C. B. & M. S. AUSTIN.
GATE-LATCH.

No. 192,889. Patented July 10, 1877.

Fig. 1.

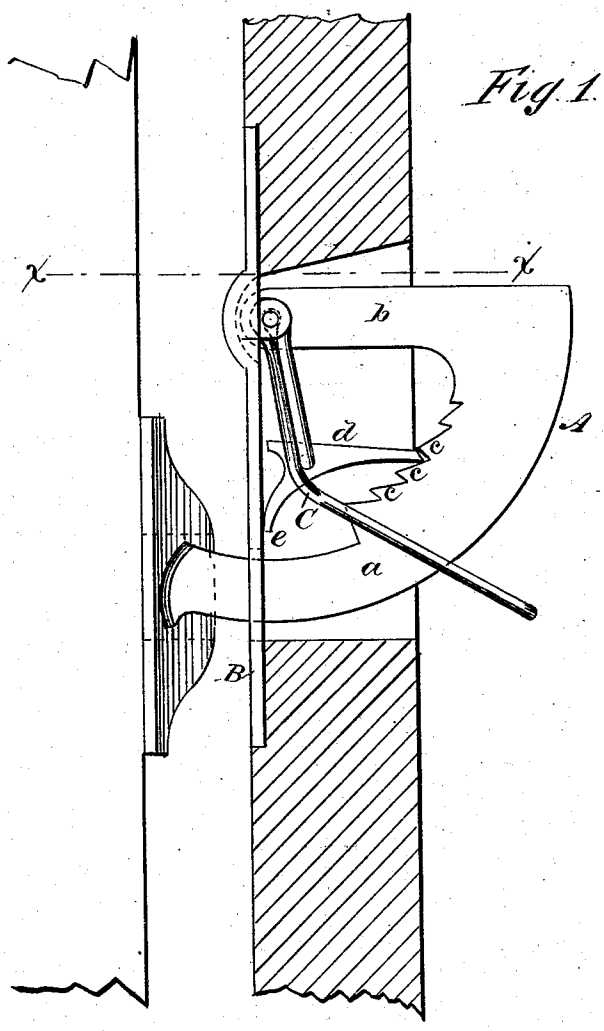
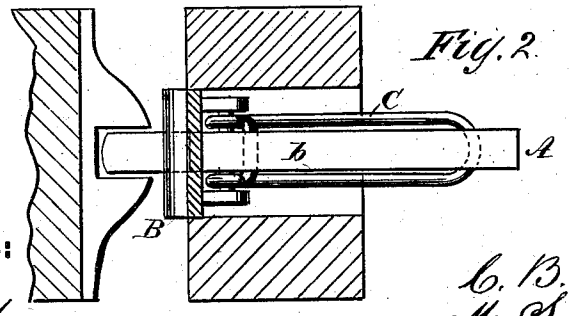


Fig. 2.



WITNESSES:

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CYRUS B. AUSTIN AND MILTON S. AUSTIN, OF CUBA, OHIO.

IMPROVEMENT IN GATE-LATCHES.

Specification forming part of Letters Patent No. **192,889**, dated July 10, 1877; application filed June 11, 1877.

To all whom it may concern:

Be it known that we, CYRUS B. AUSTIN and MILTON S. AUSTIN, of Cuba, in the county of Clinton and State of Ohio, have invented a new and Improved Latch, of which the following is a specification:

Figure 1 is a side elevation of our improved latch. Fig. 2 is a plan view in section on line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts.

Our invention consists of an arc-shaped bolt attached to a pivoted arm, and provided with ratchet-teeth, and operated by means of a lever carrying a pawl, which is capable of engaging either of the ratchet-teeth of the bolt, as occasion may require; the object being to provide a simple latch for gates and doors that will automatically adjust itself to the distance between the gate and post or between the door and jamb.

In the drawing, A is a latch, consisting of an arc-shaped piece, *a*, and an arm, *b*; and B is a plate, to which the arm *b* is jointed, and through which the end of the arc-shaped piece *a* projects. The inner edge of the piece *a* is provided with ratchet-teeth *c*, which are engaged by a pawl, *d*, that is pivoted in a bent lever, C, that moves on the same pivot as the arm *b*. The lever C is slotted, and extends downward on each side of the latch A, beyond which it projects sufficiently to form a handle for operating the latch. The pawl *d* is provided with a toe, *e*, which touches the plate B and throws the pawl out of the teeth *c* as the lever C is carried forward toward the plate B.

The latch above described is used in connection with an ordinary latch-socket having beveled sides. On shutting the gate the latch follows the inclined side of the socket, and drops into it by its own gravity. It will engage a socket equally well whether near it or removed from it any distance within the range of the latch. The pawl *d* is no impediment to the free movement of the latch, as it is kept out of engagement with the ratchet-teeth *c* by the toe *e*, which holds up the end of the pawl so long as the weight of the lever C rests upon the pawl. When the lever C is raised the pawl engages one of the ratchet-teeth *c*, and carries the latch A with it.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The latch A, consisting of the arc-shaped part *a* having ratchet-teeth *c*, and the arm *b*, the lever C, pawl *d* having the toe *e*, and the plate B, in combination, substantially as shown and described.

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