

Charles B. Clark's

Improved Gate Fastener.

No. 119,263.

Patented Sep. 26, 1871.

Fig. I.

Fig. I.

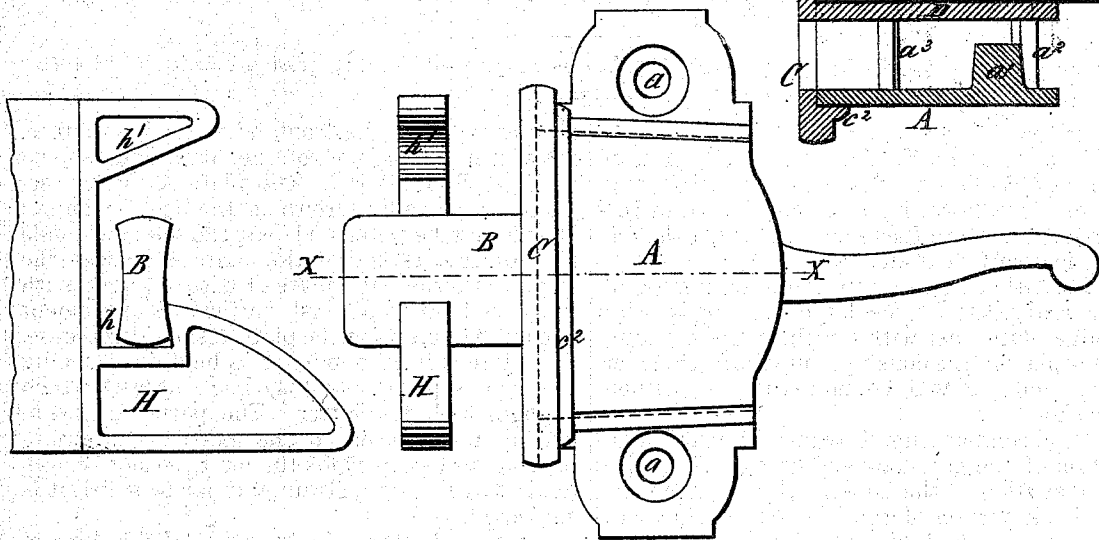


Fig. III.

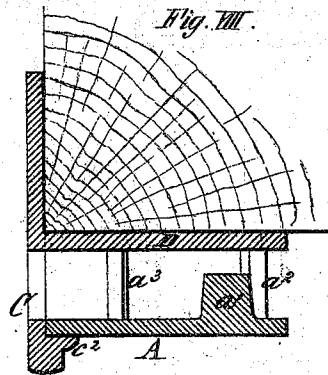


Fig. III.

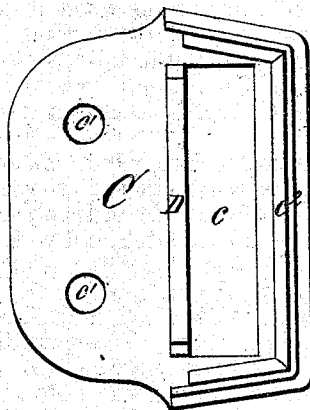


Fig. IV.

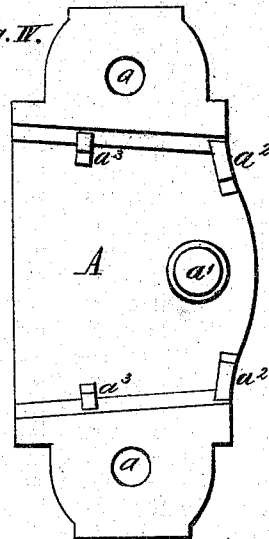


Fig. V.

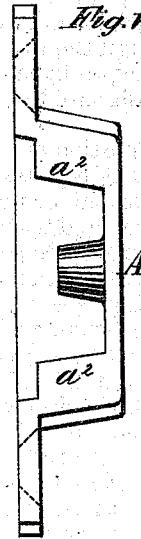
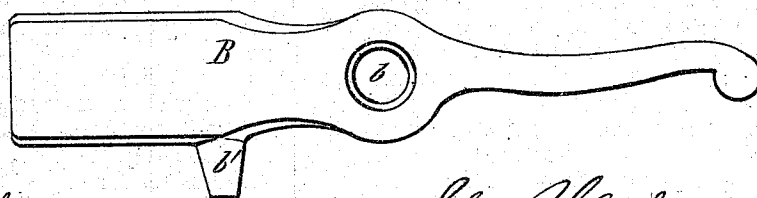


Fig. VI.



Fig. II.



Edward M. Phelps
Jno. J. Bonner. Witnesses

Charles B. Clark Inventor
by Forbush & Hyatt Attys.

UNITED STATES PATENT OFFICE.

CHARLES B. CLARK, OF BUFFALO, NEW YORK.

IMPROVEMENT IN LATCHES FOR GATES.

Specification forming part of Letters Patent No. 119,263, dated September 26, 1871; antedated September 23, 1871.

To all whom it may concern:

Be it known that I, CHARLES B. CLARK, of the city of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Gate-Fasteners, of which the following is a specification:

My invention consists in the combination of the several parts of the latch-housing, to wit: The edge plate, cast with a right angle, forming the back plate of the housing; and the latch-cover or front plate, as will be more fully explained hereinafter.

In the accompanying drawing, Figure I is an elevation of the gate-lock and catch. Fig. II is a side elevation of the latter. Fig. III is a view of the back portion of the latch-case detached; Fig. IV, a detached view of the outer portion thereof. Fig. V is an edge view of the latter. Fig. VI is an elevation of the latch. Fig. VII is a section through the eye thereof. Fig. VIII is a horizontal section in line *xx*, Fig. I.

Like letters designate like parts in each of the figures.

A is the front portion of the lock-case, of the common form of guide-plates or straps, by which the vertical movement or play of the latch B is regulated. It is secured to one side of the gate by screws passing through holes *a* in the usual manner. Fig. IV shows a plan of the inner face of this plate, from which projects a pin, *a*¹, cast therewith, forming the pivot and fulcrum of the latch. *a*² are stops at the outer edge, which limit the movement of the latch. *a*³ *a*³ are lugs or shoulders, on which the back-plate rests and is kept at uniform distance from the front plate. C is also a guide-plate for the latch, designed to be attached to the edge of the gate. It is a flat plate provided with an opening, *c*, for the passage and play of the latch, and with holes *c*¹ for screws, by which it is fastened to the gate. It is also cast with a plate, D, projecting at right angles from the side next to the gate, and of a length and width sufficient to form a back plate for the casting A. The latch B is constructed, as shown in Fig. VI, with a hole, *b*, for the pivot-pin *a*¹, and a projection, *b*¹, from the lower edge. In applying the parts already described the plate C is first secured to the edge of the gate with plate D overlapping the side, as shown in Fig. VIII. The latch B is then arranged on the fulcrum-pin *a*¹ of the plate A, which is now applied to the side of the gate over the plate D, the shoulders *a*³ *a*³ resting against the edges of

the latter while the front edge of the plate A fits within a flange, *c*², of the plate C, as shown in Figs. I and VIII. The plate A is now secured in place by screws in the usual manner. It will now be perceived that the flange *c*² holds the contiguous end of the plate A against the gate, while the back plate D is so engaged with it as to hold it against vertical displacement even if the screws of the plate A should get loose. The plate C in like manner is held in place by the edge of plate A and the back plate D, which engages with the latter. The parts, thus connected and secured to the gate, form a strong bearing and support for the latch, so as to firmly hold it against the strain and jar to which it is subjected.

Another important advantage of this feature of my invention is due to the fact that the latch is secured between metallic plates held at an unvarying distance from each other, so as to prevent the swelling of the wood in wet weather from obstructing the free working of the latch. The projection *b*¹ of the latch stops against the off-set of the plate A and arrests the descent of the latch when it has reached a horizontal position.

H is the catch-plate, which is fastened to the post of the fence by screws in the usual manner. It is provided with the ordinary notch *h* to receive the end of the latch, and with a deflecting projection, *h*¹, over the notch, inclined upward on the under edge, as shown in Fig. II, which serves to deflect the latch, as it glances upward, into the notch *h* below. To secure the latch from bounding upward as it strikes the bottom of the notch, I prefer to make the notch and latch of slightly dovetail form, as shown in Fig. II, which I have found from experiment will accomplish the desired purpose.

By inverting the parts A C and reversing the latch, my improved fastening can be changed from a right to a left hand, or vice versa, as required.

What I claim is—

In combination with the plate C, cast with a right-angled plate, D, forming the back of the latch-housing, the front plate A, as and for the purposes set forth.

CHARLES B. CLARK.

Witnesses:

JNO. J. BONNER,
EDWARD WILHELM.