F. W. BROCKSIEPER.

Keeper for Door-Latches.

No. 215,206. Patented May 13, 1879.

fig. 1

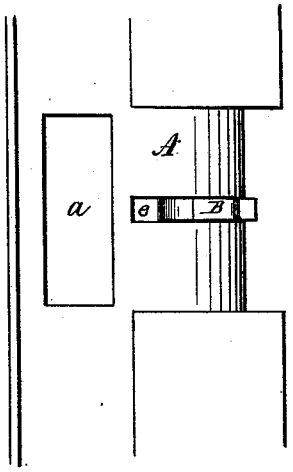
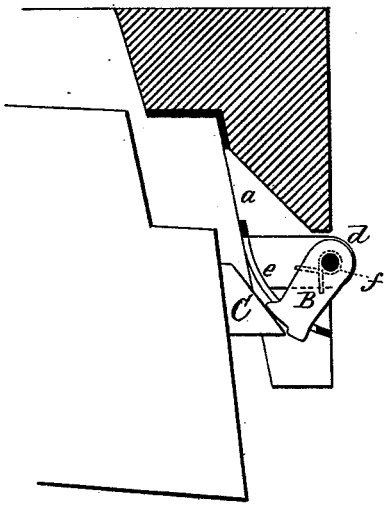


fig. 2



Witnesses.

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UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN KEEPERS FOR DOOR-LATCHES.

Specification forming part of Letters Patent No. **215,206**, dated May 13, 1879; application filed February 17, 1879.

To all whom it may concern:

Be it known that I, FREDERICK W. BROCKSIEPER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Keepers for Door-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, a side view of the keeper; Fig. 2, a horizontal section as applied to use.

This invention relates to an improvement in keepers for that class of door-latches in which the latch-bolt is drawn into its case by a knob or handle and forced out by a spring, and commonly known as "knob-latches."

In the usual construction that part of the surface of the keeper against which the latch strikes is inclined to a greater or less extent, and so that in closing the door the latch rides over the striking-surface of the keeper. In many cases the friction is so great between the keeper and latch-bolt that great force must be applied to close the door, or the bolt must first be drawn into the case.

The object of this invention is to overcome this difficulty; and it consists in the arrangement of a pivoted cam in the keeper, so that the latch-bolt will strike the face of the cam, causing it (the cam) to turn and force the bolt into its case without frictional contact with the keeper, and as more fully hereinafter described.

A is the keeper, and *a* opening or mortise into which the latch-bolt flies when the door is closed.

B is the cam, hinged back of the face of the keeper, as at *d*, and projecting through a slot, *e*, in the keeper, so as to swing in a horizontal plane, and provided with a spring, *f*, the tendency of which is to throw and hold the cam to its most outward position, as in Fig. 2.

C is the latch-bolt, represented in Fig. 2 as having just reached the cam B when the door is being closed. The face of the bolt meets the face of the cam; then, as the closing of the door is continued, the cam turns with the advancing bolt, and the bolt is thereby forced into its case before it quite reaches the opening *a*. It then escapes from the cam and passes freely into its opening *a*, and the cam, thereby released, flies back to its first position or place of rest. By this construction the bolt does not come into contact with the face of the keeper. It is therefore immaterial whether the face of the bolt is of an easy incline or not. It may be square, if preferred. In that case the forward angle of the bolt will strike the cam and be operated upon in the manner described. In the latter case there would be no necessity of a reversing mechanism to set the bolt for right or left hand doors, as a square-nosed bolt will answer for either. This construction of the keeper is peculiarly adapted for gates or doors arranged to swing in both directions. In that case it will be understood that a cam is arranged at each side of the latch-bolt, opening in the keeper, and a substantially square-nosed bolt used, so that from whichever direction a gate or door be closed the bolt will be thrown in by the cam on the corresponding side of the opening in the keeper.

I do not broadly claim a yielding latch-strike, as such I am aware is not new.

I claim—

In combination with the keeper of a door-latch, a cam swinging in a horizontal plane in front of the latch-opening, and serving to engage with the latch-bolt as it approaches the keeper and force it into the case clear from the face of the keeper, and then return to the point where the engagement was made, substantially as described.

FREDERICK W. BROCKSIEPER.

Witnesses:

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