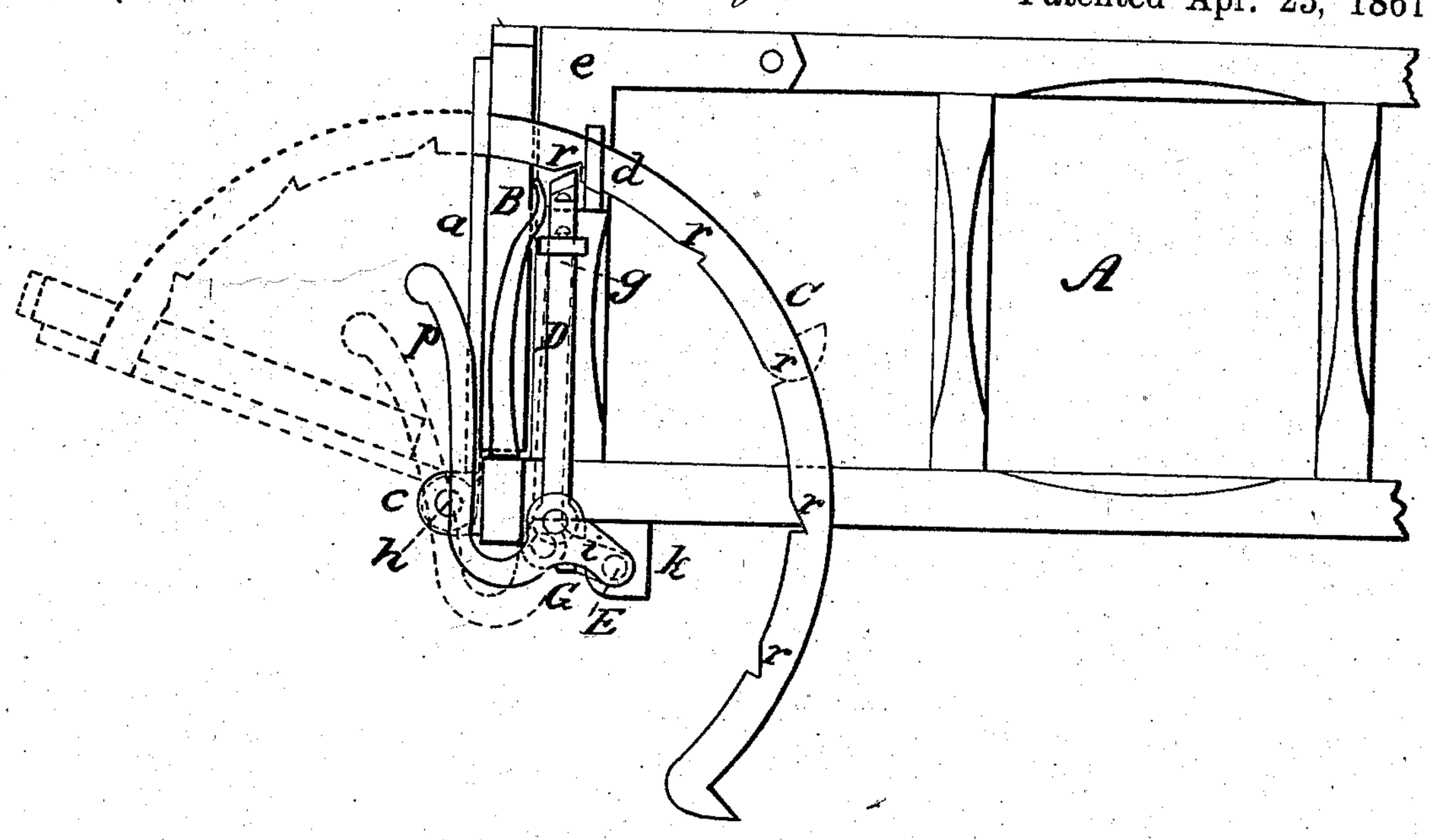
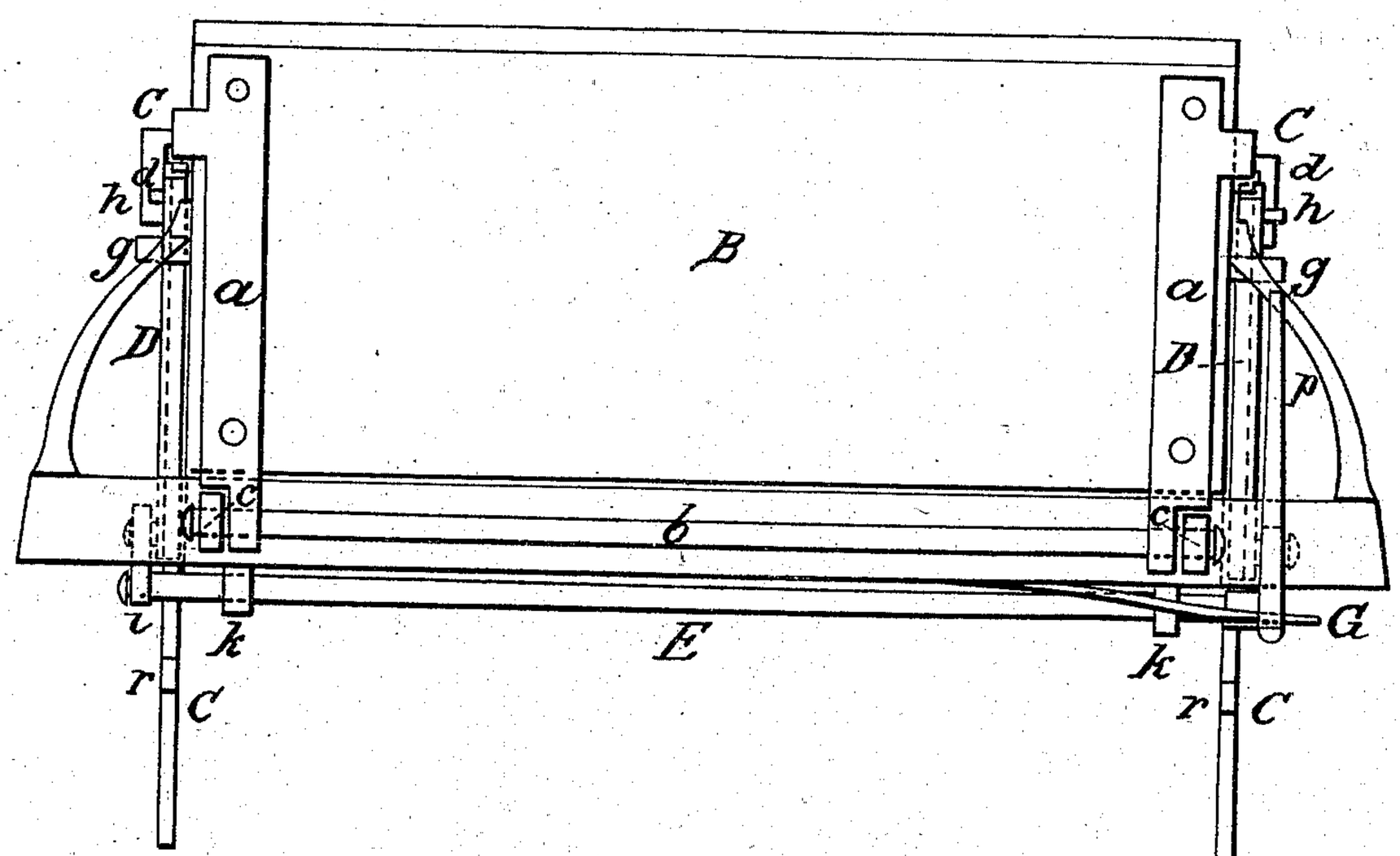


Fig. 2.



Witnesses.
J. W. Coombs.
R. S. Spencer.

Inventor.
Joseph O. Farrell
per Munn & Co.

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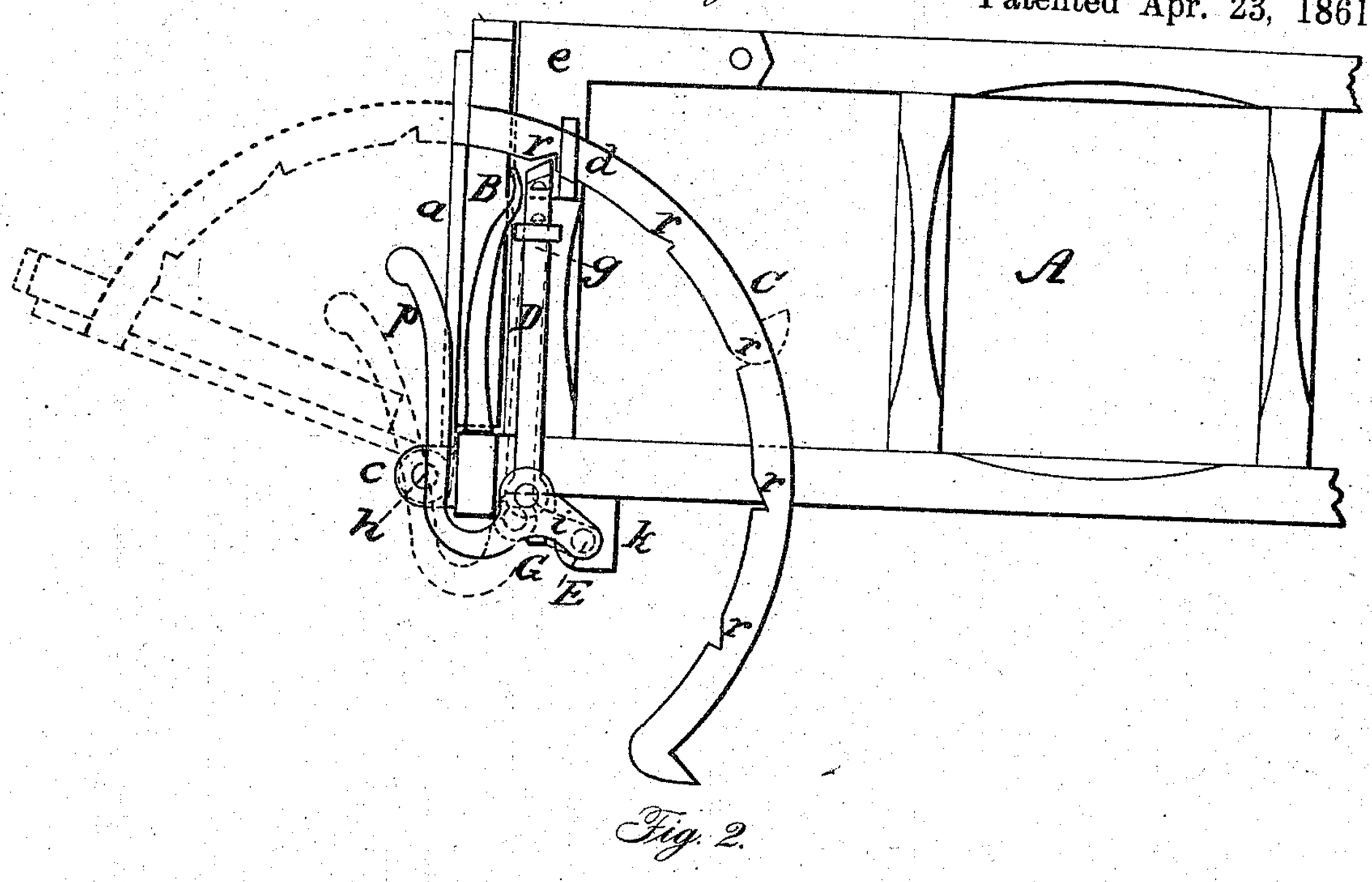
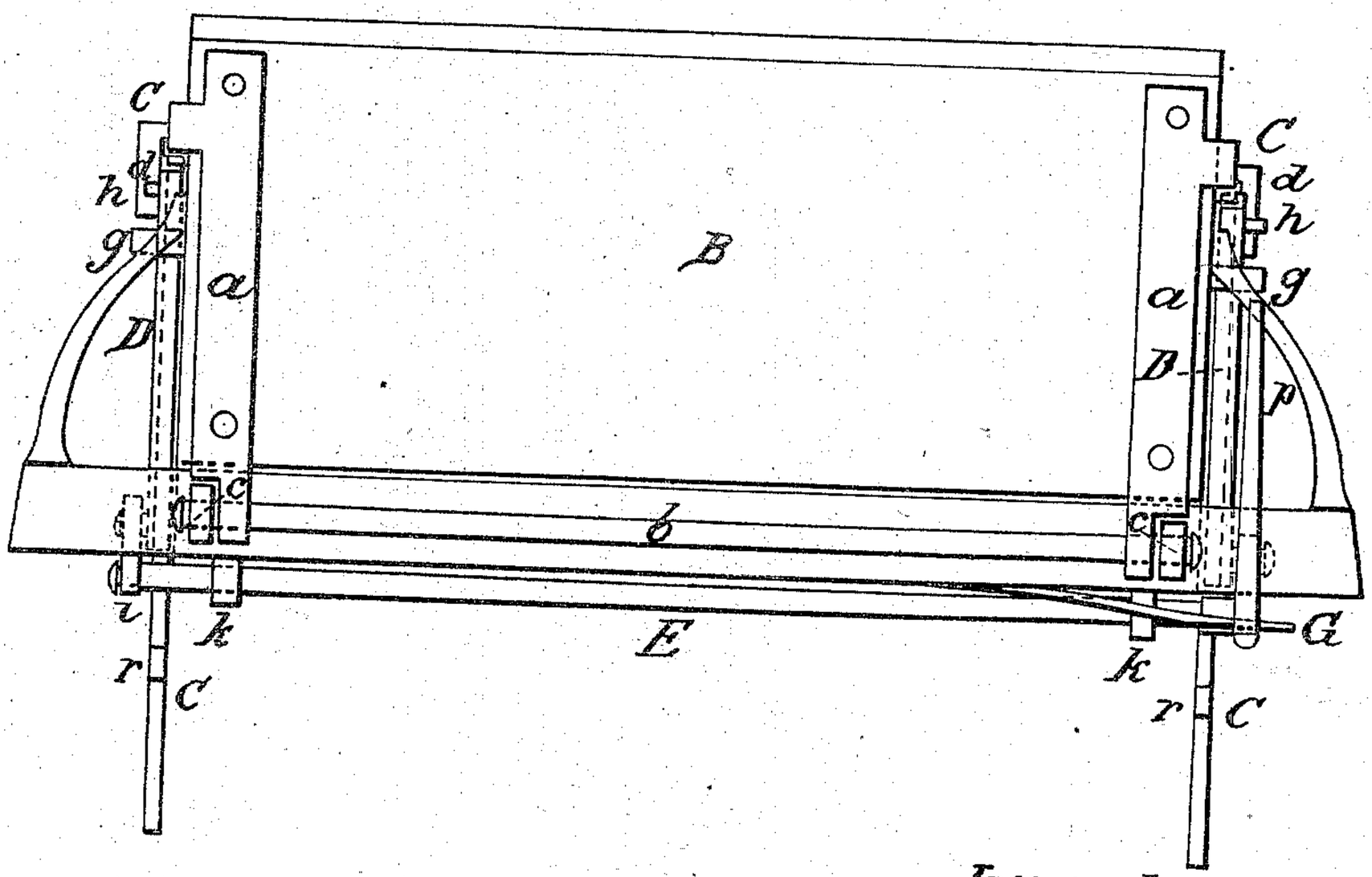


Fig. 2.



Witnesses.
J. W. Coombs.
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U. S. PATENT OFFICE.

No. 1,159. 1861. WHOLE No. 32,163.

Tail-Boards of Wagons.

JOSEPH O. FARRELL, OF BOSTON, MASS.,

ASSIGNOR TO HIMSELF, W. S. HILLS, AND J. H. HILLS, OF SAME PLACE.

Letters Patent No. 1,159, *dated April* 23, 1861.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known, that I, JOSEPH O. FARRELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented an improvement in the Tail-Boards of Wagons, and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side elevation of the rear part of a wagon body having my improved tail-board applied to it.

Figure 2 is a view of the rear end of figure 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in combining with a tail-board, which is hinged to the bottom of the wagon body, two sector arms having notches in them at suitable distances apart, and two spring latches so arranged as to catch into the notches in the sector arms, and lock the tail-board in any desired position, as will be hereinafter fully explained.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the rear part of a common light wagon body, and B is the tail-board or gate thereof. This tail-board is simply a straight board equal in length

Farrell's Improvement in Tail-Boards of Wagons.

to the width of the wagon body A, and in width the height of the body from the top of the floor to the top of the side-boards. This board B is hinged by strap hinges *a a* to a transverse bar *b*, which bar is secured at its extreme ends to eyes *c c*. The straps *a a* are bolted on the back part of the board B, near the ends thereof, so that they serve as cleats for strengthening the board. These hinges allow the tail-board, when shut, to fit tightly against the back part of the wagon body, as shown in figures 1 and 2 of the drawings.

C C are two sector bars, which are secured in a suitable manner at one of their ends to the ends of the tail-board B. These two bars C C project inwards and pass through the staples *d d* on each side of the wagon body, which staples are secured to the angular strengthening plates *e e*. These staples allow the sector bars C C to work freely through them in letting down or shutting the tail-board B; and the staples *d d* keep the bars C C in their proper places against the sides of the body A, and also support the tail-board, when it is let down to its fullest extent, in consequence of the hooked ends of the sectors abutting against the staples, and preventing the bars C C from being drawn down any further.

On each side, and at the extreme rear end of the body A, is a vertical bolt D, which has its upper end bevelled so as to form a nosing. The upper ends of both bolts D D pass through staples *g g*, which keep them in place; and above the staples *g g* pins *h h* project from the bolts, which prevent the ends of the bolts from slipping down through these staples.

The lower ends of bolts D D are pivoted to short arms *i i*, which project out from a rock shaft E, passing transversely across the bottom of the wagon body, shown in figure 2 of the drawings, and having its bearings in eyes *k k*, which are secured underneath the wagon bottom. A curved handle portion *p* projects from one of the arms *i* a suitable distance so as not to be in the way, and by depressing this arm *p* both bolts D D are depressed simultaneously. The ends of the bolts pass into the angular notches *r r r*, which are cut into the lower edges of the sector bars C C, at regular intervals apart, and thus lock these sector bars and the tail-board in a firm position. These bolts D D are acted upon by a spring G, which bears them upwards and holds them in the notches as above described.

The operation of my invention is as follows: To move the tail-board from a vertical plane to a horizontal plane it is only necessary to depress the bolts D D, so that the sector bars C C will be released therefrom, when the tail-board can be readily adjusted to the desired position.

To secure the tail-board in any other position the bolts D D are allowed to catch into the notches *r r*, in the sector bars C C, when the tail-board is in the desired position. It will thus be seen, that the board B may be secured and firmly supported in a vertical and in a horizontal plane, and at any intermediate angle. In closing up the tail-board the bevelled ends of the bolts D D will allow the notches on bars C C to pass without obstruction, so that it is not necessary to depress the bolts in closing the tail-board.

Farrell's Improvement in Tail-Boards of Wagons.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The notched sector bars C C, vertical spring bolts D D, arms *i i*, and shaft G, arranged and combined with hinged tail-board B, and operating as a self-lock, as herein set forth.

JOSEPH O. FARRELL.

Witnesses:

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A. B. ELY.