

(No Model.)

A. A. PAGE.  
LATCH.

No. 455,949.

Patented July 14, 1891.

Fig. 1

Fig. 2

Fig. 3

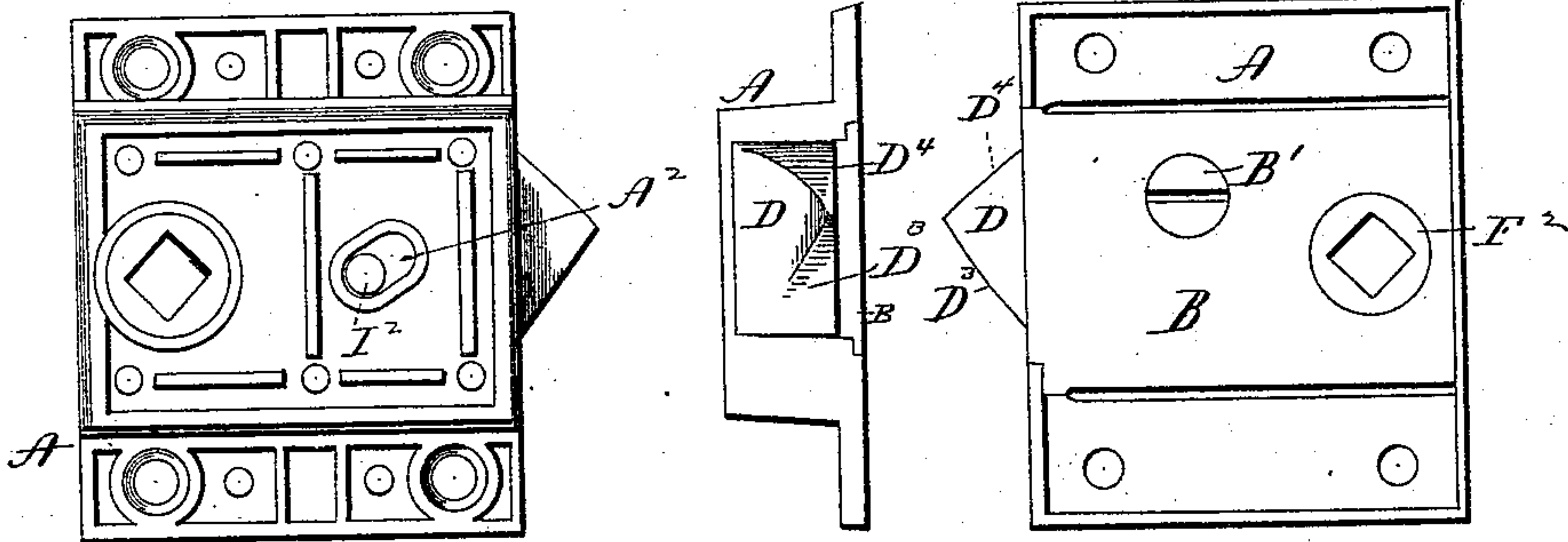
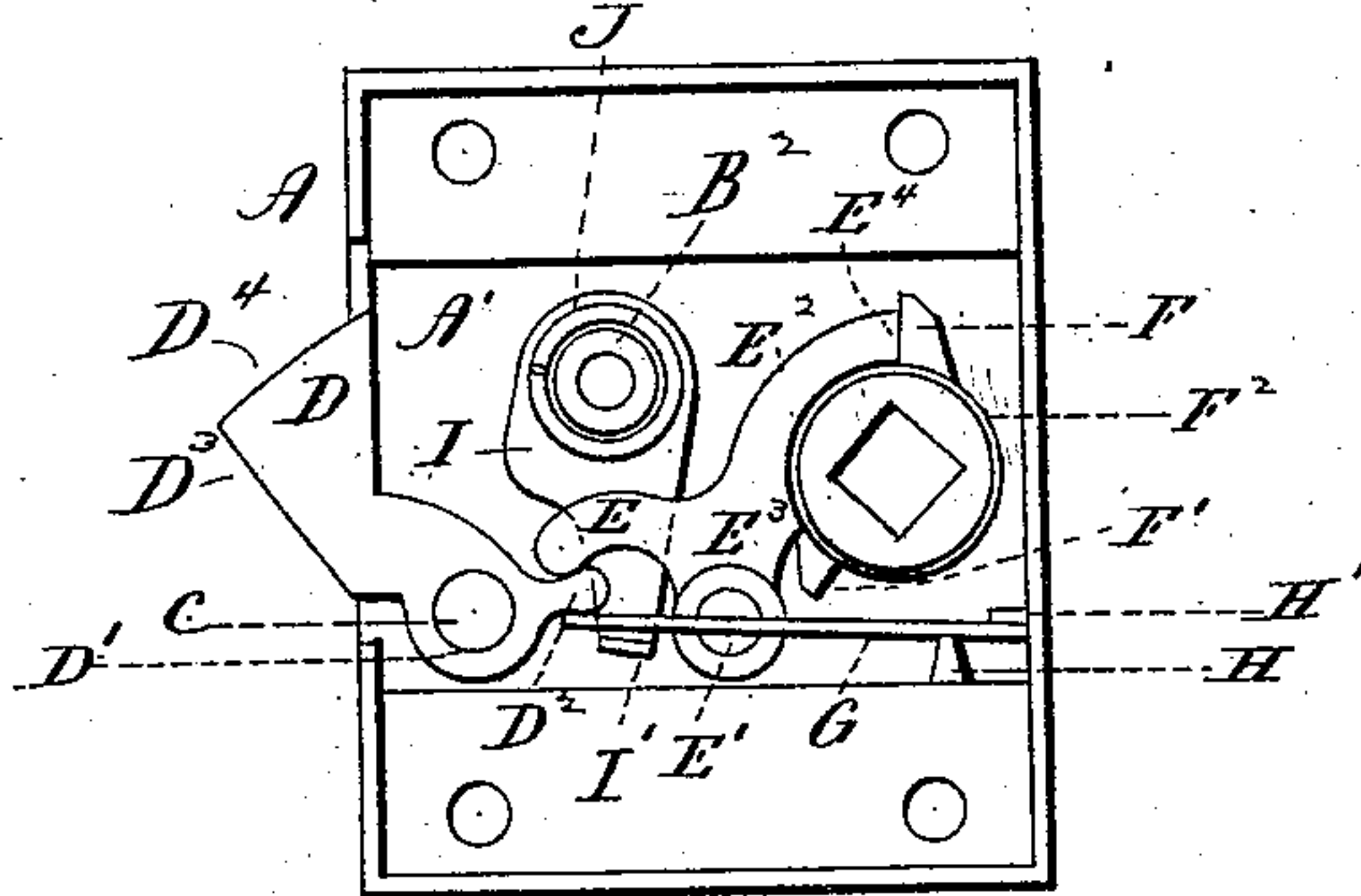


Fig. 4



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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SARGENT & COMPANY, OF SAME PLACE.

## LATCH.

SPECIFICATION forming part of Letters Patent No. 455,949, dated July 14, 1891.

Application filed April 10, 1891. Serial No. 388,424. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT A. PAGE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Latches; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in front elevation of a latch constructed in accordance with my invention; Fig. 2, a view thereof in end elevation, looking toward the bolt; Fig. 3, a view of the latch in inside elevation, and Fig. 4 a view thereof in side elevation with the plate of the case removed.

My invention relates to an improvement in latches, the object being to produce a simple, durable, cheap, and compact device in which the bolt is thrown back under very light pressure, whereby the article is especially adapted for use on light constructions, such as screen-doors.

With these ends in view my invention consists in a latch having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

The case of the latch is of ordinary construction and, as herein shown, consists of a body portion A, adapted to be secured to a door and provided with a chamber A', which receives the several parts of the lock mechanism, and of a plate B, which closes the said chamber, and is secured in place by a screw B', entering a stud B<sup>2</sup>, formed integral with the body portion A of the case and standing up in the chamber A' thereof. The bolt of the lock is hung on a stud C, located in the forward lower corner of the chamber A', and consists of a nose D, a hub D', and an inwardly-projecting finger D<sup>2</sup>, the said nose being shaped to form a winding bevel D<sup>3</sup>, beginning at its lower inner edge and extending diagonally in a circular line to its upper edge, where it merges into the drop-off D<sup>4</sup>, as best shown by Fig. 2 of the drawings. The said finger D<sup>2</sup> of the bolt has its upper edge engaged by the curved short arm E of a two-

armed operating-lever hung near the lower edge of the chamber A' on a stud E', located about midway the length of the chamber, the other and longer arm E<sup>2</sup> of the said lever being provided with operating-faces E<sup>3</sup> and E<sup>4</sup>, which are respectively engaged by the fingers F' F' of the roll-back F<sup>2</sup>, which has a squared central opening to receive a shank carrying knobs or handles, but not herein shown. The said roll-back is located at the inner end of the chamber A', with the operating-lever hung between it and the bolt. A spring G engages with the lower edge of the finger D<sup>2</sup> of the bolt, and exerts a constant effort to throw the same into its projected position, the inner end of the spring, as herein shown, being inserted between two lugs H' H' formed integral with the body portion A of the case. The particular construction and arrangement of this spring, however, is not material to my invention. A locking-lever I, hung on the stud B<sup>2</sup> as a center and located in the bottom of the said chamber A', is provided at its end with an upturned finger I', which is engaged with either the upper or the lower edge of the finger D<sup>2</sup>, according as it is desired to lock the bolt in its projected or retired position, the said locking-lever being thereto swung on the stud B<sup>2</sup> by means of a pin I<sup>2</sup> located upon its outer face and projecting through an inclined slot A<sup>2</sup>, formed in the body portion of the case. A spiral spring J, interposed between the locking-lever and the plate B, holds the lever in any position in which it may be placed.

My improved latch being composed of few and simple parts, is cheap to construct, durable in use, compact in form, and by reason of the provision of its bolt with a beveled nose and of the advantageous leverage secured by arranging the parts as shown and described, the bolt is thrown back with the minimum of friction and strain, whereby the latch is particularly adapted to use on light constructions—such as screen-doors—which are not racked when swung to for latching.

I would have it understood that I do not limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my



invention. If desired, for instance, the roll-back may be made with only one finger, in which case the bolt will not respond to turning the knob in either, but only one direction.

5 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a latch, the combination, with a case, of a bolt hung in one of the forward corners  
10 thereof and having a beveled nose and a single short finger projecting inwardly from its hub, a roll-back mounted in the opposite end of the case and provided with two oppositely-extending fingers, an operating-lever  
15 hung between the bolt and roll-back and having two oppositely-extending arms, one of which engages with the short finger of the bolt and the other with the fingers of the roll-back, a spring co-operating with the bolt to  
20 throw it into its open position, and a locking device for securing the bolt in either of its positions, substantially as set forth.

2. In a latch, the combination, with a case,

of a bolt hung in one of the forward corners thereof and having a beveled nose and an inwardly-projecting finger, a roll-back mounted  
25 in the opposite end of the case and provided with one or more fingers, a two-armed operating-lever hung between the bolt and roll-back and having one arm engaged with the  
30 finger of the bolt and its other arm engaged by the roll-back, a spring co-operating with the bolt to throw it into its open position, and a locking-lever hung within the case and adapted to be engaged with the upper or lower  
35 edge of the finger of the bolt, and provided with means projecting outward through the case for operating it, substantially as set forth.

In testimony whereof I have signed this  
40 specification in the presence of two subscribing witnesses.

ALBERT A. PAGE.

Witnesses:

ELLIOTT LITTLEJOHN,  
WM. S. COOKE.