

(Model.)

M. F. HILL.
GATE LATCH.

No. 404,971.

Patented June 11, 1889.

Fig. 1.

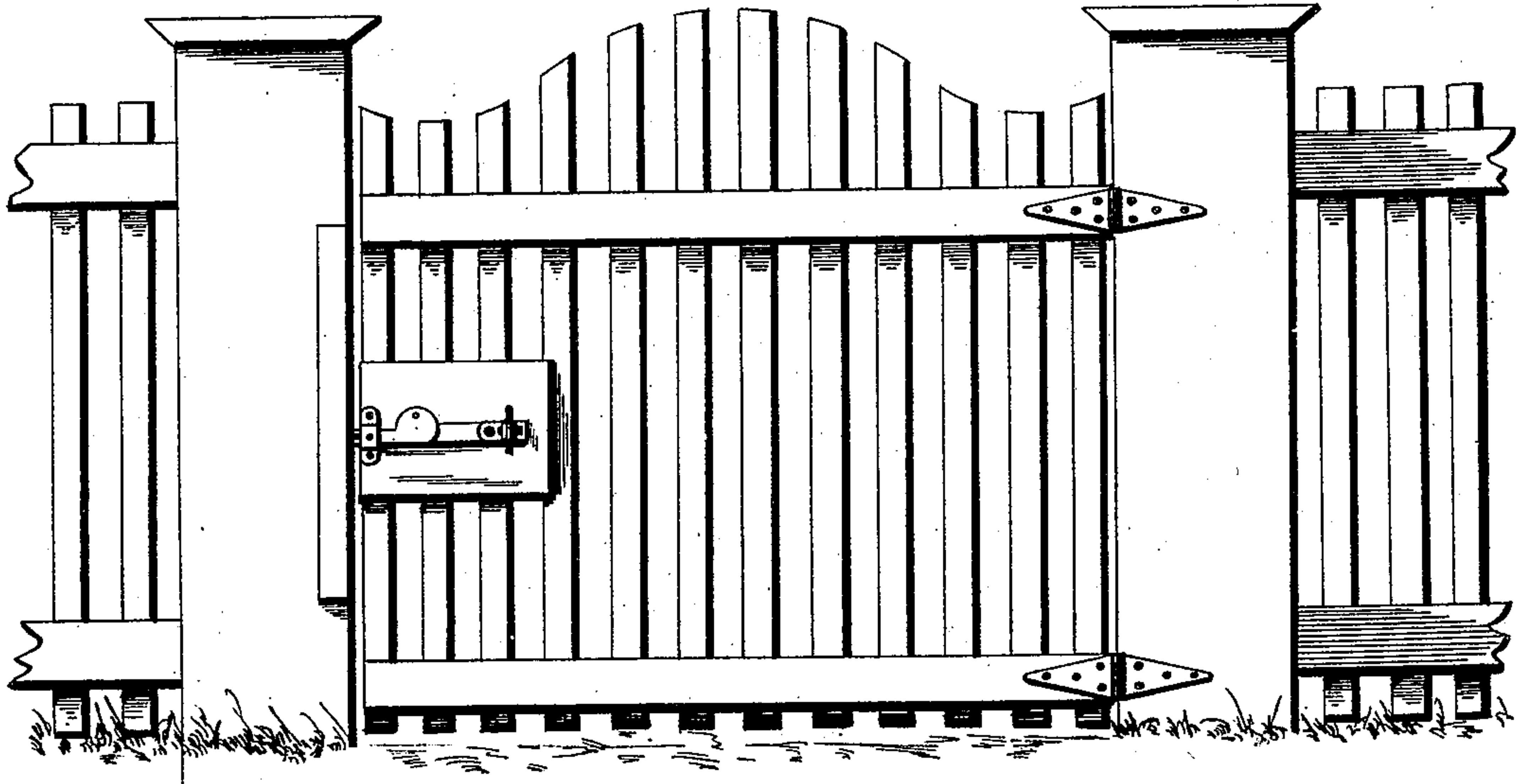


Fig. 2.

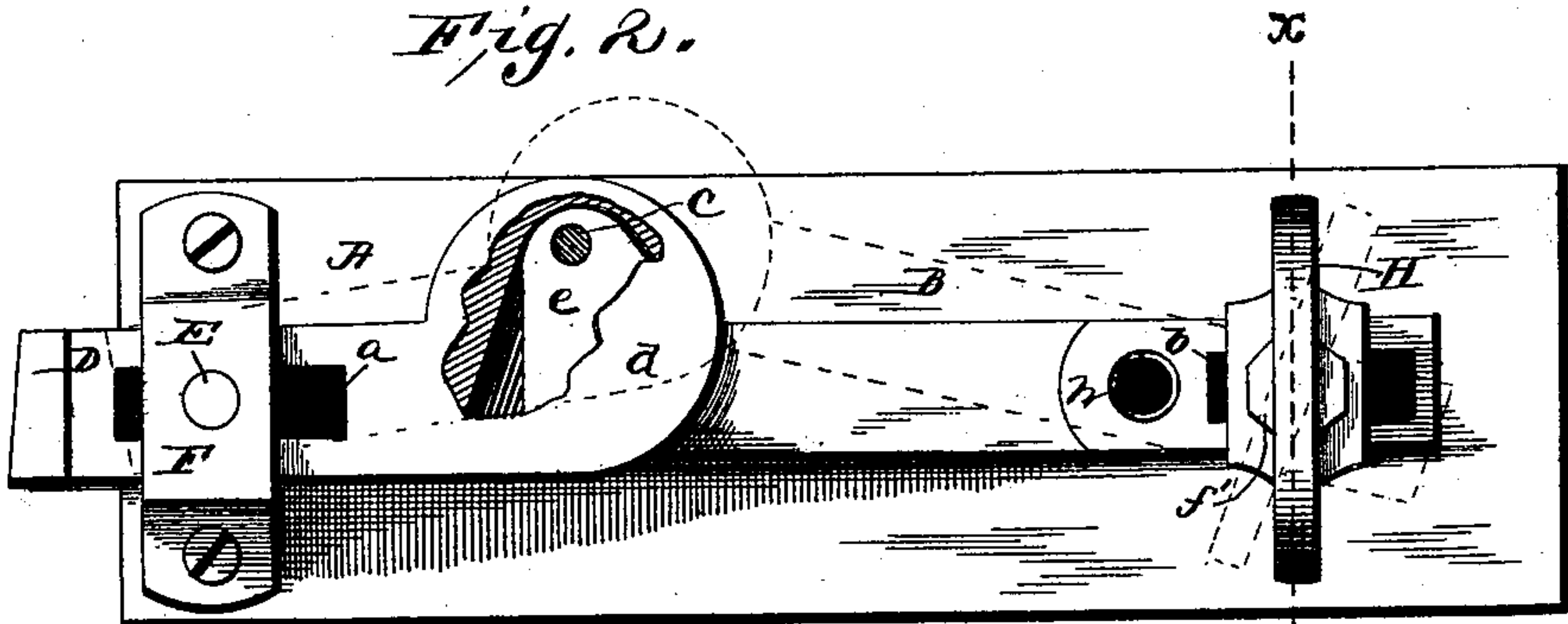


Fig. 3.

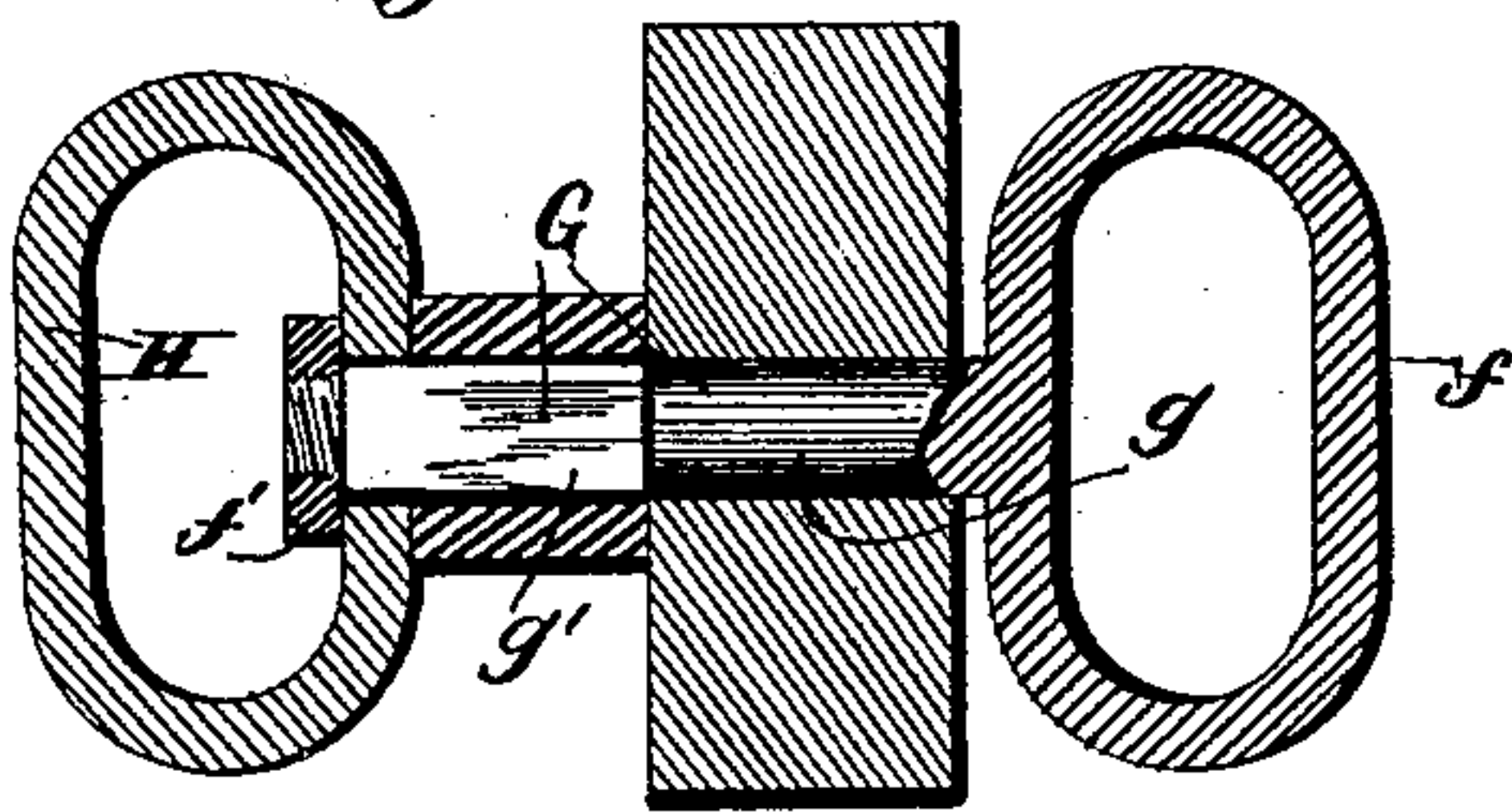


Fig. 4.

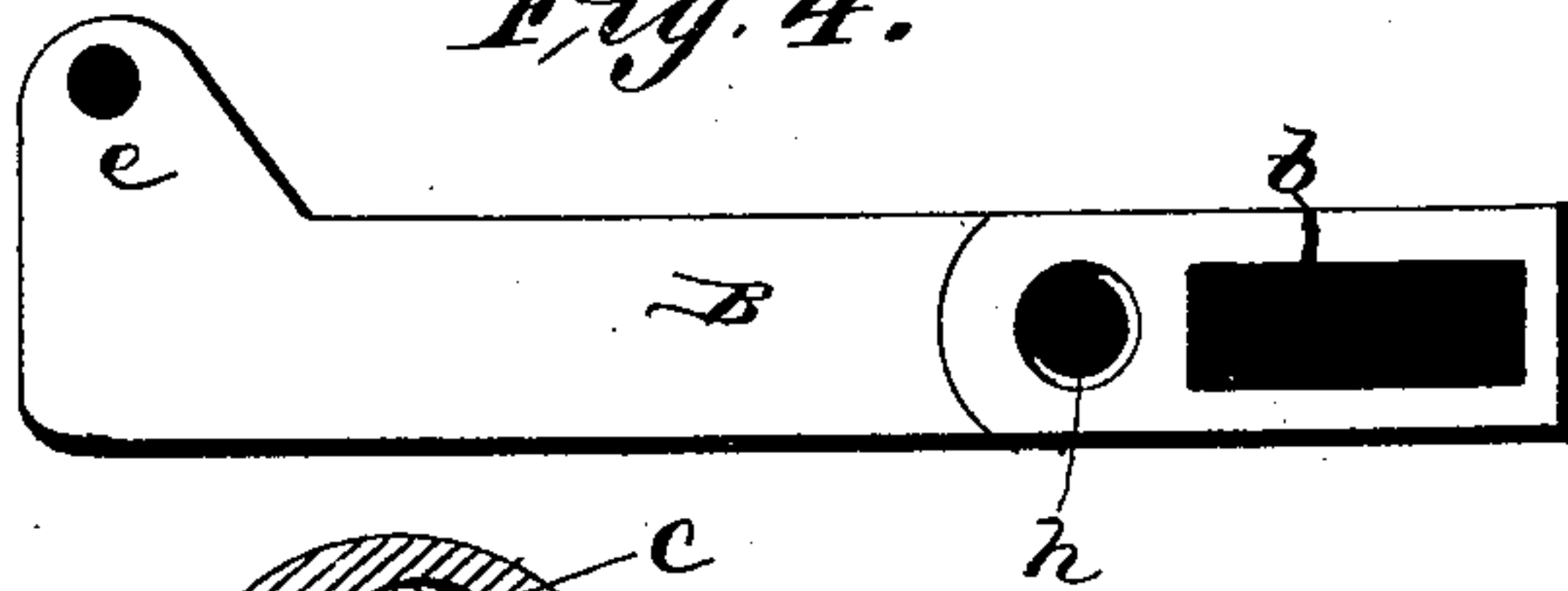
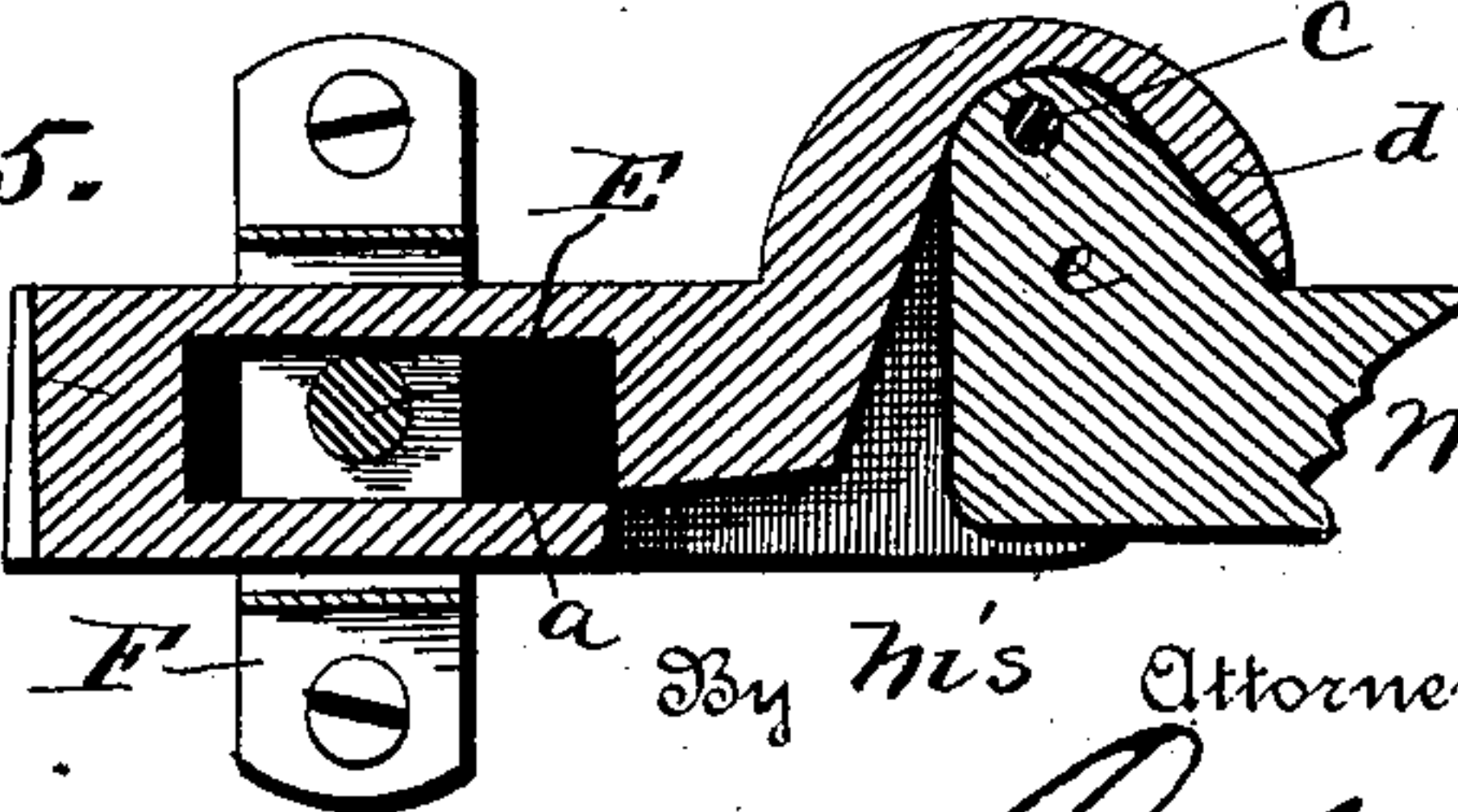


Fig. 5.



Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

MORTIMER FERRELL HILL, OF BELLEVILLE, ILLINOIS.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 404,971, dated June 11, 1889.

Application filed June 4, 1888. Serial No. 275,966. (Model.)

To all whom it may concern:

Be it known that I, MORTIMER FERRELL HILL, a citizen of the United States, residing at Belleville, in the county of St. Clair and State of Illinois, have invented a new and useful Improvement in Latches, of which the following is a specification.

This invention relates to latches for gates, barn-doors, and shutters that are exposed to the weather.

The latch is constructed after the fashion of a toggle-joint, and is pivotally supported at its inner end, the outer end being supported by a keeper or a pin passing through a slot in the said end of the latch. The component parts of the latch are connected together by an approximately rule-joint, which joint is weighted to hold the parts in alignment and the latch projected. The latch is bodily adjustable on the gate to allow for any sagging of the gate-post and the gate itself, so that the latch, when projected, will engage with the said gate-post and lock the gate. The end of the latch has an oblique bevel, to have the whole surface of the end engage with the gate-post when closing the gate.

The improvement further consists of the novel features which hereinafter will be more fully described and claimed, and shown in the drawings, in which—

Figure 1 is a front view of a gate, showing my improved latch in position. Fig. 2 is a side view, parts being broken away, of the latch, showing its operation by dotted lines. Fig. 3 is a cross-section on the line *xx* of Fig. 2. Fig. 4 is a detail view of a part of the latch. Fig. 5 is a detail sectional view of a part of the latch.

The latch is composed of the parts A and B, which are connected together by an approximately rule-joint and have slots *a* and *b* at their outer ends, respectively. The inner end *b* of the part A is expanded, and this expanded end is recessed on its under side to receive the extension *e* at the end of the part B, the two ends being pivotally connected by the pin C. The end D of the latch has an oblique bevel. The latch is held to place by the keeper F at one end and the latch-oper-

ating shaft G at the other end; or a bolt may extend through the forward slot *a*, and a corresponding bolt or screw pass through the opening *h* near the rear end of the latch. The pin E, passing through the keeper, also extends through the slot *a* and forms a bearing for the part A to slide on and turn about when being projected or retracted.

The latch-operating shaft G is provided at one end with the handle *f*, and its other end is adapted to receive a corresponding handle H, which is held thereto by the nut *f'*. That portion *g* of the shaft which passes through the gate is round, and that portion *g'* which passes through the latch and the handle H is square. The nut *f'* is mounted on a reduced and threaded end of the said shaft G and clamps the latch between it and the end of the round portion *g*. By loosening the nut *f'* the latch can be adjusted in or out with reference to the gate to have the end of the latch project more or less beyond the edge of the gate. Thus, if the distance between the gate and the gate-post should increase to such an extent that the latch would not obtain a firm purchase in the gate-post, the latch can be readily moved out in the manner just described.

Having thus described my invention, I claim—

1. The latch composed of two sections, one section having one end enlarged and weighted and provided with an open recess in its under side, and the other section having its meeting end provided with a vertical extension on its upper side entering the recess in the under side of the first section and pivoted at its extremity in the upper end of said recess, as set forth.

2. The combination of the latch composed of two parts having slotted outer ends, one of said parts having an expanded weighted recessed inner end, and the other part having its inner end provided with an extension pivoted within the recessed end of the first-mentioned part, the operating-shaft passing through the slot in the end of one part, and the pin passing through the slot in the end of the other part, as set forth.

3. The combination, with the latch composed of two parts, which are pivotally connected together and pivotally supported at one end and having a slot at its other end, of
5 the keeper and the pin passing through the keeper and the said slot, substantially as and for the purpose described.

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

MORTIMER FERRELL HILL.

Witnesses:

R. A. MOORE,

L. W. MOORE.