

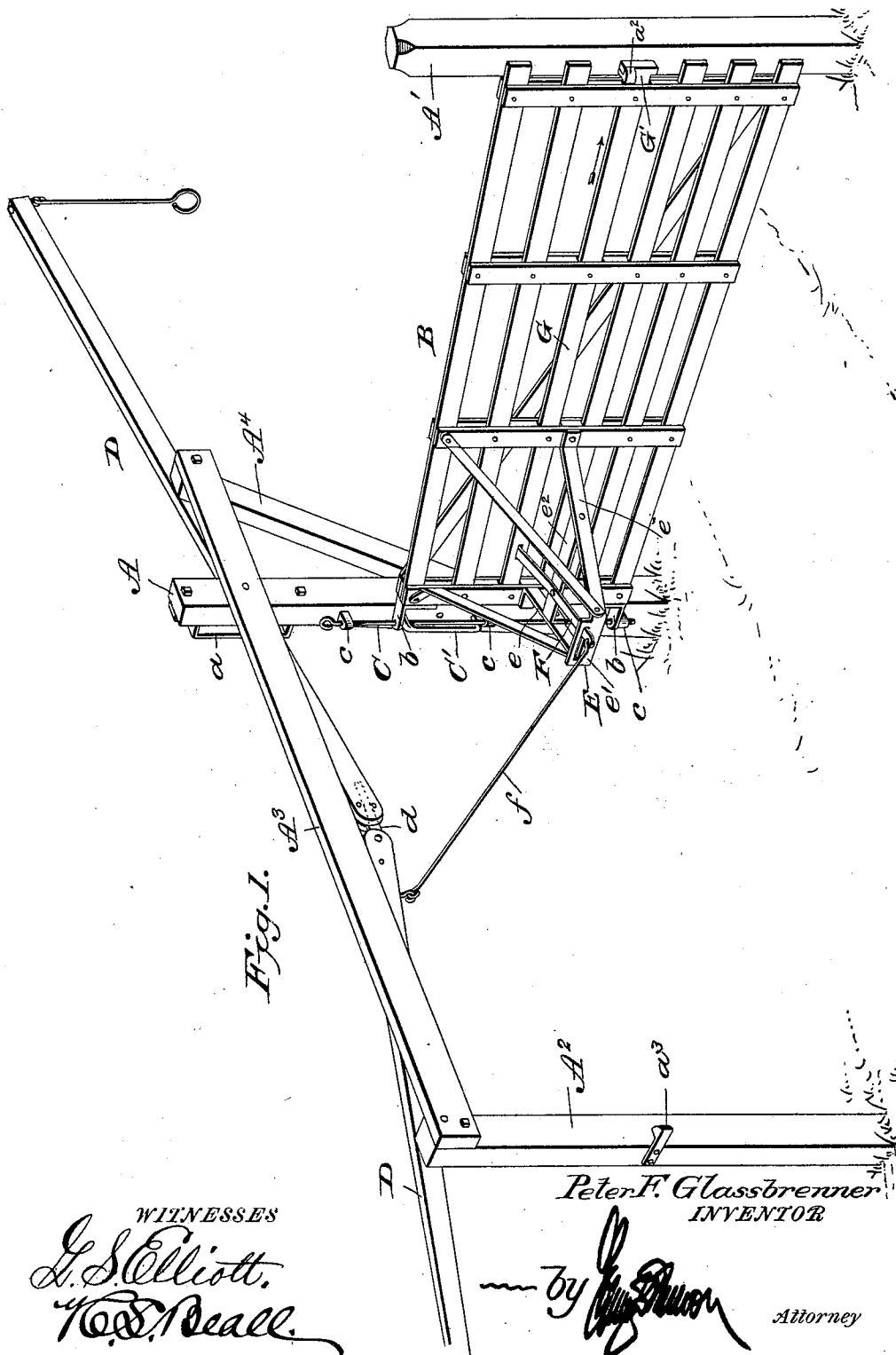
(No Model.)

2 Sheets—Sheet 1.

P. F. GLASSBRENNER.
GATE.

No. 592,775.

Patented Nov. 2, 1897.



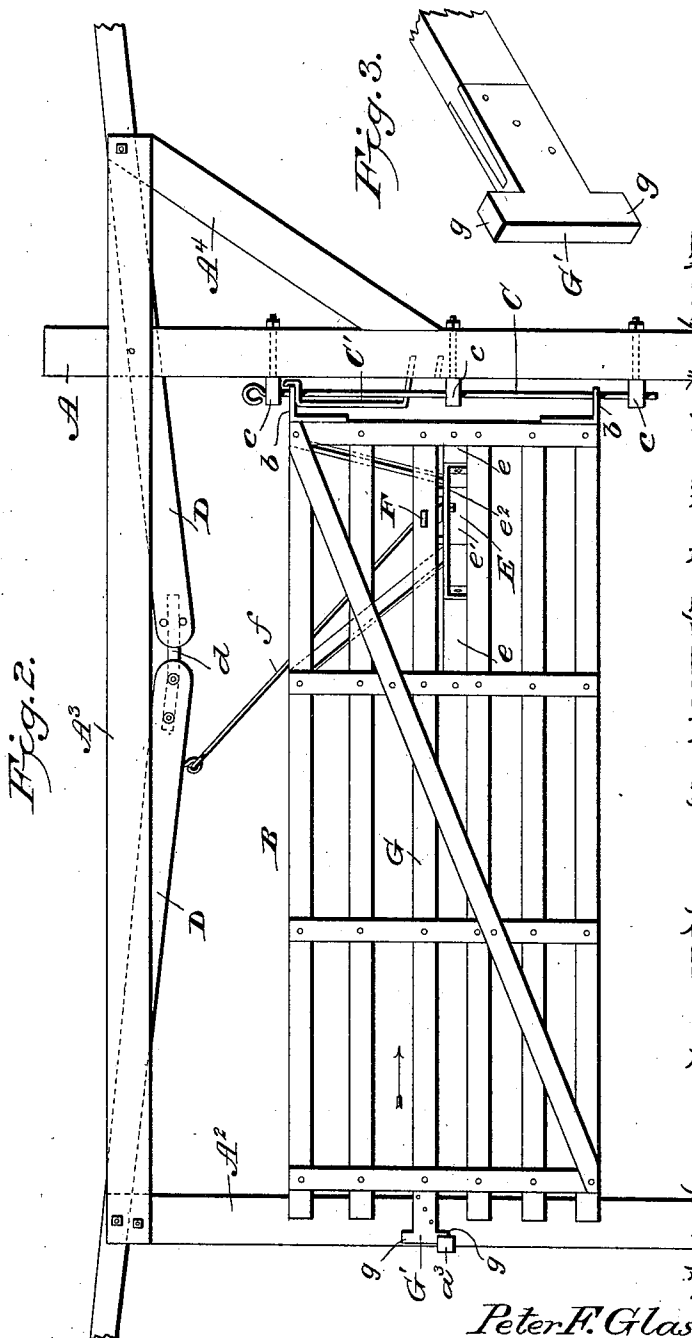
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WITNESSES

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UNITED STATES PATENT OFFICE.

PETER FREDRICK GLASSBRENNER, OF FRANKLIN, INDIANA, ASSIGNOR TO
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GATE.

SPECIFICATION forming part of Letters Patent No. 592,775, dated November 2, 1897.

Application filed February 15, 1896. Serial No. 579,417. (No model.)

To all whom it may concern:

Be it known that I, PETER FREDRICK GLASSBRENNER, a citizen of the United States of America, residing at Franklin, in the county of Johnson and State of Indiana, have invented certain new and useful Improvements in Operating Mechanism for Swinging Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a gate in which the operating-levers serve to actuate the latch-bar and swing the gate upon its hinges, the gate and operating mechanism being so constructed that a downward pull upon either one of the operating-levers will first release the sliding latch-bar and then swing the gate upon its hinges to open or close the same, said latch-bar automatically engaging its catches when the gate is opened or closed, the automatic movement being accomplished by weighting the inner ends of the operating-levers.

The invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a gate and operating mechanism therefor constructed in accordance with my invention, the gate being shown closed. Fig. 2 is an elevation showing the gate open, and Fig. 3 is a detail perspective view of the outer end of the latch-bar.

A designates a post or upright to which the gate is hinged, and at the opposite side of the roadway is another post or upright A', against which the gate abuts when closed. The gate B is hinged or pivoted upon a rod C, which passes through apertured lugs c, secured to the post A, and through apertured brackets b, attached to the end of the gate, the rod being supported in this connection by bending the upper end of the same into an eye, as

shown. The gate is adjustably supported upon the rod C by means of a bar C', the upper end of which is flattened and apertured to slide upon the rod and engage the upper bracket b of the gate, while its lower end is bent at an angle to engage recesses in the post A, and by this arrangement the gate can be supported at different elevations above the ground. I lay no particular stress upon this construction or manner of supporting the gate at different elevations, as other means may be employed that would answer the same purpose in connection with my improvements hereinafter described.

Upon the same side of the roadway as the post A and at a suitable distance therefrom, corresponding with the length of the gate, is placed a post or upright A², which is connected to the post A by a horizontal beam A³, said beam extending beyond the post A to connect with the upper end of an inclined beam A⁴, to which one of the operating-levers is pivoted, the other operating-lever being pivoted to the upper end of the post A². The inner ends of the operating-levers D are connected to each other by a flat link d, which is secured to one of the levers and plays between pins carried by the other lever, this connection permitting a greater movement of the levers, which movement is limited by a strap or guide-loop a, secured to the post A. The inner ends of the levers overbalance their outer ends for the purpose of operating the latch-bar of the gate, as hereinafter described.

On the side of the gate toward the post A² and adjoining the rear end of said gate is rigidly secured a projecting bracket or frame E, presenting horizontal members e e, connected at their outer ends by a plate e' and at an intermediate portion by a transverse bar e². Upon the transverse bar e² is pivoted a lever F, the inner end of which engages a sliding latch-bar G, which runs the whole length of the gate and is guided between the vertical battens thereof. The outer end of the lever F extends through a transverse slot in the connecting portion e' of the members e e of the frame E and is connected to one of the operating-levers D by means of a rod f, the slot in the connecting portion or plate e' 100

serving to limit the throw of the lever F. The outer end of the sliding latch-bar is provided with a head G' of metal, constructed to present vertical projections *g g*, the inner edges of which engage a catch a^2 , attached to the post A', the upper projection of the head engaging the catch when the gate is adjusted to its lowered position, while the lower projection engages the catch when the gate is supported in its elevated position. The outer edge of the head G' of the sliding latch-bar engages a catch a^3 , which is attached to the post or upright A², so as to hold the gate open, said latch engaging the upper part of the head when the gate is lowered and the lower part of the same when the gate is elevated. This peculiar construction of the head and particular arrangement of the catches, together with the operating mechanism of the sliding latch-bar, provides for the positive engagement of the latch-bar with the catches when the gate is swung open or closed.

In operation, assuming the gate to be closed, by pulling upon the operating end of one of the levers D the outer end of the lever F will be drawn upon through the intervention of the connecting-rod *f*, and the inner end of said lever will push the latch-bar G, moving the head of the same out of engagement with the catch a^2 , when a further movement of the operating-lever will swing the gate upon its hinges to a partly open position, or slightly beyond one-half of its movement, and the weighted inner ends of the levers D then act to move the gate to its full open position, the connecting-rod *f* operating the lever F to push upon the latch-bar and cause it to automatically engage the catch a^3 . In

closing the gate the movement of one of the levers D will operate the lever F to first draw upon the latch-bar and release it from the catch a^3 and then swing the gate to a certain distance, after which it is closed by the weight of the inner ends of the levers D in the same manner as opening the gate, the only difference being that in one case the sliding latch-bar is pushed and in the other it is drawn upon, and in both positions the weighted ends of the operating-levers hold said latch-bar in engagement with its catches.

It will be noted that in operating the levers D to either open or close the gate a quick or sharp pull should be given thereto, so as to throw the gate beyond the center of its movement, and thus permit the weighted ends of said levers to act in moving the gate to the limit of its movement.

The construction herein shown and described provides a cheap and efficient means for opening and closing a gate at a distance therefrom, as well as means for causing the automatic engagement of the latch-bar with its catches to hold the gate both open and closed.

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

A latch-bar provided at its outer end with a head G' having vertical projections *g, g*, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

PETER FREDRICK GLASSBRENNER.

Witnesses:

JOSEPH W. BELL,
CLINT C. NORRIS.