

W. F. STEVENS.

Hinges for Safe-Doors, &c.

No. 145,973.

Patented Dec. 30, 1873.

Fig. 1.

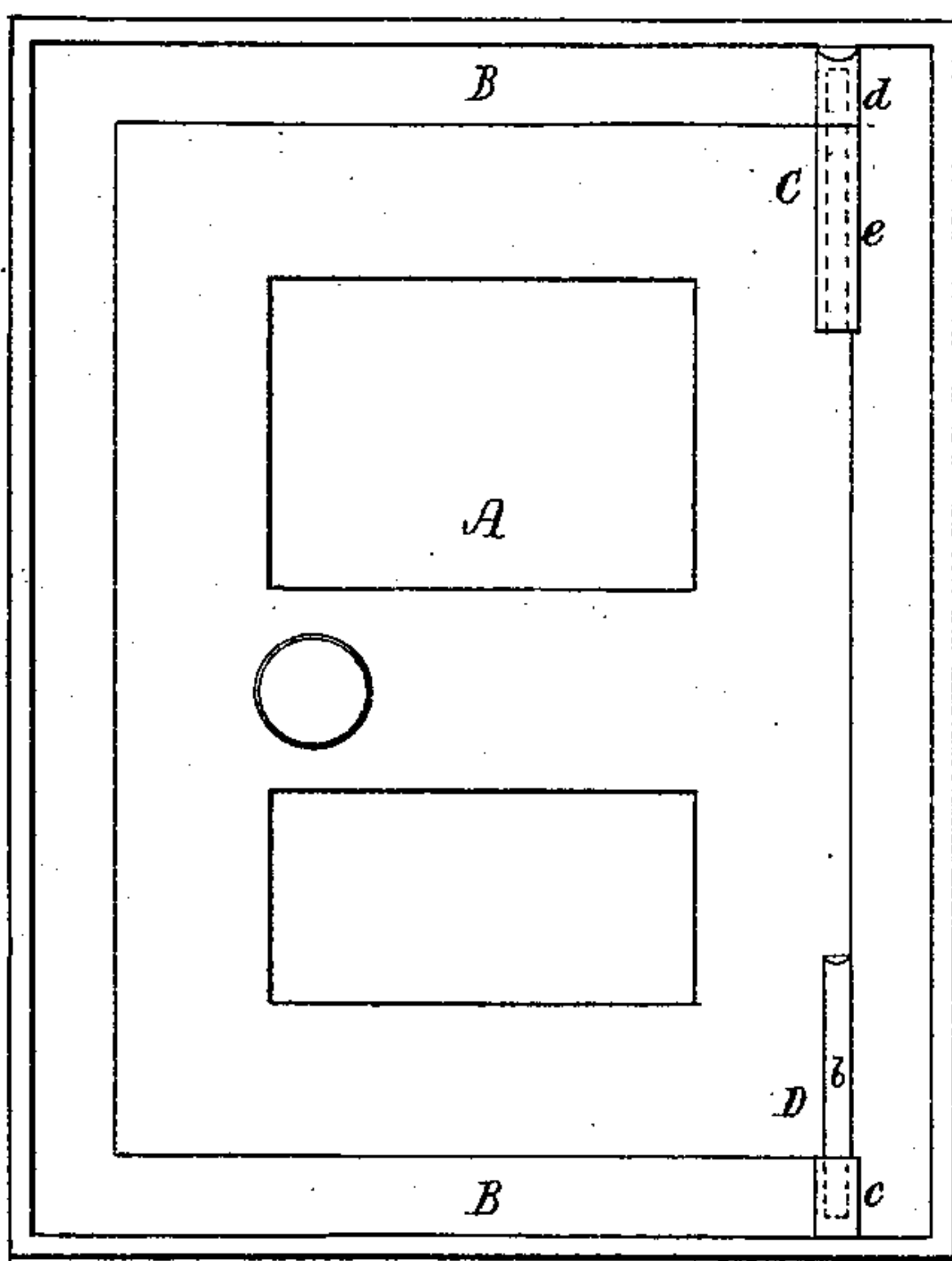
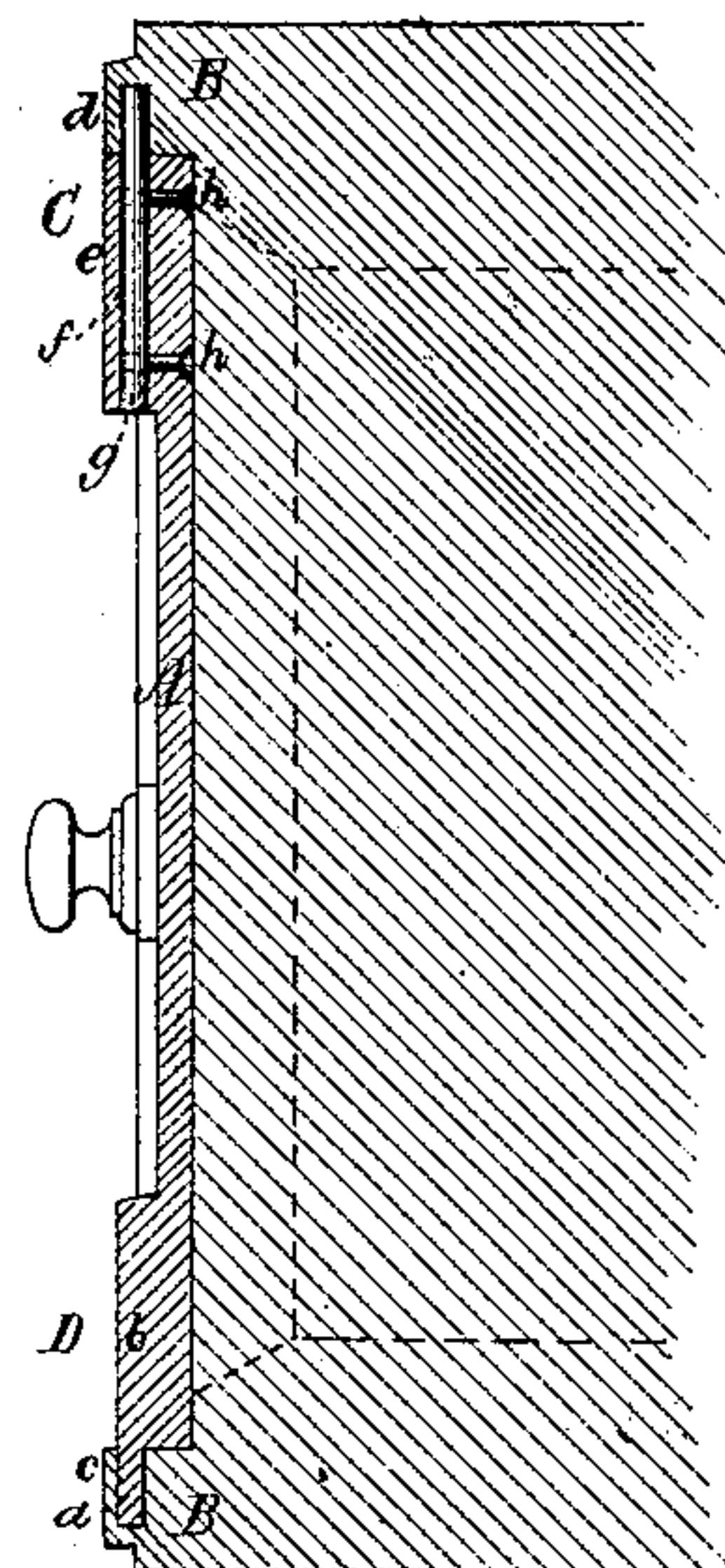


Fig. 2.



Witnesses

S. W. Piper

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WILLIAM F. STEVENS, OF MELROSE, MASSACHUSETTS.

IMPROVEMENT IN HINGES FOR SAFE-DOORS, &c.

Specification forming part of Letters Patent No. **145,973**, dated December 30, 1873; application filed July 23, 1873.

To all whom it may concern:

Be it known that I, WILLIAM F. STEVENS, of Melrose, of the county of Middlesex and State of Massachusetts, have made a new and useful invention having reference to Safe-Doors and the Hinges thereof; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front view of a safe-door and its casing or frame, provided with my invention. Fig. 2 is a transverse and vertical section thereof taken through the axes of the two hinges.

My invention, which has reference to safe-doors having what safe-makers term "outside hinges," is to enable a door to be readily unhinged or separated from the door-frame or safe in case of the lock requiring repair, as well as from any other cause, thereby saving the necessity of transporting the whole safe to the place of repair, the door being all that has to be so taken.

In the drawings, A denotes a safe-door, and B its frame, or that part of a safe to which such door is hinged, and into which it closes when shut, C being the upper and D the lower of the two hinges. The hinge D has a pivot, *a*, extending down from the lower end of a projection, *b*, into a step, *c*, permanently attached to the door-frame B, such step being generally provided with a screw screwed upward into it and against the lower end of the journal. The upper outside hinge usually has a pivotal step projecting from the door-frame in manner as shown at *d*, the remaining part of the hinge being provided with a lip and secured to the door by rivets. The door having once been hinged to the safe cannot be separated therefrom without first destroying the hold of the rivets, all of which it is very undesirable to attempt or accomplish, not only on account of injury to the safe usually resulting therefrom, but the necessity of restoring the rivets and repairing the damage done. Rather than do this it has been customary to remove the whole safe to the place for effecting the repair of the lock. With my invention the door only need be so removed.

In carrying out my said invention, I construct the part *e* of the upper hinge tubular or with a bore, *f*, extending throughout its length, and I place in such bore and to extend upward from it and into the step *d* a hinge-pin, *g*, and fasten the same in place by two or any other suitable number of screws, *h h*, inserted or screwed into the door from its inner side, and also going into or through the pin, all being as shown in Fig. 2. By unscrewing the screws *h h* from the hinge-pin when the door is open, the said pin will be free, and may be removed from its socket, and the door may be drawn forward a little at top, and next lifted out of connection with the lower hinge-step.

I do not claim a pivot-pin formed and applied to a door, its frame, and a spring in manner as shown in the United States Patent No. 59,414, in which case the pin is socketed into the door-frame, so as to be immovable while the door is being either opened or closed. It is also applied to a spring. With my invention there is no spring, and the pin turns with the door, is arranged in a tubular socket projecting from the outer side of the door, and is fastened in such socket by screws inserted from the inner side of the door and going into the pin, the said fastening-screws by such arrangement being inaccessible when the door is closed. There are no such fastening-screws so arranged to the pivot-pin and door shown in said patent. Consequently, my invention differs in very important particulars from anything shown in such patent. Therefore,

I claim—

The removable hinge-pin *g* arranged in the tubular socket *e*, projecting from the outer side of the door, and fastened in said socket by screws *h h* inserted from the inner side of the door, in combination with the pivot *a* on the door and the steps *d* and *c* in the door-frame, all arranged as shown and described.

WILLIAM F. STEVENS.

Witnesses:

R. H. EDDY,
S. N. PIPER.