

N. Harrier,

Gate.

No. 91,932.

Patented June 29, 1869.

Fig. 1.

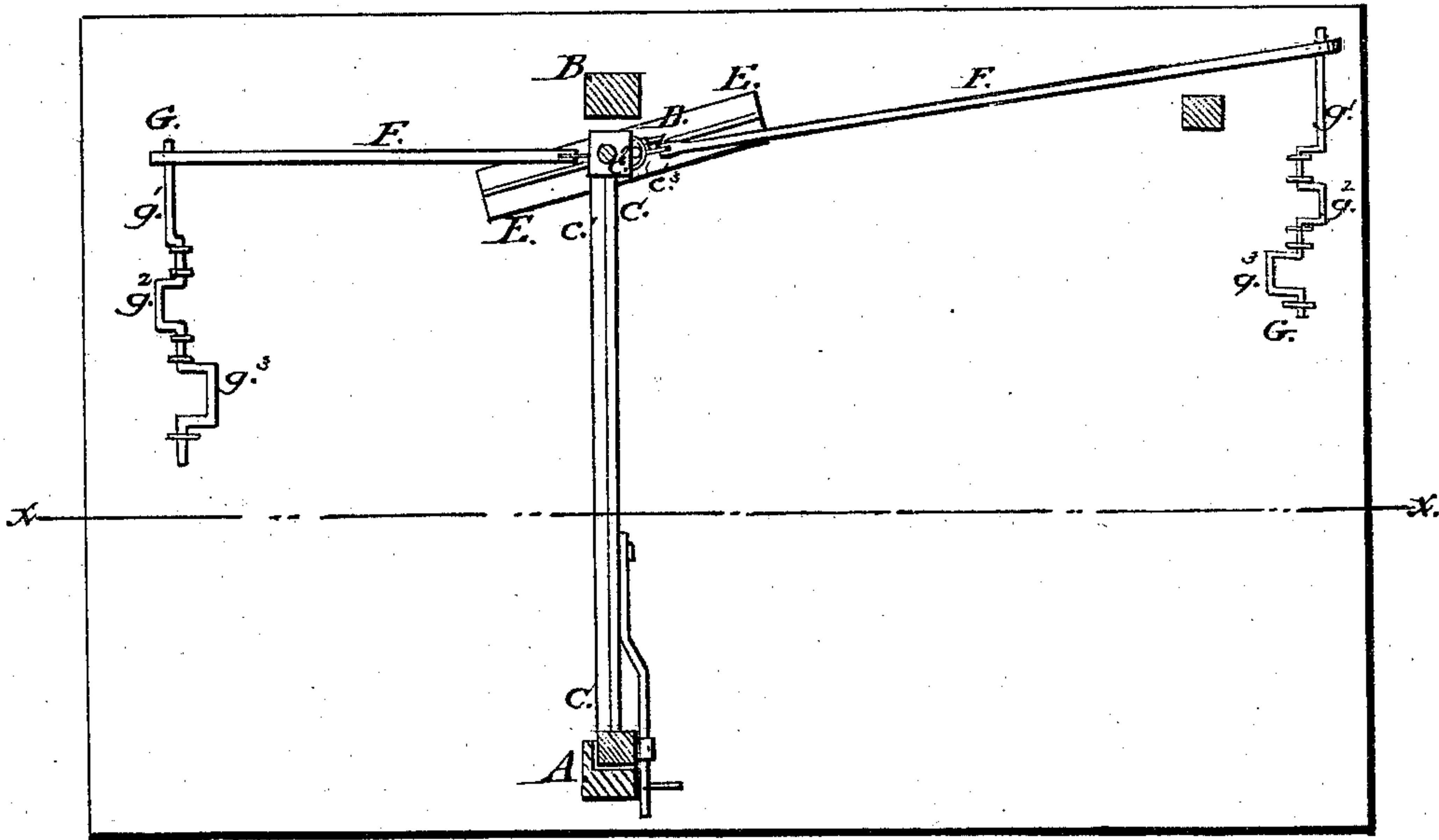
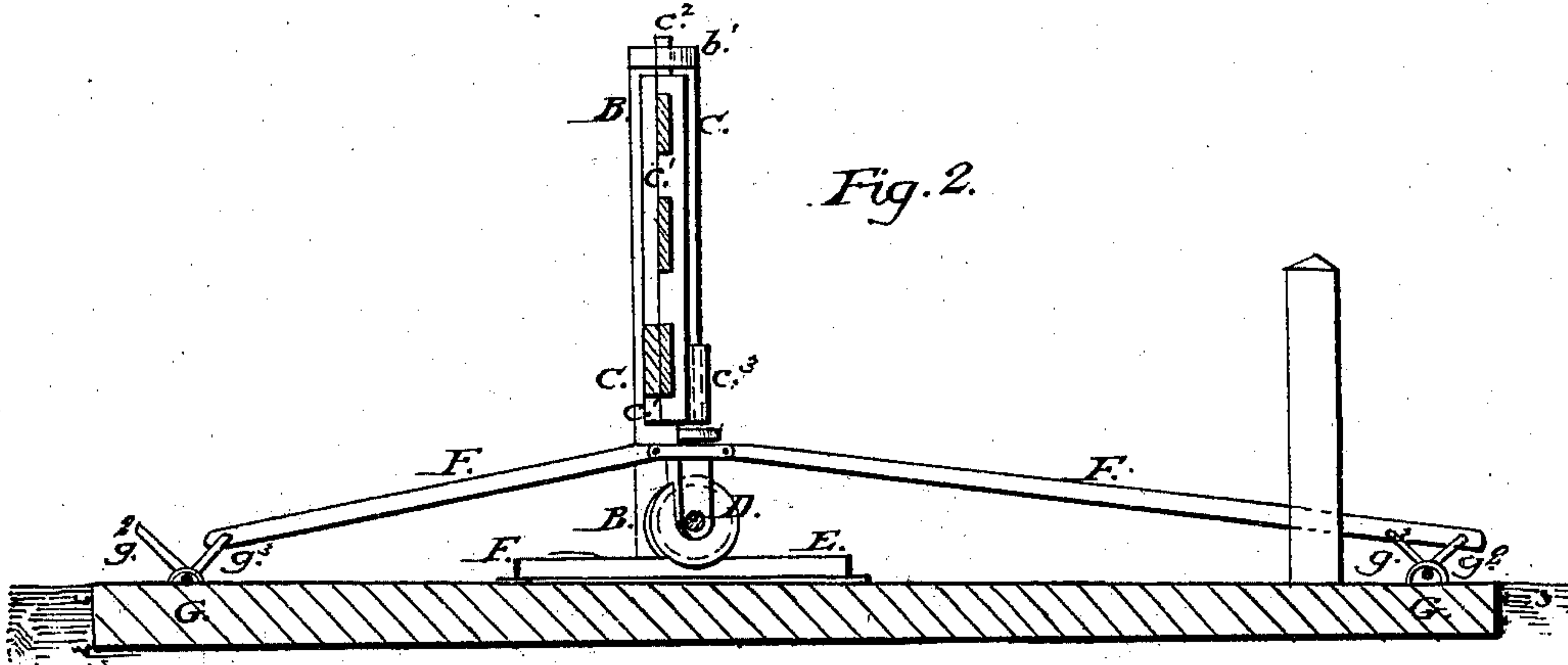


Fig. 2.



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Witnesses:
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NATHANIEL HARRIER, OF MUSCATINE, IOWA.

Letters Patent No. 91,932, dated June 29, 1869.

IMPROVEMENT IN GATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, NATHANIEL HARRIER, of Muscatine, in the county of Muscatine, and State of Iowa, have invented a new and useful Improvement in Gates; 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 top view of my improved gate.

Figure 2 is a sectional view of the same, taken through the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved gate, which shall be so constructed and arranged that it may be opened and closed by the wheels of the passing vehicle; and

It consists in the construction and combination of the various operating parts with the gate, as herein-after more fully described.

A is the front post, to which the gate is latched when closed.

B is the rear post, and

C is the gate.

Upon the upper end of the rear vertical bar *c'* of the gate C, is formed, or to it is attached, a round tenon, or spindle, *c''*, which enters a hole, or socket in the outer end of the arm *b'*, attached to the upper part of the post B.

In the lower end of the rear vertical bar *c'* of the gate C, is formed, or to it is attached, a socket, *c'''*, in which works the spindle of the caster-wheel D.

The face of the caster-wheel D is grooved, to roll upon a rail, E, secured in such a position that when the caster-wheel D rolls along it, it will give such an inclination to the rear end of the gate as will cause the gate to swing open or shut, as the case may be.

With the lower end of the rear vertical bar *c'* of the gate C, or with the spindle of the caster-wheel D, are connected the inner ends of the bars F, which extend out a sufficient distance, and the outer ends of which are pivoted to the outer or long cranks *g'* of the triple crank-shaft G, which are made of such a length that the two inner cranks *g'' g''* of each shaft may be in that part of the roadway along which the wheels of the passing vehicles roll.

The cranks *g''* and *g'''* extend out at right angles with each other, and are so arranged that when the gate is closed they may both be at an angle of about forty-five degrees (45°) with the ground.

In a gate arranged to swing, as shown in the drawings, the vehicle passing from right to left should be so guided that its wheels may come in contact with the cranks *g''*, and a vehicle moving from left to right should be so guided that its wheels may come in contact with the cranks *g'''*.

By simply changing the inclination of the rail E, the gate may be made to swing in the other direction.

It will be noticed that when the wheel D is moved by the action of the bar F, the gate being closed, the front end of said gate is elevated, and, with it, the latch, out of its catch, so that it may readily open.

Having thus described my invention,

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

The combination of the caster-wheel D, rail E, bars F, and triple crank-shafts G, with each other and with the gate C, said parts being constructed, arranged, and operating substantially as herein shown and described, and for the purpose set forth.

NATHANIEL HARRIER.

Witnesses:

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