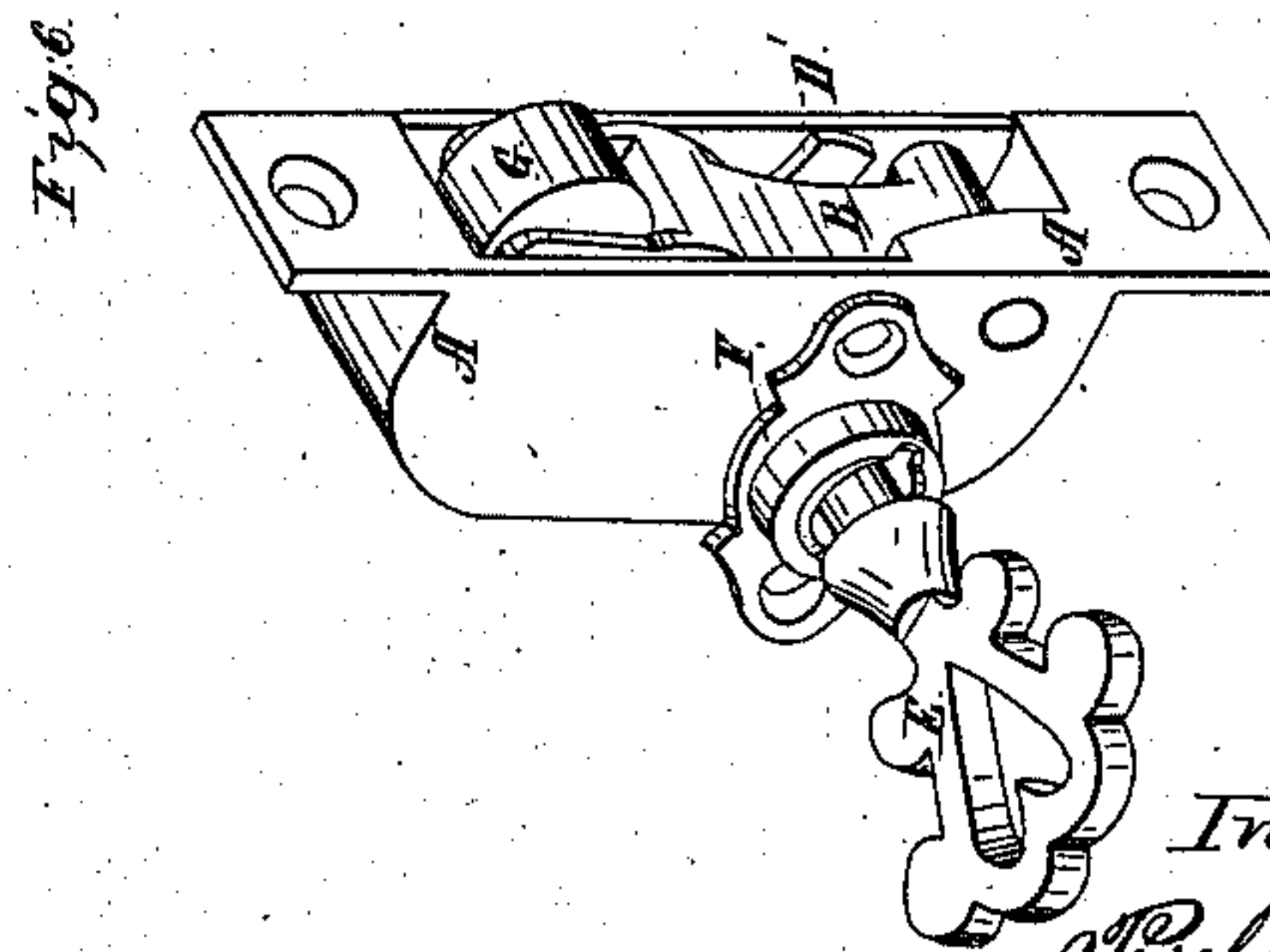
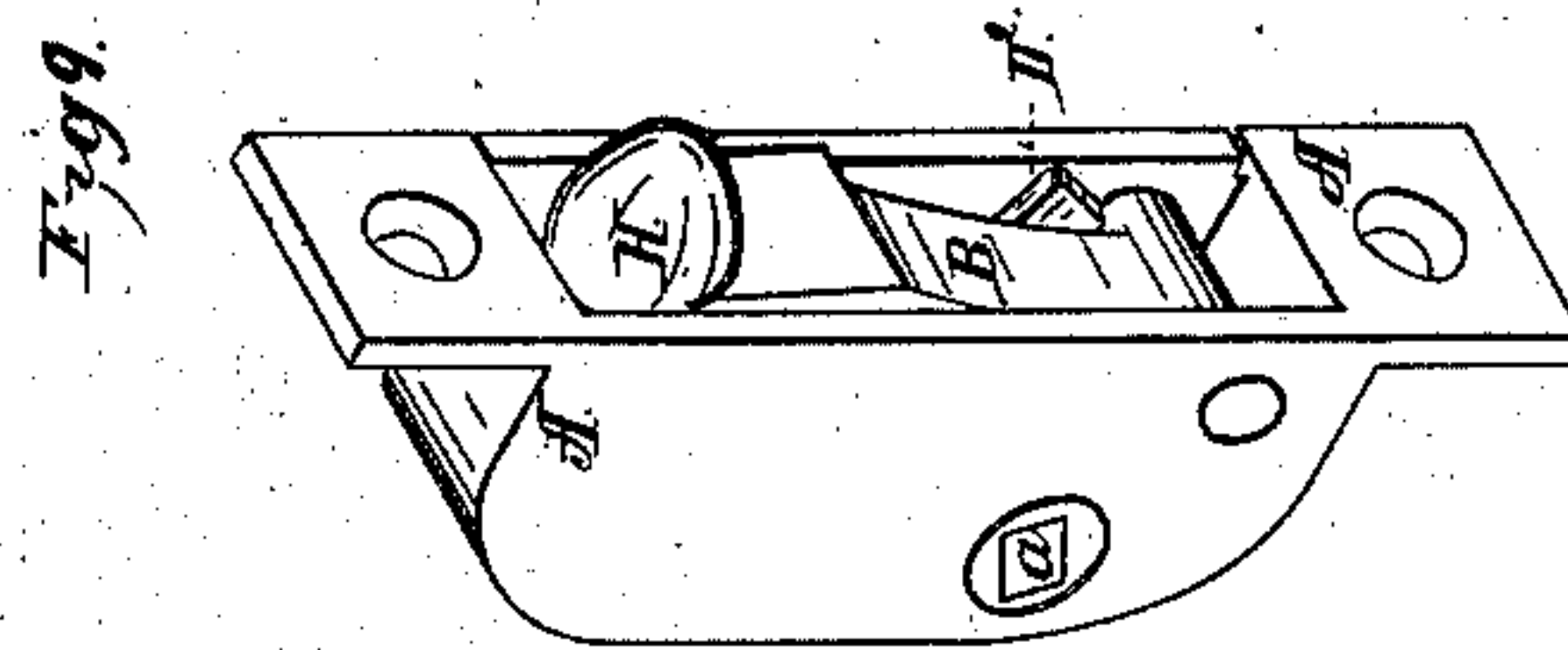
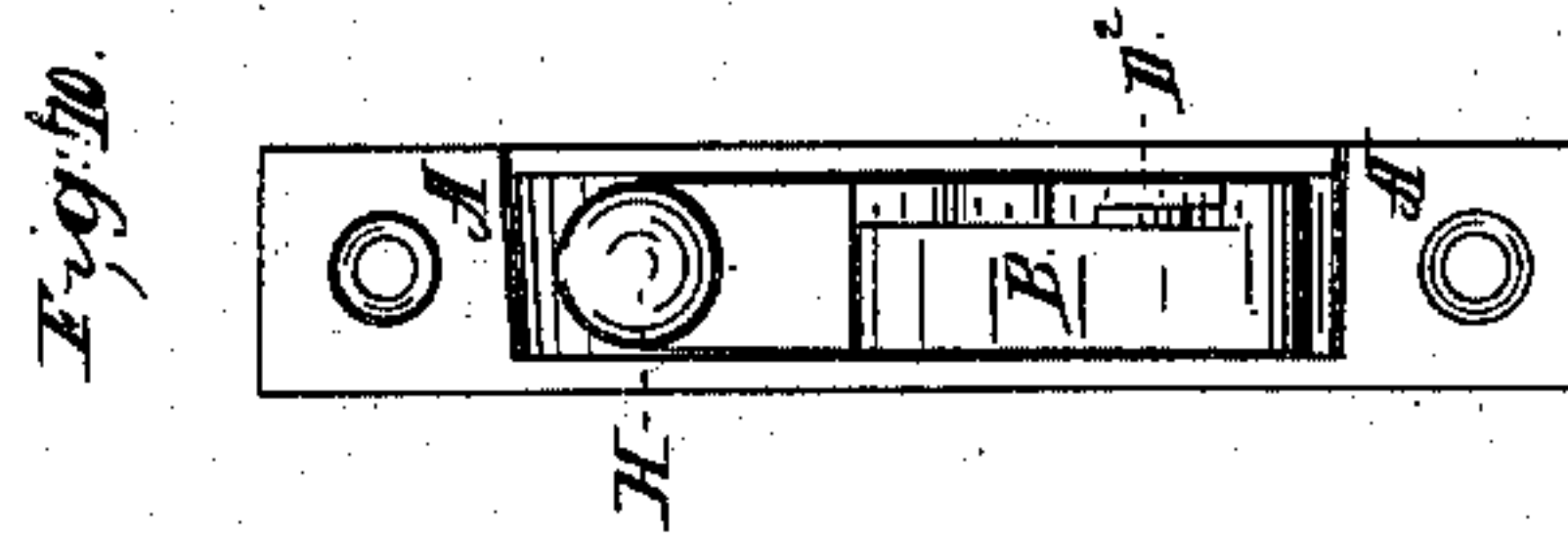
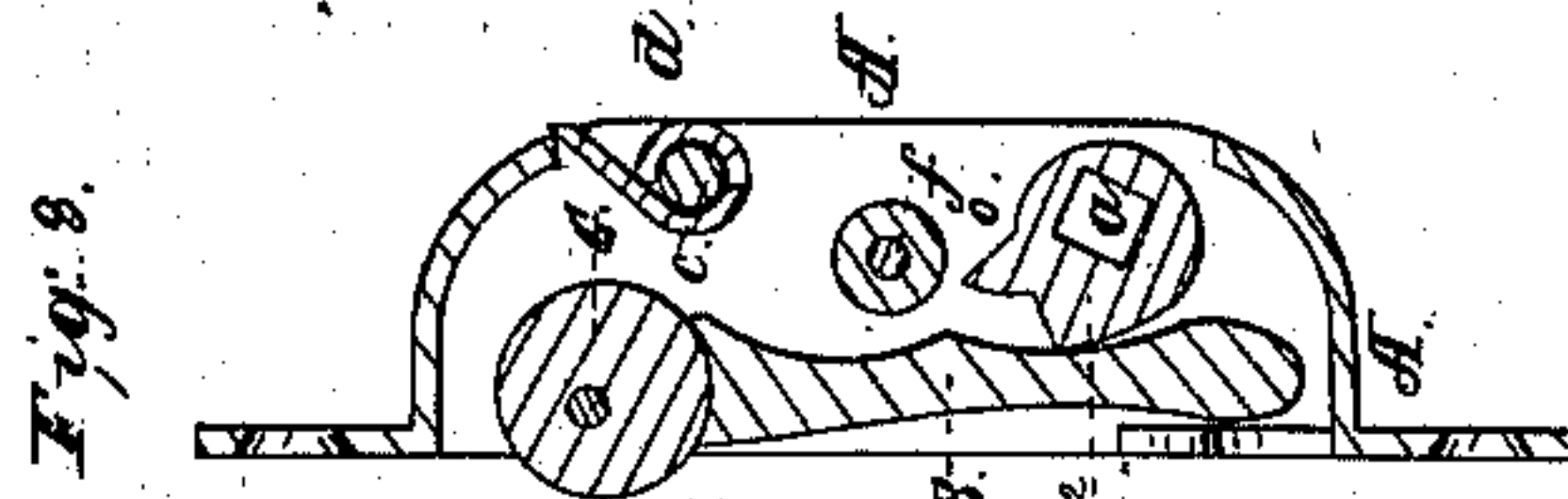
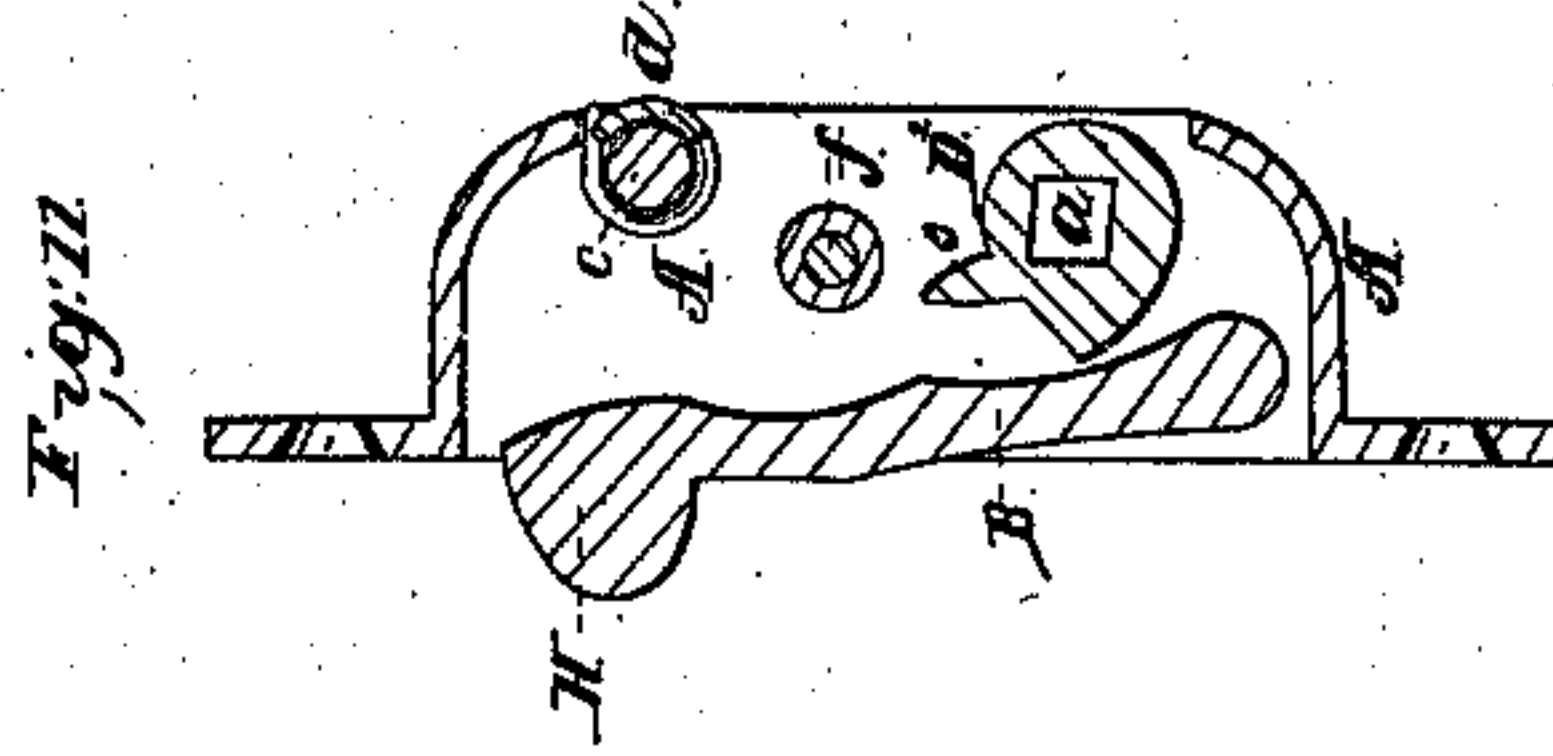
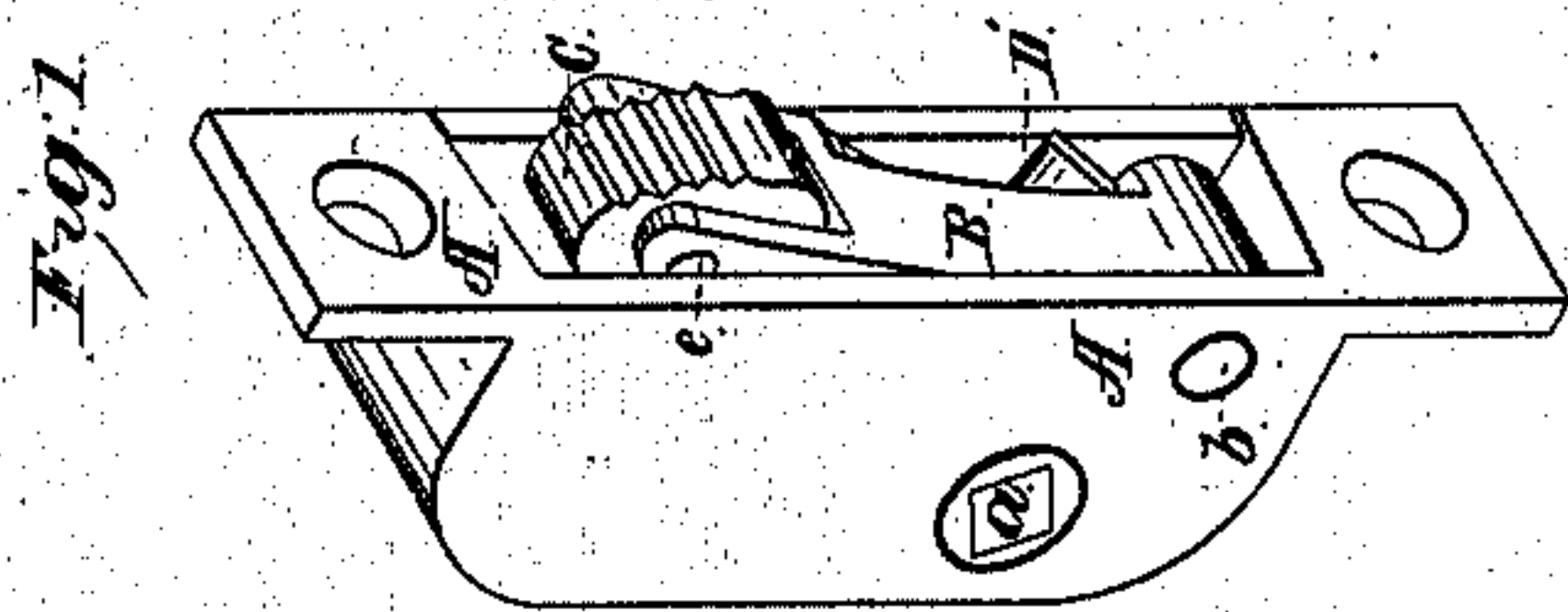
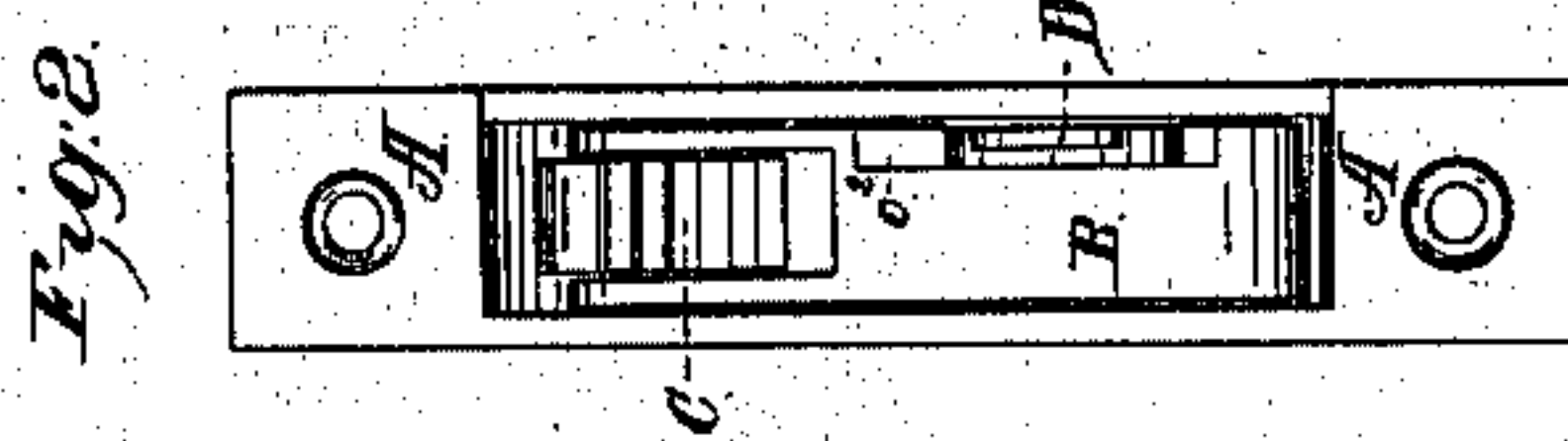
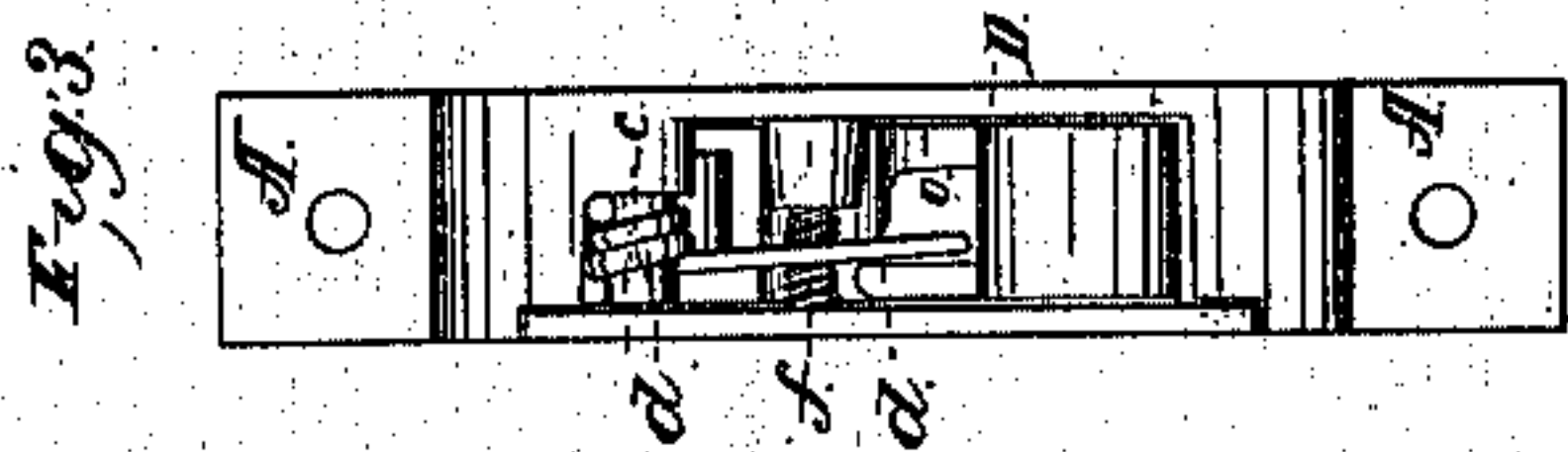
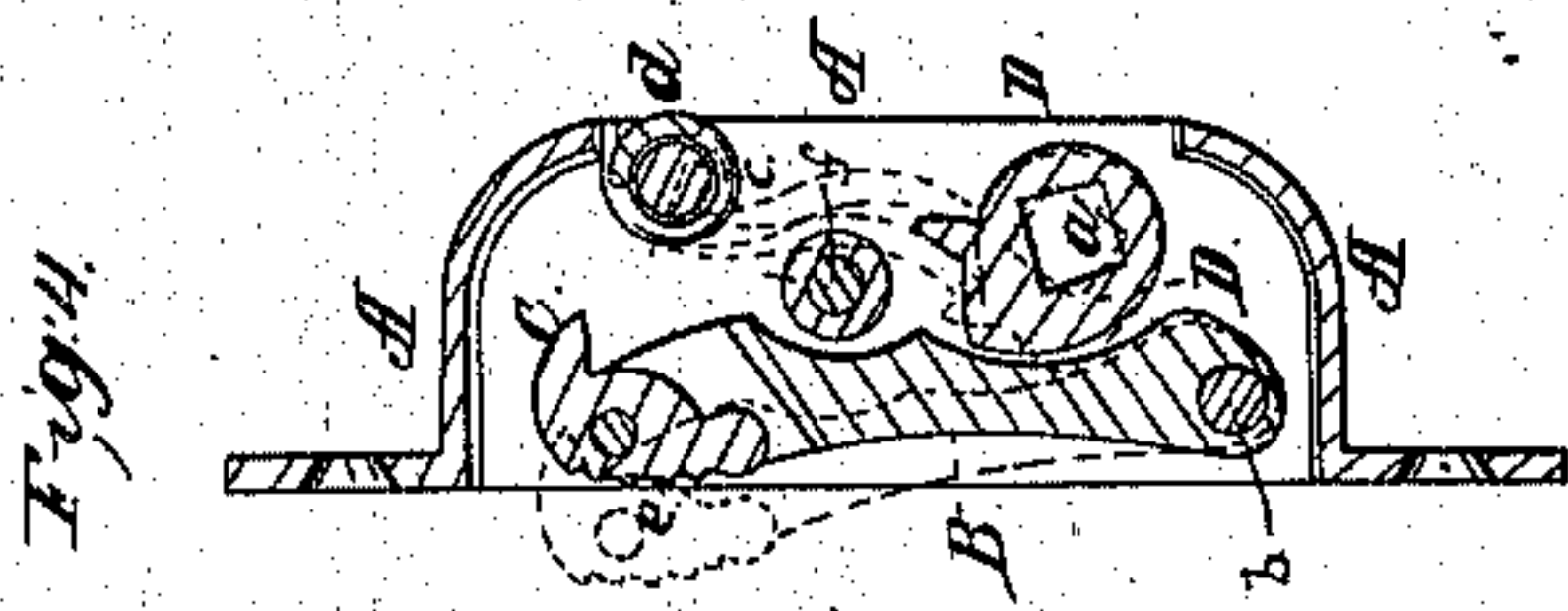
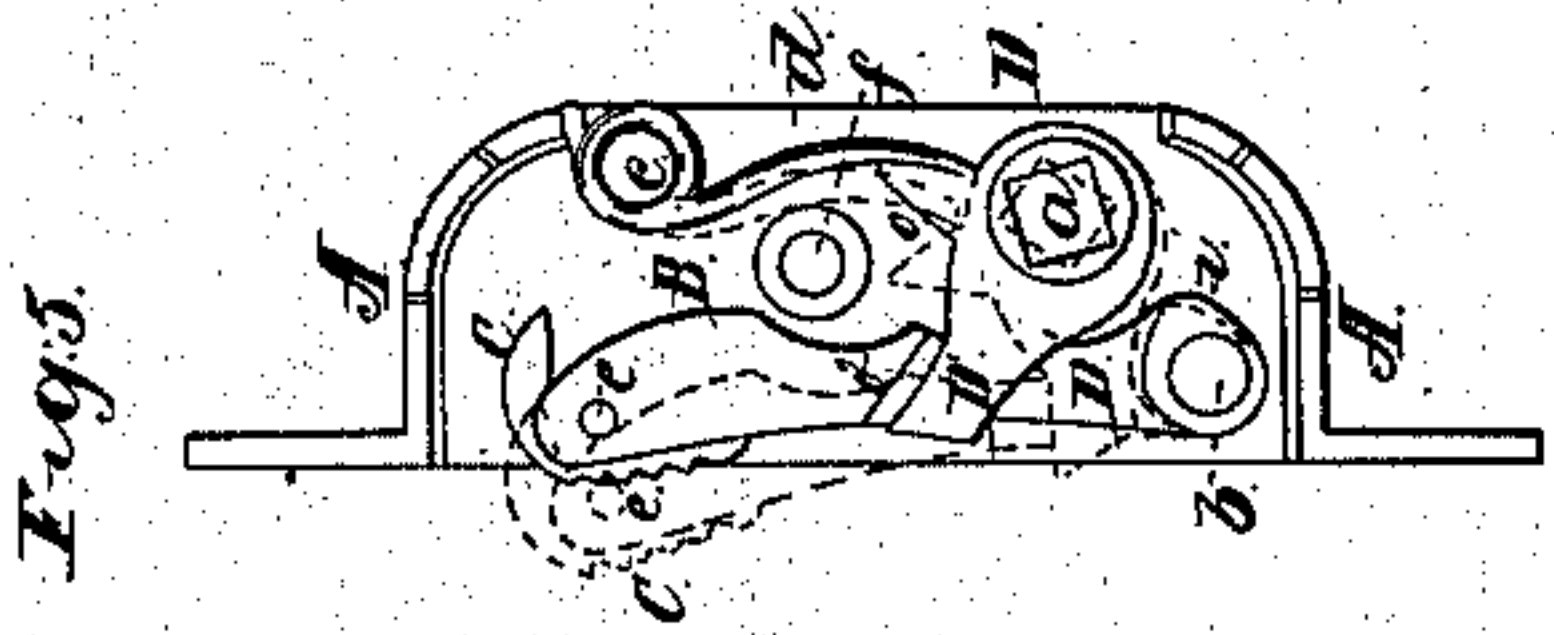


P. MILES.
SASH LOCK.



Witnesses:
L. S. Pease,
Chas. H. Bruce.

Inventor:
Purkes Miles.

UNITED STATES PATENT OFFICE.

PURCHES MILES, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN SASH-LOCKS.

Specification forming part of Letters Patent No. 35,617, dated June 17, 1882.

To all whom it may concern:

Be it known that I, PURCHES MILES, of Hartford, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Sash-Locks; and I do hereby declare that the same is described and represented in the following specification and drawings; and to enable others skilled in the art to make and use the same I will proceed to describe its construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

My invention relates to that kind of apparatus which is designed for the double purpose of holding the sash up at different heights, and also for locking or holding the sash down; and my invention consists in the employment of a swinging or vibrating lever with a suitably-formed projecting end, in combination with a spring cam-piece so arranged as to continually press the moving lever in the direction of and against the surface on which the retaining force is to be exerted, and prevent said lever from backing, as will be hereinafter fully described.

My invention further consists in forming the vibrating lever with an eccentric hub-piece, in combination with a retaining leg or projection on the spring-cam, for the purpose of holding the vibrating lever properly within the case, as will be hereinafter described.

My invention further consists in combining a double cam-dog or eccentric-roll with the vibrating lever, as will be hereinafter described.

To enable those skilled to make and use my invention, I will proceed to describe its construction and operation, referring by letters to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a perspective view of one of my improved apparatuses. Fig. 2 represents a front or face view of same. Fig. 3 represents a back view of same. Fig. 4 represents a vertical section at the line *x x*, Figs. 2 and 3; and Fig. 5 represents a side view with the removable side detached, showing the internal arrangement of parts. Figs. 6, 7, and 8 represent, respectively, perspective front and sectional elevations of another modification of my invention.

In the several figures, A represents the case of the apparatus, which is designed to be let into the frame of the window (after the fashion of putting in a pulley-case) opposite the sliding edge of the sash. In this case A is hung on a pivot, *b*, near its lower end, a vibrating lever, B, which is formed with a projecting and an eccentric hub, *i*, (see Fig. 5,) against which the arm D' of the spring-cam D operates, as will be presently described. The cam-piece D is formed with journals, which take their bearings in the sides of the case A in such manner as to allow said cam-piece D to turn freely on its axis, and through the center of said piece D is formed a square hole at *a*, for the reception of a key, E, (see Fig. 6,) for turning back said cam-piece D, which cam-piece D is operated on by the spring *d*, (fastened at its upper end to the stud *c*, and coming in contact at its lower end with the projection *o*, see Figs. 3 and 5,) which produces in said cam a continual tendency to turn on its axes and press against the rear of the lever B in such manner as to force its front end outward, as illustrated in red lines at Figs. 4 and 5.

One of the sides of the case A is made separately from the rest of the case, and is so formed, as is also the case, that it will lock into said case, so as to be secured in its proper relation to the case by a single screw, *f*. The stud *b* of lever B is cast solid with the lever and takes its bearings in holes formed in the sides of the case A.

In the apparatus illustrated in the first five figures of the drawings, C is a double cam block or dog, which is hung on a pivot, *e*, in the upper end of the lever B. This cam-block C is made smooth on a part of its face.

At Figs. 6, 7, and 8 an eccentric-roll, G, is employed as a substitute for the cam-block C.

The operation of the apparatus constructed on either of these two methods is very similar. After the apparatus has been properly secured in the frame, and it is desired to raise the window, the key E must be turned in such a direction that the arm D' of cam D will come against the shoulder *o* (see Figs. 2 and 5) and throw the arm B within the case A, so that its cam-block C will lie inside of the line of the face of the case, as seen in black lines at

Fig. 4. After the sash has been elevated to the desired height the key E should be released, when the spring *d* will cause the cam D to turn into the position shown in red lines at Fig. 4, which will cause the arm B to be thrown out, as shown in red, until the block C comes against the side or edge of the sash. The tendency of the sash to descend will then cause it to press against the cam-block C (or G) and turn it tightly up against it (the sash) and firmly sustain it. When it is desired to lower the sash, the key E must be again turned and the lever B thrown back into the position shown by black lines at Fig. 4. When the sash is down, the key may be turned in the reverse direction, which will force the cam C (or G) tightly against the sash, so that it cannot be raised.

It will be seen that with an apparatus such as mine the sash may be readily and securely held at any elevation and securely locked down. It will also be seen that by virtue of the swinging lever carrying the retaining-cam, the shrinkage or wobble of the sash in the frame will not affect the perfect operation of the apparatus, since the cam on the vibrating arm or lever B is always forced out against the sash before the clamping action of the retaining-cam commences; and it will also be seen that my improved apparatus, possessing these advantages of ready and successful op-

eration, is exceedingly simple and durable in its method of construction, and capable of being very economically made, and does not require any mutilation of the frame or sash.

Having described the construction and operation of my improved sash retainer and lock, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The swinging lever B, in combination with the cam D, with its arm D' and the spring *d*, or its equivalent, and the key E, the whole constructed and operating as described, for the purpose set forth.

2. Forming on the pivot end of the arm B an eccentric-hub, *i*, in combination with the arm D' of the spring-cam D for retaining the vibrating arm within the case A, as hereinbefore described.

3. The combination of an eccentric clamping-dog or double cam-piece, C, or its equivalent, with the vibrating spring-actuated lever or arm B, substantially as for the purpose set forth.

In testimony whereof I have hereunto set my hand and affixed my seal this 15th day of March, 1862.

PURCHES MILES. [L. S.]

Witnesses:

L. S. PEASE,

CHAS. H. BRISCOE.