

(No Model.)

W. L. McKELVEY.

SASH FASTENER.

No. 277,591.

Patented May 15, 1883.

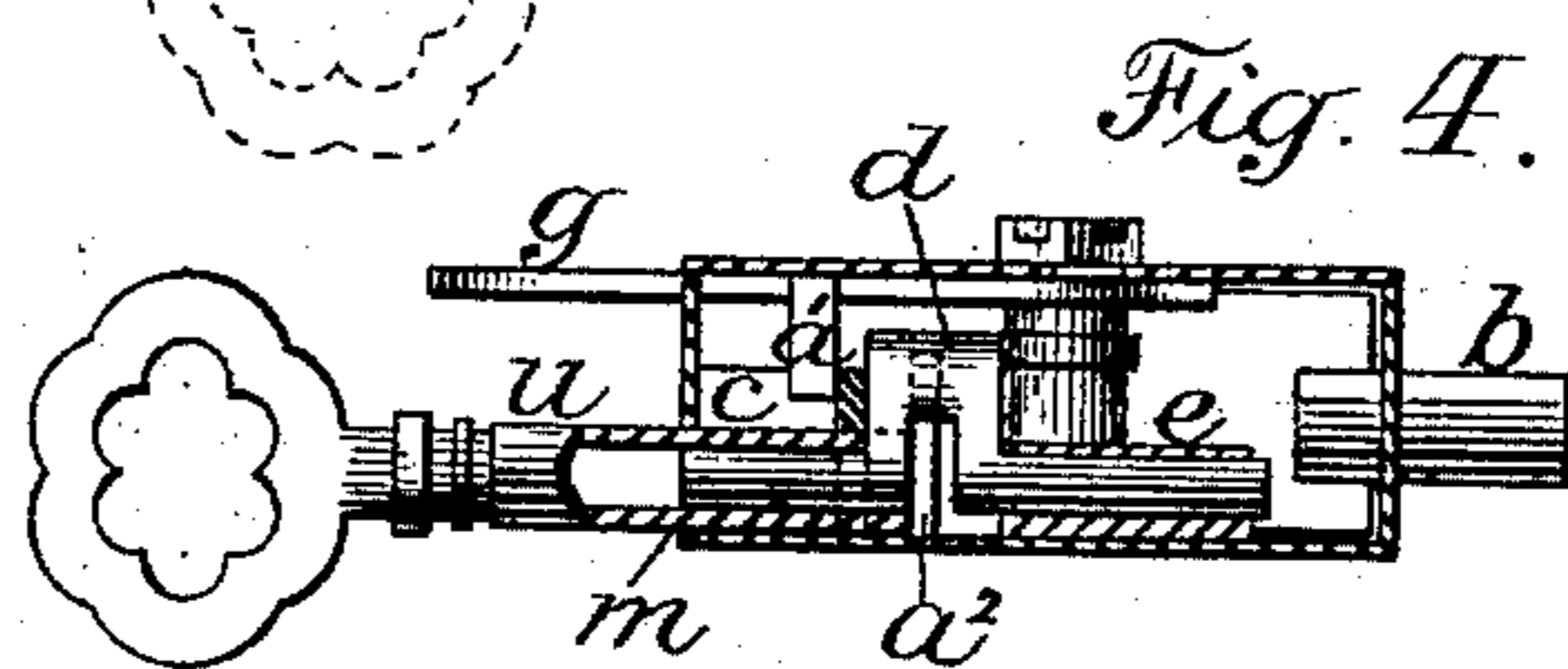
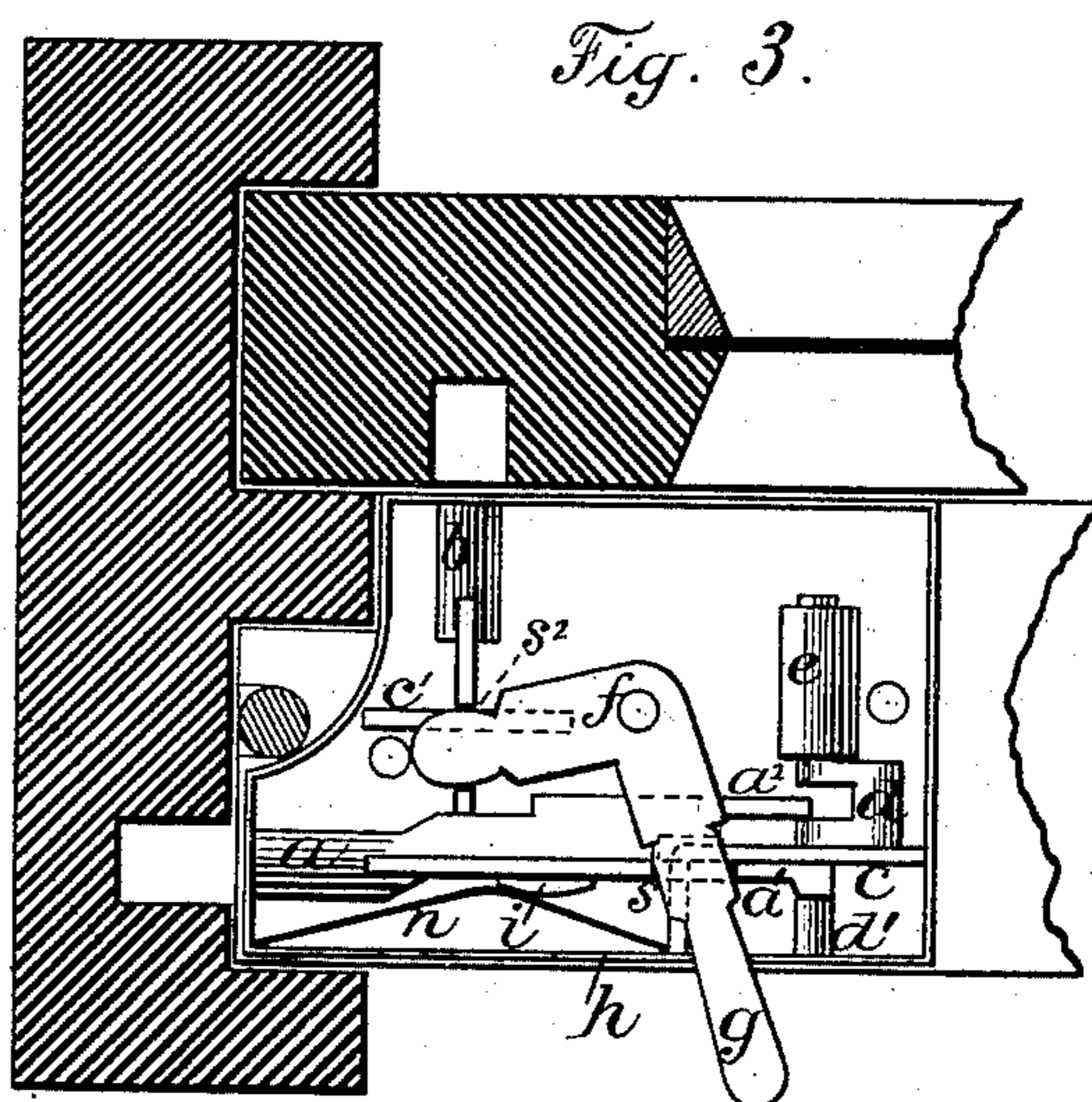
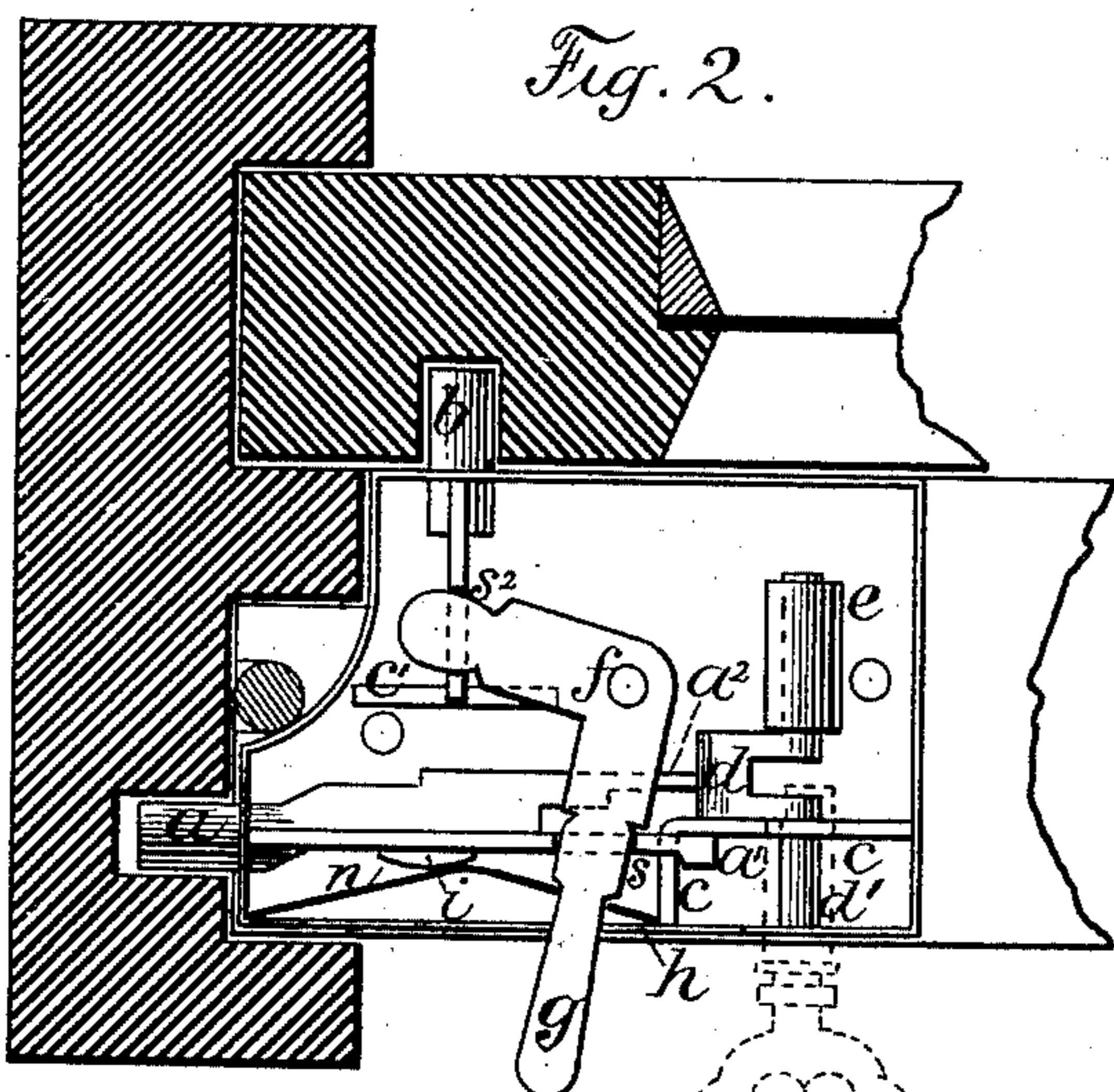
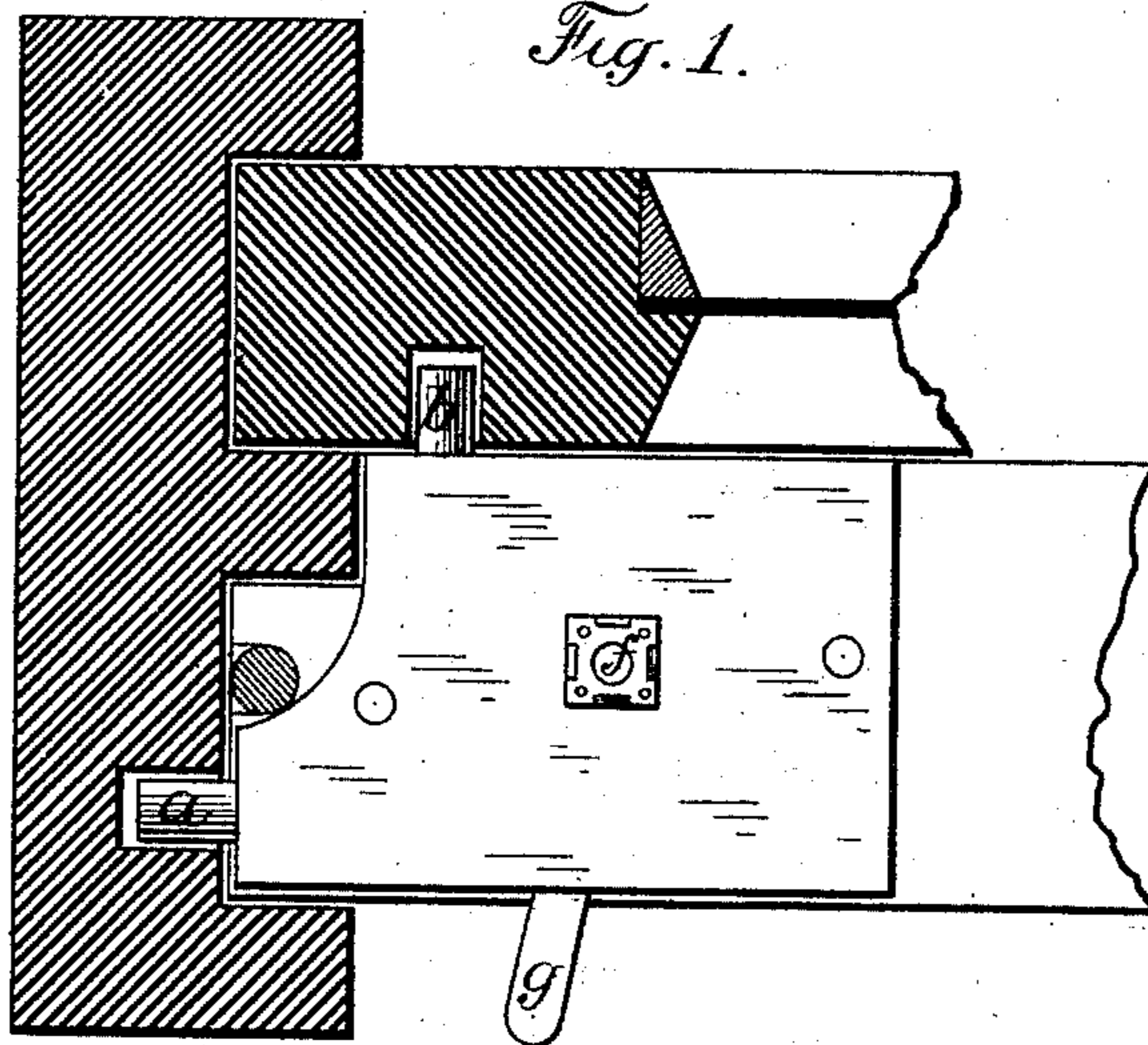


Fig. 5.

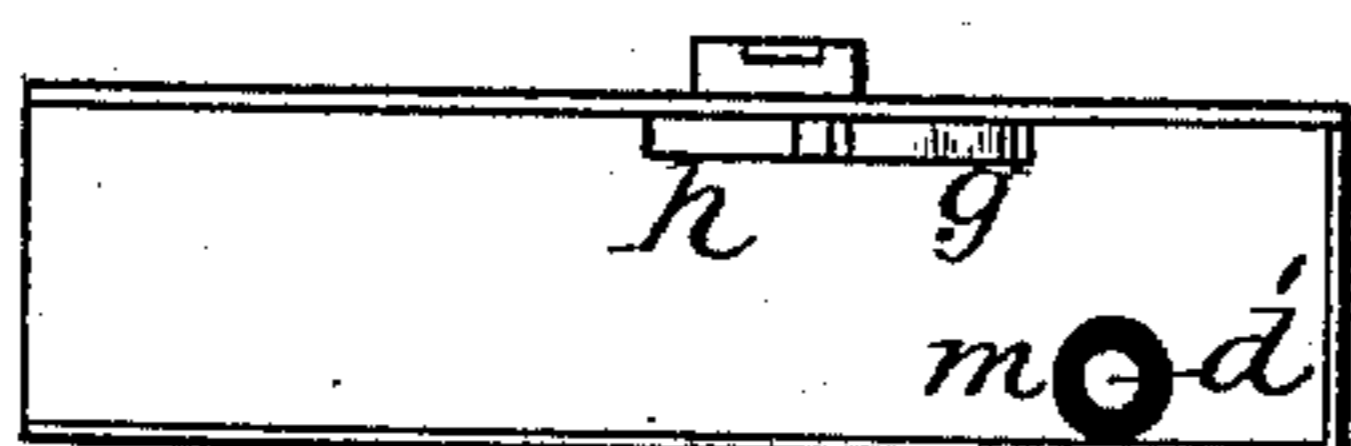


Fig. 6.



Witnesses:

Edmund D. Prochag
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Inventor:

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UNITED STATES PATENT OFFICE.

WILLIAM L. McKELVEY, OF YOUNGSTOWN, OHIO.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 277,591, dated May 15, 1883.

Application filed December 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LAWSON McKELVEY, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented new and useful Improvements in Sash-Locks, of which the following is a specification.

The style of sash-fastener which I have improved is adapted to lock both the upper and the lower sash of a window together and to the casing at the same time in any desired position by a locking device secured upon the top of the upper bar of the lower sash, having two bolts arranged at right angles to each other and operated together, so as to engage both the upper sash and the window-casing, and to be unbolted therefrom.

The specific matter of improvement consists of a combination of devices, and in details of construction hereinafter described, and embraced in the claims.

Referring to the accompanying drawings, Figure 1 represents a horizontal section of the window-sash taken above the meeting-rail, showing both sashes locked together and to the window-casing; Fig. 2, a similar view, the top plate of the locking device being removed to show the bolts locked by a turning cranked stem; Fig. 3, a similar view, showing the bolts unlocked; Fig. 4, a cross-section taken through the cranked stem, by which the bolts are locked when engaged with the sash and the window-casing; Fig. 5, a side view of the lock, and Fig. 6 the tubular notched key.

As stated, the bolts are arranged at right angles to each other, and the case for containing them is suited to such arrangement. It is curved out at the end next the window-frame, so as to clear the parting-strip of the window-casing and the sash-cord. It is screwed to the top rail of the lower sash, so that one of its bolts, *a*, will enter a corresponding hole in the window-casing, and the other bolt, *b*, will enter a hole in the upper sash, the said bolts projecting through holes in their confining-case and maintained in position therein by suitable guide-strips, *cc'*, cast with the case. The bolt *a*, which locks with the window-casing, is forked or divided at its inner end, one branch, *a'*, sliding within the notched guide-strip *c*, and the other, *a²*, serving to receive the action of

a locking cranked stem, *d*, secured in suitable bearings, *e*, in the case, and adapted to be turned by a key to abut against the end of the bolt-branch, *a²*, to lock it, as will be more fully presently stated. The bolts are connected by a bell-crank lever pivoted to a stud, *f*, in the case, its long or handle end, *g*, extending through a slot, *h*, in the front side of the case, and connected by a notch, *s*, to the bolt *a*, and having its inner or short end connected by a notch, *s²*, to the bolt *b*, by which both bolts can be projected and withdrawn simultaneously. The slot *h* is long enough to allow the bolts to have the proper throw in the movements of the lever. The bolt *a* has a projection, *i*, on the side next the lock-case, and a plate-spring, *n*, is arranged to bear against the side of the bolt to receive the action of its side projection, *i*, in such manner as to hold the bolts within the case when withdrawn, and thus keep them free of the sash and the casing in raising and lowering the windows. The bolt projection *i* rides over the bearing part of the spring, and the pressure of the latter against the bolt holds it firm in being moved in and out, and prevents rattling of the bolt parts. The locking cranked stem *d* is secured in a bearing, *e*, across the bottom of the case, behind the inner end of the bolt *a*, and extends into or through an opening, *m*, in the front side of the case, which opening is made larger than the stem, so that a tubular key, *u*, can be inserted through said opening over the end *d* of the stem to operate it. The bearing and the free ends of the stem are cylindrical, and the crank part *d* is flat, and it can be turned over through half a circle on the inner side of the guide-strip *c* to allow the bolt *a* to be withdrawn within the case; or the crank part can be turned over against the inner end of the bolt to lock the bolts, so that they cannot be withdrawn by the bell-crank lever. The key *u* has a notch, *x*, in the side of its tubular end adapted to fit over the crank part *d* of the stem, and for this purpose a key must be inserted through an opening in the guide-strip *c*, so that the locking-crank part cannot be reached except by a tubular notched key passed through the outer and inner openings through which the stem part *d'* of the crank passes, and then over the flat crank part *d* of the stem.

The key is only used when it is desired to lock and to unlock the bolts. The bolt *a* locks both sashes to the window-casing, and the bolt *b* locks both sashes together. The window-casing and the upper sash have holes corresponding with the respective bolts, and they are so placed that the lower sash may be raised to any desired position and be locked to the casing and the upper sash; or the upper sash may be lowered to any desired point and secured; or the lower sash may be raised and the upper sash lowered, and both locked at any desired point, so that both sashes may be left in open locked position day or night. The sashes may be hung by weights in the usual manner.

I claim—

1. The sash-lock herein described, consisting of the bolt *a*, having the notch *s*, and the side projection, *i*, the bolt *b*, having the notch *s*², the bell-crank lever connecting with the notches of the bolts, and the plate-spring *n*, arranged to bear against the bolt projection,

the several parts constructed and arranged as shown and described.

2. The combination of the bolts *a b*, the bell-crank lever connecting them, as described, and the lock-case with the cranked stem *d*, adapted to be turned by a key over in position to lock the bolts when engaged with the sash and the window-casing, and to release such lock, substantially as described.

3. The turning cranked stem *d*, having the stem part *d'* cylindrical, the lock-case having the opening *m*, and the guide-strip *c*, combined with the bolt *a*, having the divided inner end, the bolt *b*, and the bell-crank lever, substantially as shown and described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM LAWSON McKELVEY.

Witnesses:

T. J. FORDING,
JAMES D. SHIELDS.