F. W. BROCKSIEPER.
Latch.

No. 205,041. Patented June 18, 1878.

Fig. 1

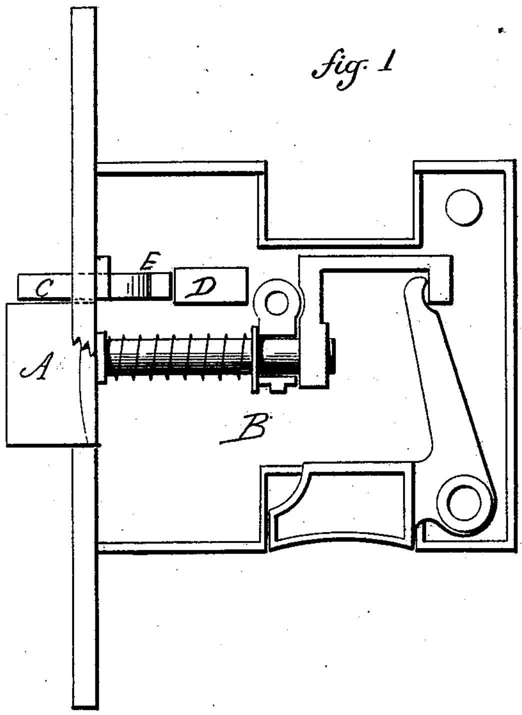
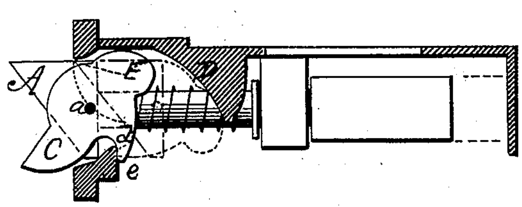


Fig. 2



Witnesses.

Fred^k W. Brocksieper
Inventor.
By atty.
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UNITED STATES PATENT OFFICE.

FREDRICK W. BROCKSIEPER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO SARGENT & CO., OF SAME PLACE.

IMPROVEMENT IN LATCHES.

Specification forming part of Letters Patent No. **205,041**, dated June 18, 1878; application filed April 30, 1878.

To all whom it may concern:

Be it known that I, FREDK. W. BROCKSIEPER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Knob-Latches; and I do hereby declare the following, when taken in connection with the 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, interior of the latch, the said plate being removed for that purpose; Fig. 2, transverse section above the latch-bolt.

This invention relates to an improvement in that class of latches which consist of a bevel-headed bolt arranged in a case to be operated by knobs or otherwise, and having for its object to facilitate the movement of the bolt as the door closes; and consists in the peculiar arrangement of an auxiliary lever, and as more fully hereinafter described, and particularly recited in the claim.

A represents the head of the latch-bolt, arranged within the case B, and with operative mechanism for drawing the bolt by means of a knob or other device, the nose of the bolt being beveled in the usual manner, and as seen in Fig. 2.

On either the upper or lower side of the bolt a lever is pivoted, as at *a*, the said pivot forming a fixed center on the bolt, around which the lever will turn. One arm, C, of the said lever extends forward of the bevel, as seen in Fig. 2, and so as to strike the keeper in advance of the bolt. A second arm, *d*, of the said lever extends within the case and against a bearing-surface, *e*, on the inside of the face-plate. This bearing-surface *e* forms a fulcrum, against which the lever turns. Hence, when the arm C strikes the keeper, the arm *d* holds against the fulcrum *e*, and the lever is turned, forcing the head inward because of the pivot *a* and in advance of contact between the beveled face of the bolt and the keeper until both the arm C and the bolt are forced within the case, as seen in Fig. 2. When the bolt is freed its spring throws it outward, and the lever is again turned to bring the arm C forward.

When the latch-bolt is drawn in, as by the knob, and in order to insure the turning of the lever, an incline, D, is made in the case, against which a third arm or projection, E, on the lever will strike and ride upon, as indicated in broken lines, causing the lever to turn substantially as it does when forced by contact with the keeper, as before described.

The incline D is not positively essential, but is desirable.

I am aware that auxiliary levers arranged upon the latch-bolt, and to strike the keeper in advance of the bolt, are common and well known; hence do not broadly claim such a combination; but

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

In a latch, the lever pivoted to the edge of the latch-bolt, one arm of which extends outward and forward of the bevel of the latch-bolt, a second arm inward and so as to take a bearing or fulcrum on the inner surface of the face-plate or within the case, and combined with the incline E within the case, substantially as and for the purpose described.

FREDRICK W. BROCKSIEPER.

Witnesses:

J. H. SHUMWAY,

H. A. KITSON.