(No Model.)

L. L. LIGHTCAP.

GATE LATCH.

No. 256,577. Patented Apr. 18, 1882.

Fig. 1.

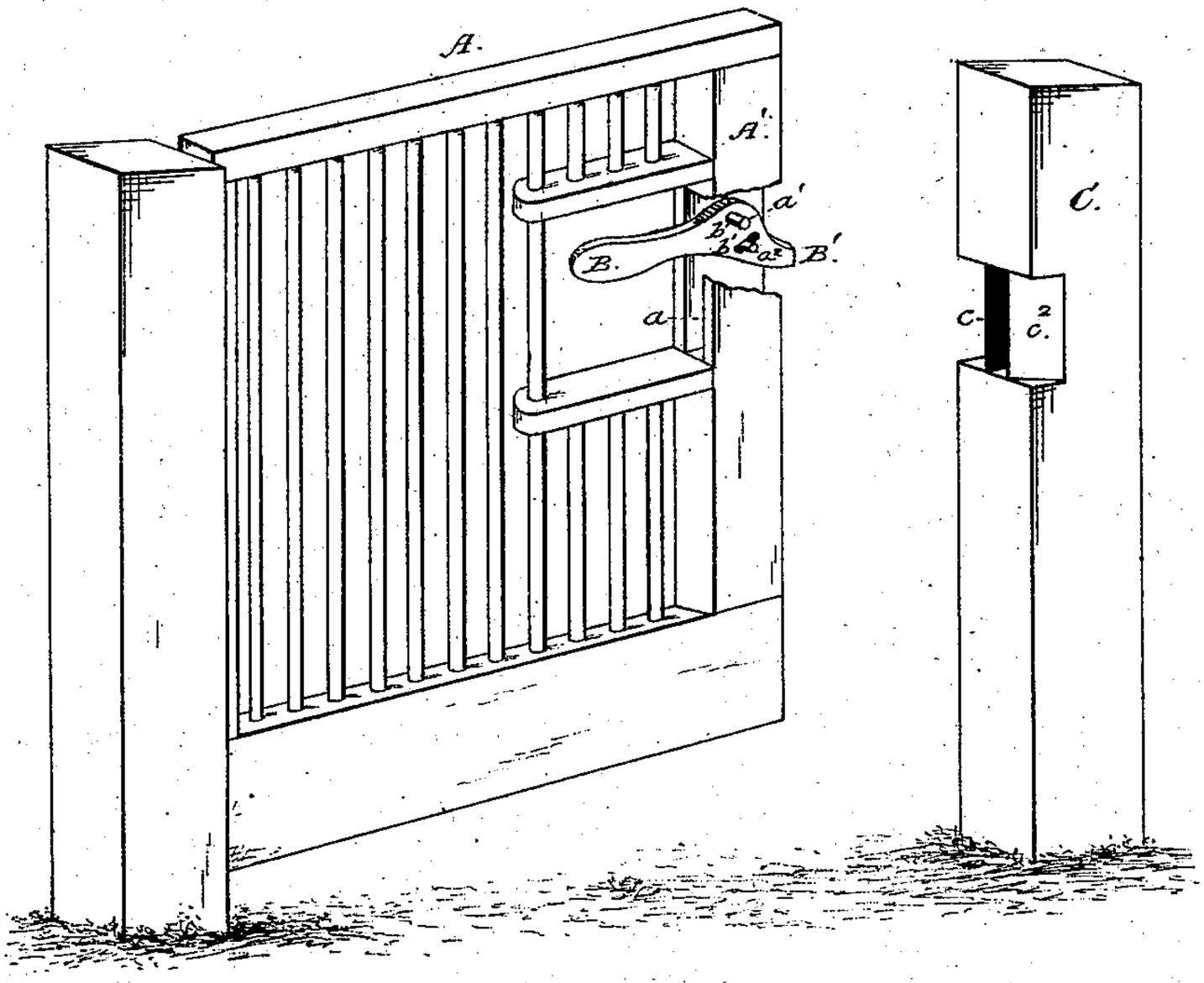


Fig. 2.

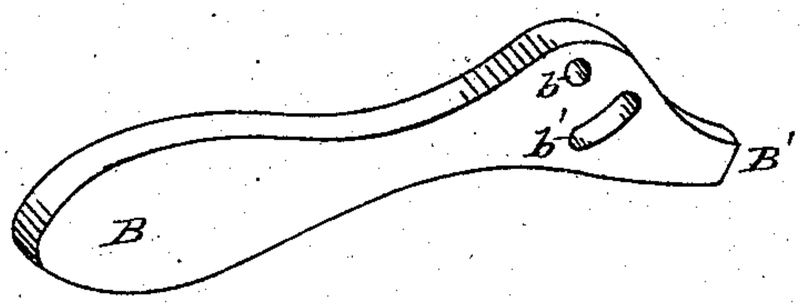
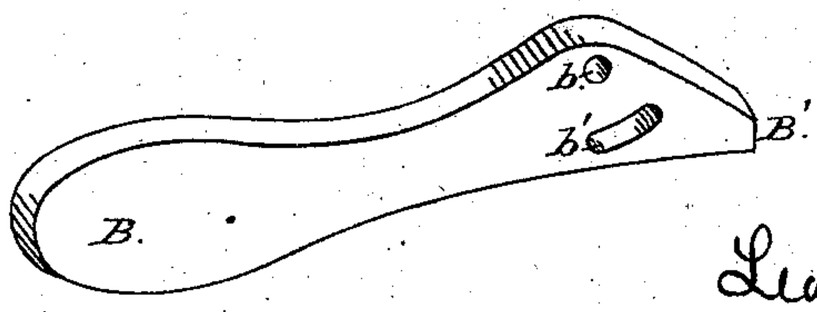


Fig. 3.



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UNITED STATES PATENT OFFICE.

LEONARD L. LIGHTCAP, OF HAZEL GREEN, WISCONSIN.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 256,577, dated April 18, 1882.

Application filed August 20, 1881. (No model.)

To all whom it may concern:

Be it known that I, LEONARD L. LIGHTCAP, of Hazel Green, in the county of Grant and State of Wisconsin, have invented a new and useful Improvement in Gate-Latches; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention, which relates to that class of gate-latches known as "gravitating latches," is to provide a latch that shall be simple in construction, afford ready and cheap means of attachment to the gate, be effective at all times in its operation, and be manufactured with very little expense; and to this end the invention consists in the peculiar construction and arrangement of the latch proper and the gravitating handle adapted to automatically operate said latch, the latch and its handle being made of one piece of metal provided with certain novel and simple means for limiting the movements of the operating-handle and for attaching the device to the gate, all as more fully hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view, representing a two-way swinging gate provided with my improved latch; Fig. 2, a perspective view of the latch detached, and Fig. 3 a perspective view of a form of latch adapted to be attached to gates swinging one way only.

The gate A is secured to the gate-post by means of the hinges commonly used on gates adapted to be swung both ways. In the post A′, which forms the front portion of the gate-frame, a slot, *a*, is cut. This slot passes transversely through A′, and should be made of a sufficient width and length to allow the latch, presently to be described, to move freely therein.

B represents the operating-handle, and B′ the latch proper, of my improved latching device, which is formed of one piece of metal or other suitable material of a proper width and thickness to fit properly into the slot *a*, and of the peculiar shape and construction shown in Fig. 2. This latch is so constructed that its greatest weight is in the handle end B, so that when the device is properly secured to the gate the weight of this part will effectively operate to throw the latch proper forward into the recess *c*, with which the gate-post C is provided, as shown, and thus securely fasten the gate. The latch is pivotally attached to the gate by means of a screw or pin, *a′*, passing through the part A′ and the hole *b*, with which the latch is provided, and is arranged in such a manner in the slot *a*, through which it passes, that the part provided with hole *b* shall approach as near as possible to the upper part of said slot and permit the proper movement of the latch and its operating-handle. The latch also is provided with a slot, *b′*, arranged as shown in Fig. 2. After the latch has been secured to the gate a screw or pin, a^2, is passed through the part A′ and the slot *b′* directly under and in line with the screw that secures the latch within said part. This slot *b′* is made of sufficient length to allow the latch proper to readily free itself from the locking-post when opening the gate, which is done by simply raising the handle end B, and yet not allow said handle to be raised so far as not to be operative by its own weight in closing and fastening the gate. Although this slot is the preferable means employed by me to limit the movements of the latching device, the same result might be quite as readily and simply accomplished by providing the part A′ with slots cut upon each side of slot *a*, said slots registering with each other, and being of similar construction and corresponding to the slot *b′* in size, and, instead of the slot in the latch, providing it with a pin whose ends shall enter the slots in the part A′, and thus allow the latch to move back and forth in the same manner as before described.

Upon either side of the recess *c* the gate-post is cut away to form inclined planes c^2, so that when closing the gate the end of the latch, striking against the incline, will be forced back, thus elevating its heavier end the proper distance to automatically by its own weight throw the latch forward into the locking-recess the instant it passes said incline.

In the foregoing reference has been made only to my latching device as applied to gates adapted to swing both ways; but it is evident the device could be applied as well to gates opening only one way, the difference in construction and arrangement of operative parts consisting mainly in the employment of an inverted keeper attached to the gate-post C, instead of providing said post with the recess *c* and in-

clines c^2, and in using a latching device similar to the form and construction shown in Fig. 3 attached to the outside of the gate, instead of being passed through a slot therein, as hereinbefore described.

The advantages of my latching device consist mainly in its simplicity of construction and operation and in the comparatively small cost incident to its manufacture.

What I claim, and desire to secure to myself by Letters Patent, is—

The combination, with the gate-post C, provided with recess *c* and inclines c^2, arranged on either side, of gate A, having its front post provided with the transverse slot *a*, and latching device B B′, provided with hole *b* and slot *b′*, whereby said device may be pivotally secured in slot *a* by means of pin *a′* and limited in its movements therein by means of pin a^2, the several parts constructed and arranged substantially as described, shown, and for the purpose set forth.

This specification signed and witnessed this 5th day of July, 1881.

LEONARD L. LIGHTCAP.

Witnesses:

MONROE M. CADY,

GEO. M. LIFE.