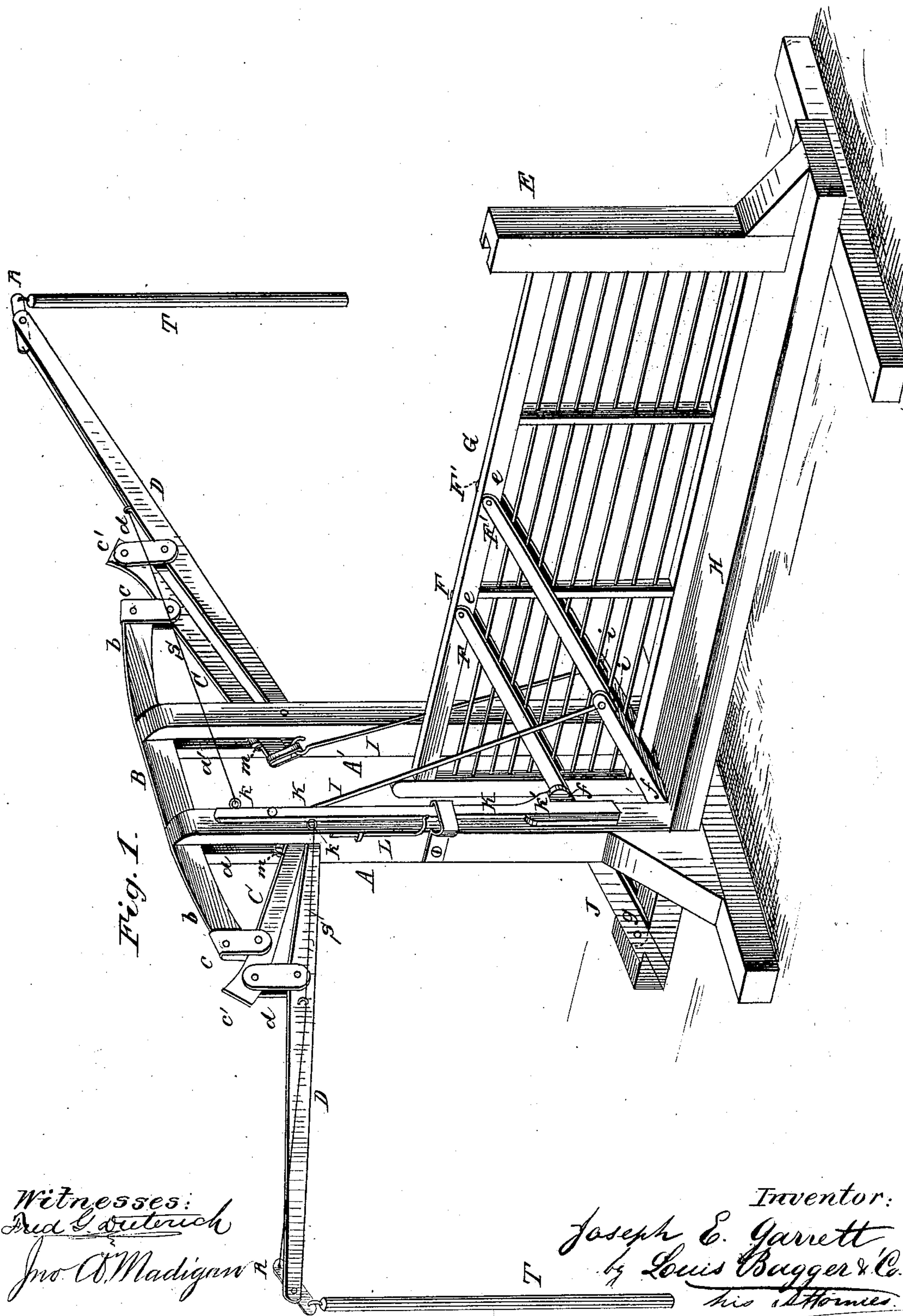


J. E. GARRETT.
Gate.

No. 207,600.

Patented Sept. 3, 1878.



Witnesses:
And G. Dutrich
Jno. C. Madigan

Inventor:
Joseph E. Garrett
by Louis Bagger & Co.
his Attorneys

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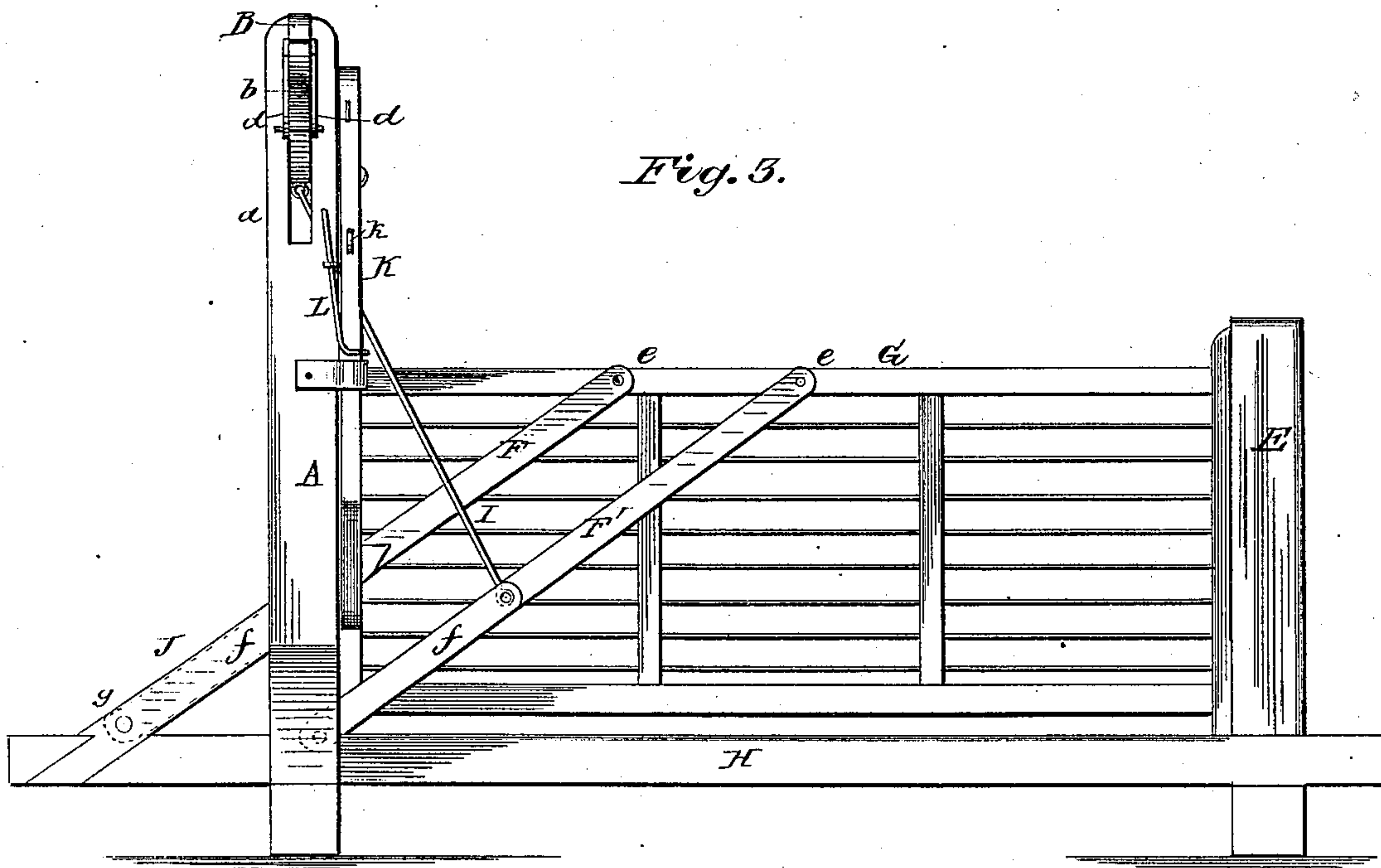
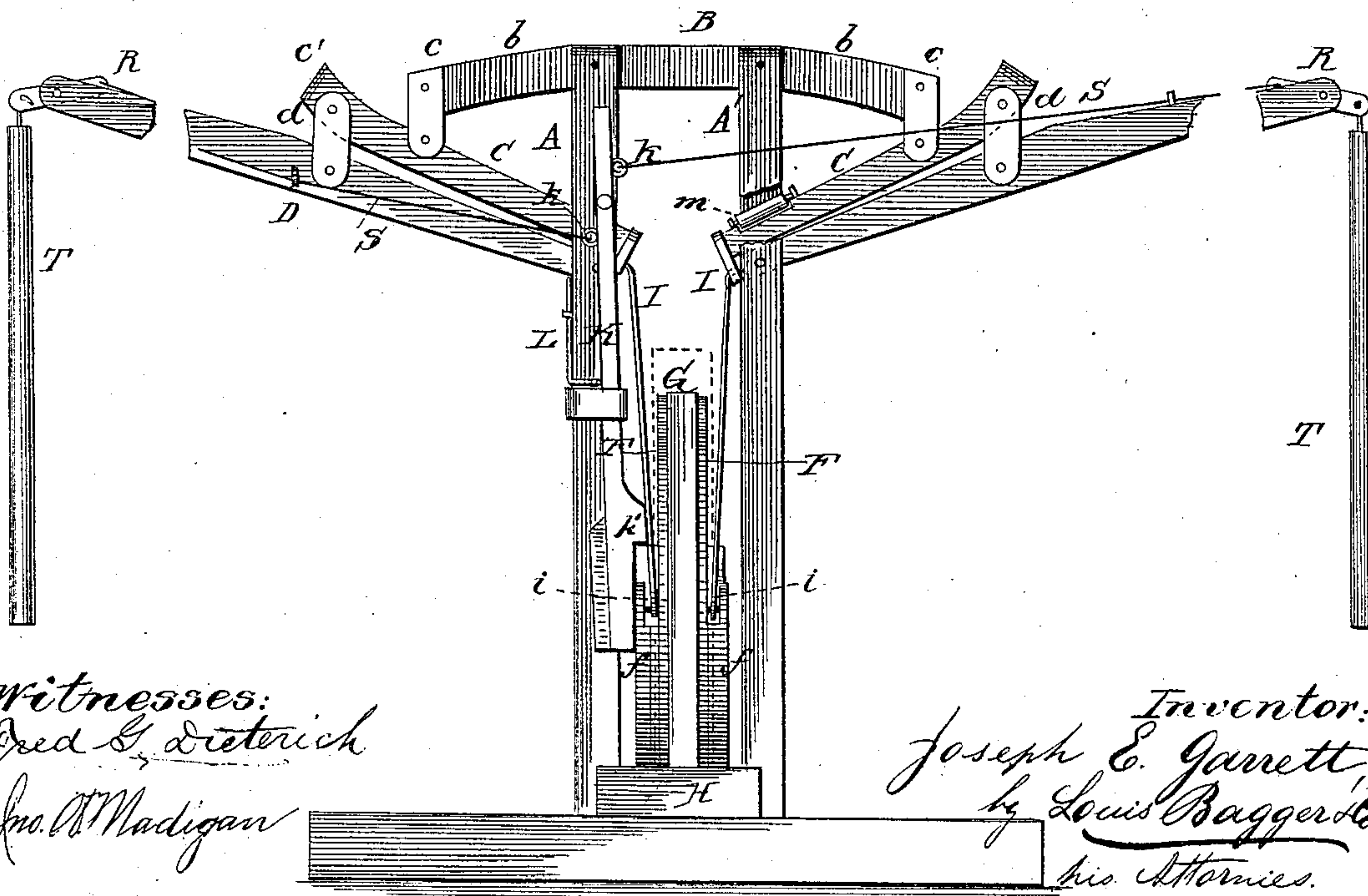


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH E. GARRETT, OF DAVENPORT, IOWA.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. 207,600, dated September 3, 1878; application filed March 26, 1878.

To all whom it may concern:

Be it known that I, JOSEPH E. GARRETT, of Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements 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 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view, Fig. 2 is a side view, and Fig. 3 is a rear view, of my improved gate.

Similar letters of reference denote corresponding parts in all the figures.

This invention relates to that class of gates which may be opened by passengers on horseback or in carriages by a suitable arrangement of levers; and it consists in the improved construction and arrangement of parts hereinafter more fully described, by which, first, the play of the levers is considerably diminished, and, second, the gate is prevented from swaying aside while being opened or closed in very windy weather.

It further consists in certain improvements in the construction of the latch or locking device and in the general arrangement of parts, as I shall now proceed more fully to describe.

In the drawings, A A' are the main posts of the gate. Their upper ends are slotted, as shown at *a a'*, and they are connected by a cross-bar, B, projecting on both sides, so as to form brackets *b b*. The ends of brackets *b b* have stirrups *c c*, in which are pivoted levers C C, the short ends of which, *c' c'*, project beyond the brackets. The ends of the levers C C, which project into the slots *a a'* of posts A A', are provided with friction-rollers *m m*, to prevent them from binding in the slots and give them an easy up-and-down motion.

D D are long levers, pivoted in the slots *a a'* of posts A A', and connected with the levers C C by means of short links or stirrups *d d*. G is the gate, which may be of any suitable construction, and is arranged between the posts A A' and a third post, E, at a suitable distance from the two former.

F F' are legs or braces, arranged in pairs on

each side of the gate, and pivoted to the bottom plank, H. These legs or braces are pivoted at *e e* to the upper rail of the gate, which, when the braces are tilted, is carried by them between and to the opposite side of the posts A A'. Each of the legs or braces F F' consists of a piece of scantling of only width and thickness enough to give it sufficient strength; but to their lower or butt ends are bolted or otherwise secured additional pieces *f f*, which completely fill up the spaces between the gate and the posts A A' and prevent the gate from swaying when operated.

The inner ends of the levers C C are connected by rods I I direct with the legs or braces F' F', which are pivoted between the posts A A', recesses *i i* being formed in the upper ends of the parts *f f* of legs F F' for the reception of the rods I, the pull of which, for this reason, comes upon the center instead of upon the sides of legs F F'.

J J are diagonal braces, mortised or dovetailed into the bottom plank, H, for the purpose of supporting the posts A A'. Through the lower end of these braces passes the pin *g*, upon which the legs F F are pivoted.

K is the latch. This consists, essentially, of a rod, pivoted near its upper end to the post A, and having at its lower end a notch, *k'*, fitting over one of the braces, F, so as to prevent the gate from being opened. It is held in this position partly by its own weight, (or its lower end may be weighted,) but especially by the pressure of a spring, L, arranged upon the side of post A. Two staples, *k k*, are secured upon rod K, one upon its inside above the pivoting-point and one upon its outside below the pivoting-point. These staples are connected by wires S S with the upper ends of short slanting or bent levers R R, arranged at the ends of the levers D D, as shown. To the lower or outer ends of the levers R R are attached the ropes, rods, or chains T T, by which the gate is operated by persons who desire to pass through.

From the foregoing description, and by reference to the drawings hereto annexed, the operation and advantages of my improved gate will be readily understood. By pulling down upon one of the rods T the latch is instantly

released, thus permitting the gate to be elevated and tilted by the levers C D and rods and legs I F F'. The arrangement of the compound levers C D is such that the play of the outer ends of the long levers D D is but slight, thus doing away with a general objection to this class of gates, as heretofore constructed.

Owing to the construction of the braces F F' the gate cannot easily be displaced laterally by the wind, or from any other cause; and, finally, the construction of the latch is such that the gate cannot be opened by hogs or cattle, nor can the latch easily be accidentally displaced.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In combination with the gate G, having legs or braces F and frame A A' B, the pivoted notched latch-bar K and operating-spring

L, substantially as and for the purpose herein shown and described.

2. The improved device for operating gates herein shown and described, consisting, essentially, of frame A A' B, supporting the pivoted compound levers C d D C d D, pivoted latch K, having notch k' and operating-spring L, and pull-cords s s, in combination with the gate G, having tilting legs or braces F F' and rods I I, all constructed and combined to operate substantially in the manner and for the purpose herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH E. GARRETT.

Witnesses:

G. W. HEYWOOD,
FRANK H. CLARK.