(No Model.)

G. B. HOWLAND.

GATE LATCH.

No. 348,909. Patented Sept. 7, 1886.

Fig. 1.

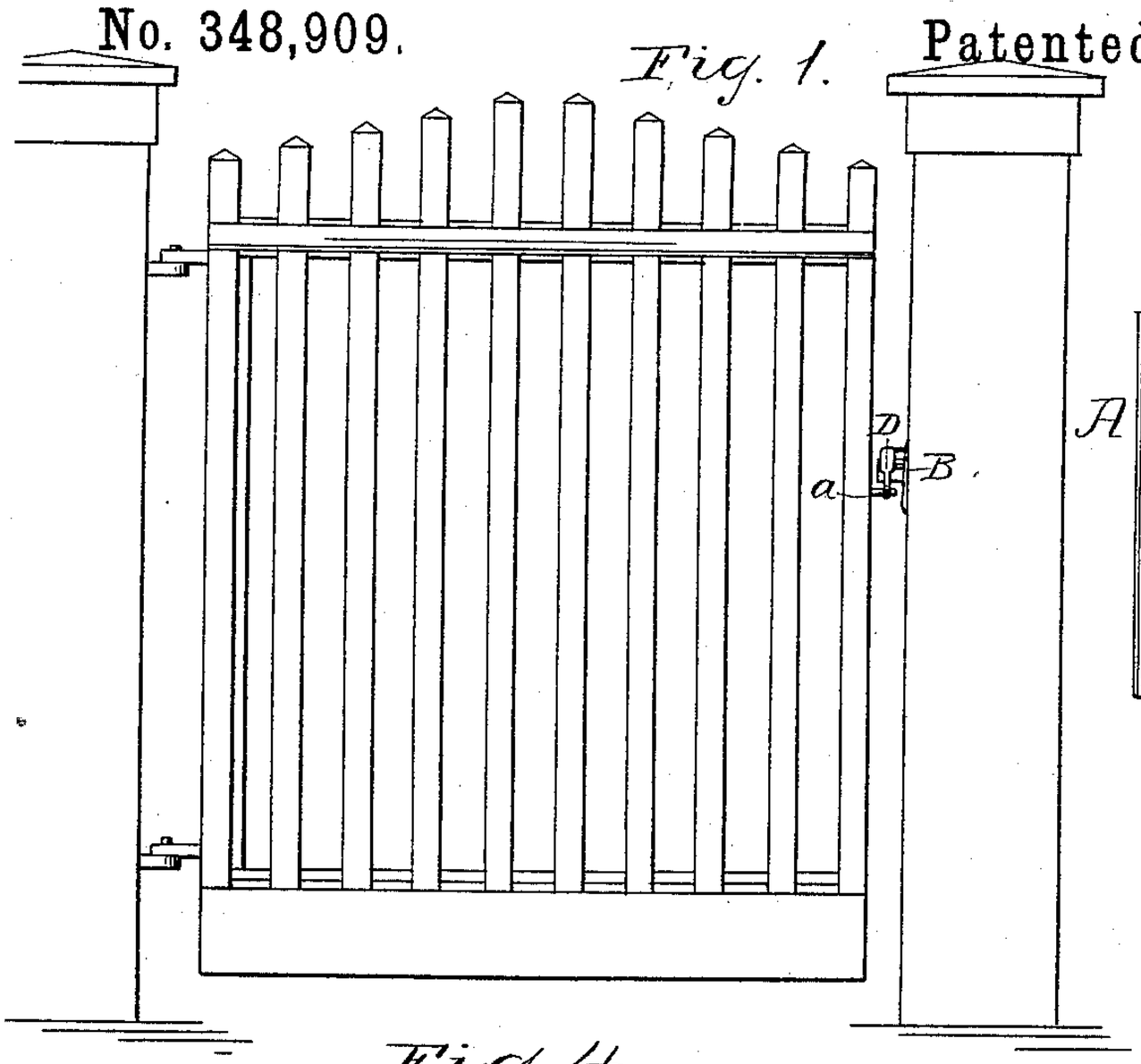


Fig. 2.

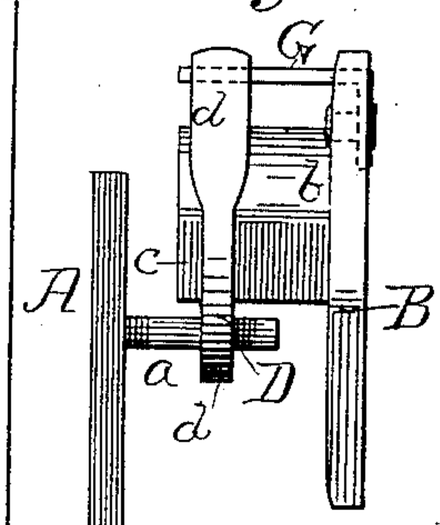


Fig. 3.

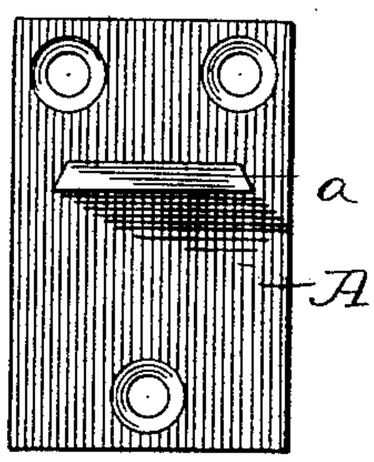


Fig. 4.

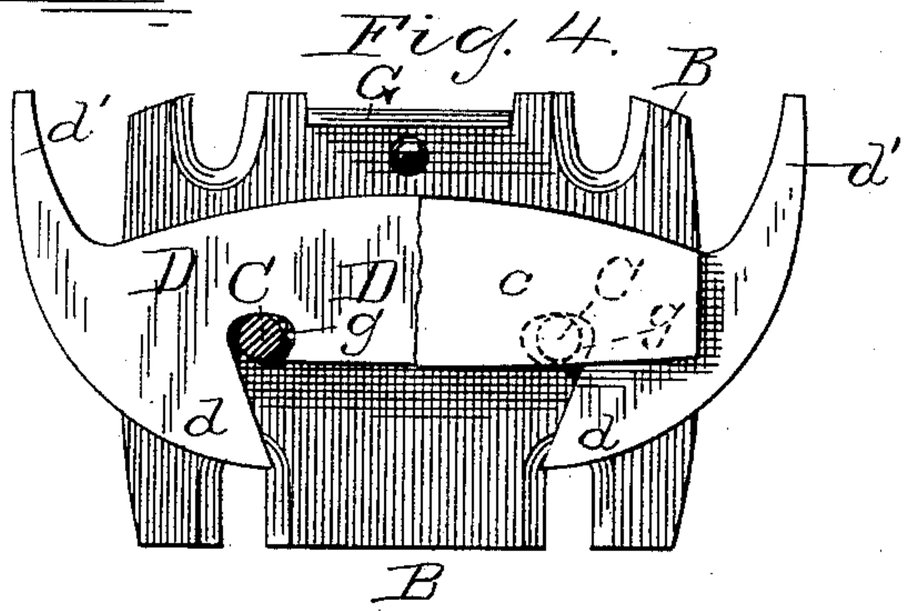
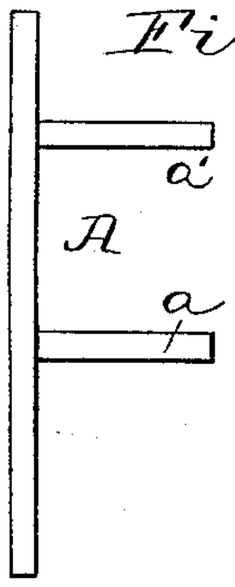


Fig. 5.



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GEORGE B. HOWLAND, OF CHICAGO, ILLINOIS.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 348,909, dated September 7, 1886.

Application filed September 14, 1885. Serial No. 177,020. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. HOWLAND, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gate-Latches; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a new and improved gate latch or catch which has but one movable piece in it, which, by reason of its weight and construction, automatically locks the gate when it swings shut in either direction, and which is not liable to get out of order or be affected by either rust or ice.

In the drawings, Figure 1 is a side elevation of a gate, showing my improved latch applied thereto. Fig. 2 is an end view of my device, the parts of which are in their relative position as when the gate is closed. Fig. 3 is a front view of that part of my device which is affixed to the gate. Fig. 4 is a front view of my device, showing a portion of the guide-plate broken away to show the latch. Fig. 5 is a modification.

My gate-latch consists of two separate parts, one of which is secured to the outer free edge of the gate, and the other to the vertical surface of the contiguous fence-post. The part connected to the outer frame of the gate consists of a plate, A, having a number of screw-holes therein, and having a lug, *a*, projecting laterally therefrom, as shown in Fig. 2. The part affixed to the fence-post consists of a plate, B, having a boss, *b*, extending laterally from it. This boss has extending from its outer vertical surface the pins C C, which are on the same horizontal plane, and which support and hold out from the said boss *b* a guide-plate, *c*. The vertical shape of plate *c* corresponds to that of the boss, the outer surface of which latter, said plate is opposite to and separated from.

Placed between the outer surface of boss *b* and the adjacent surface of plate *c* is the latch D. This latch is provided with hooks *d d* at both ends, the points of which are on a plane below the under edge of the body of the latch connecting said hooks. The inner surfaces of the hooks *d d* are inversely beveled, as shown. Their backs are curved or beveled, so that when struck by the lug *a* as the gate closes the hook struck will be raised or forced upward, and they are provided with an extension, *d'*, which can be grasped and lifted or depressed when it is desired to open the gate. The plate A is so located with reference to the latch D that when the gate is closed from either direction the lug *a* thereon strikes the back of the hook nearest it and lifts that end of latch. After the lug *a* passes under either hook said hook drops to its normal position, and thus confines the lug between the inner surfaces of hooks *d*. If by long exposure the latch should become rusty and not drop readily to its normal position when the lug passes under it, it will be forced down when the lug strikes against the inner surface of the hook at the other end of the latch, and this before the gate can rebound.

As the latch D is lifted at one end, it is desirable to have for it a fixed point of oscillation. To do this I provide the under edge of the body of the latch adjacent to the angle of the inner surfaces of the hooks, and about at those points where the body of latch D rests on pins C, with circular recesses, into which the pins pass when the latch is in its normal position. These recesses *g g* are preferably a little greater in diameter than the pins, and the width of their openings in the contiguous edge of the latch is about the diameter thereof. When one end of the latch is raised in the manner aforesaid, the pin supporting the opposite end will be in the recess and prevent the latch from moving longitudinally. These recesses *g* are so located and constructed with reference to the pins that the latch cannot be lifted in a horizontal position. It must be lifted first from one end.

In order to prevent the latch oscillating too high when struck by lug *a*, I provide a stop, G, and rivet it to the upper edge of plate B, so that it will project out over the latch. This stop, however, may, if desired, be dispensed with, and plate A provided with two lugs, *a a'*, as shown in Fig. 5, one of which passes over the latch to prevent it oscillating too high, while the other or lower one raises the latch. If lug *a* should become broken or rendered

useless, plate A could be removed and a large nail or spike or screw be driven into the gate to take the place of the lug.

What I claim as new is—

1. The combination, with plate B and plate *c*, pins C C, connecting said plates, and latch D, having a hook, *d d*, at each end, and having circular recesses *g g* in the lower edge, into which said pins C C pass, of the lug *a*, as set forth.

2. In a gate-latch, the combination, with a latch having a hook at each end, the points of which project below the body of said latch, having circular or oblong openings therein contiguous to the angles of the inner surfaces of said hooks, the width of the opening into which from the exterior corresponds to the diameter of the fulcrumal pins, and said fulcrumal pins, of a lug projecting from a gate, as described.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

GEORGE B. HOWLAND.

Witnesses:
EDWARD W. SCHIRACH,
FRANK D. THOMASON.