

(No Model.)

H. S. OHL, Jr.

SASH FASTENER.

No. 281,291.

Patented July 17, 1883.

Fig. 1.

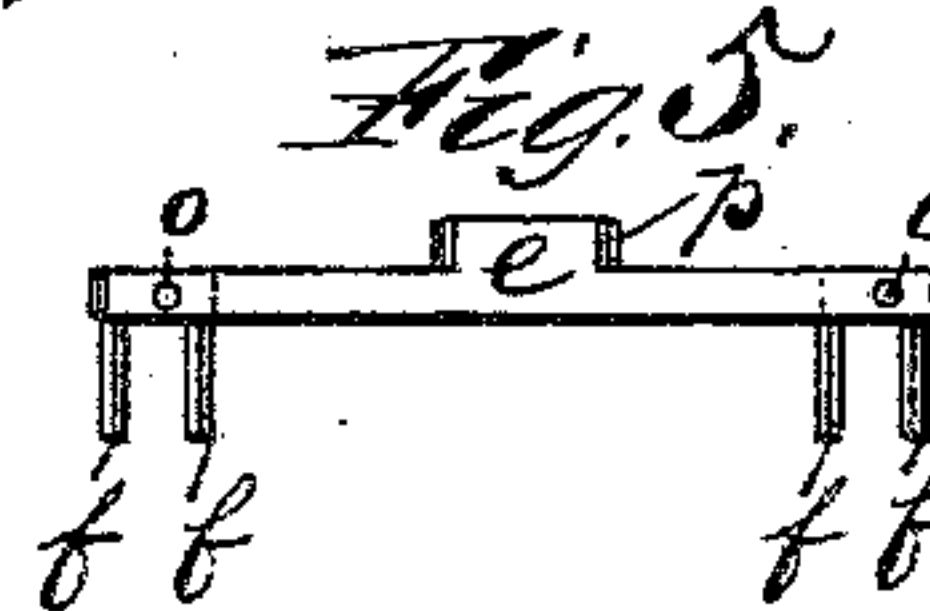
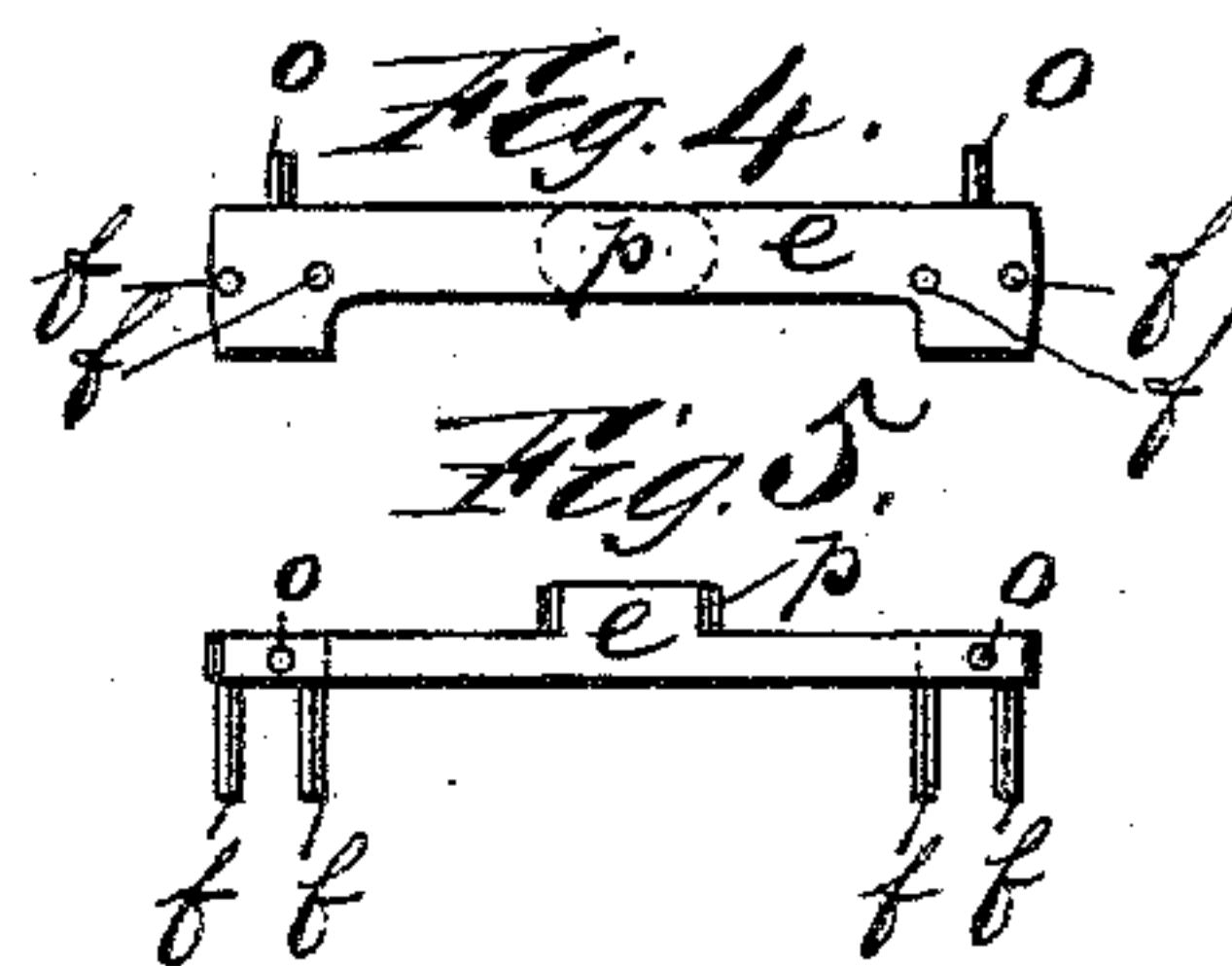
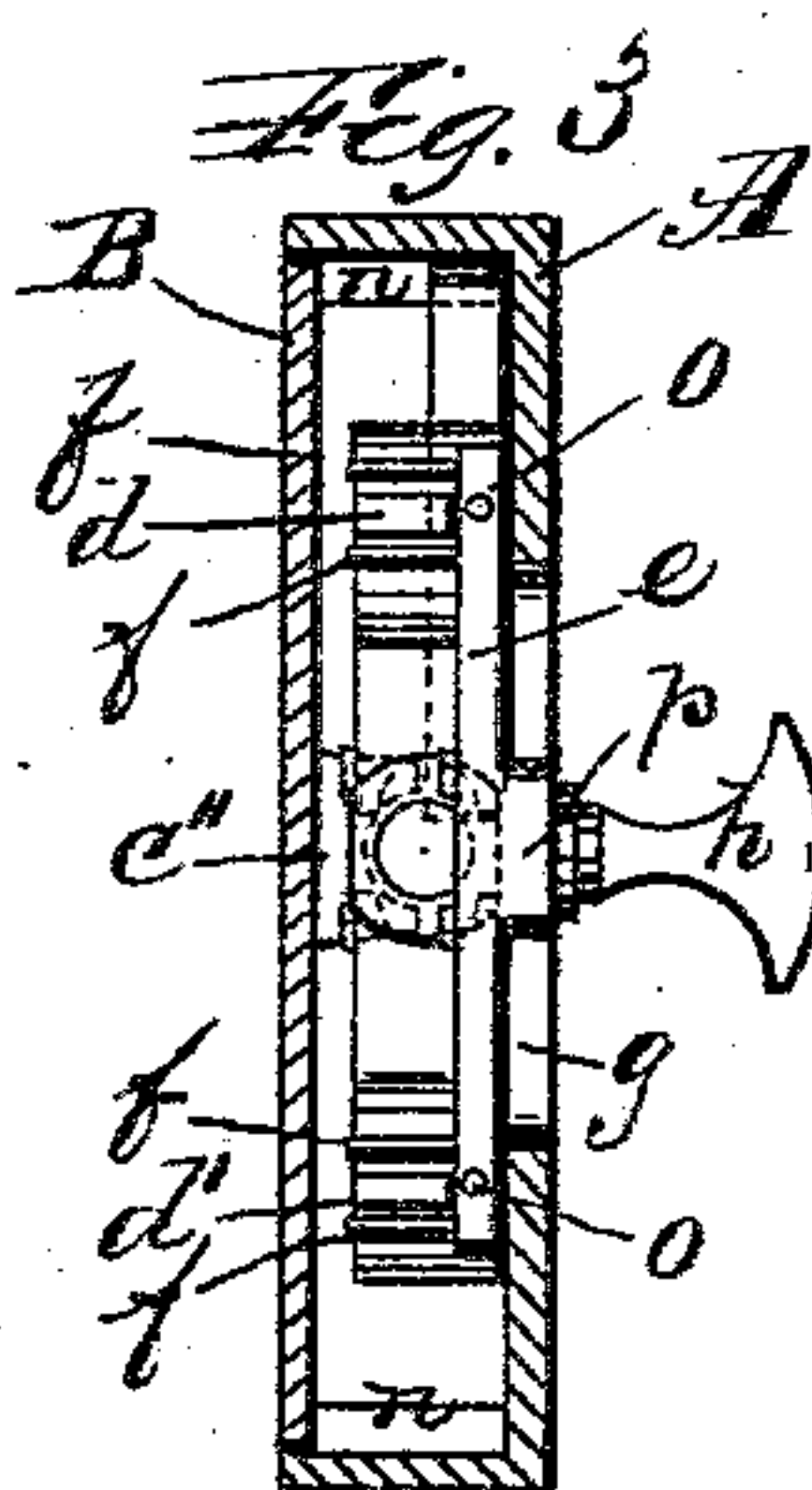
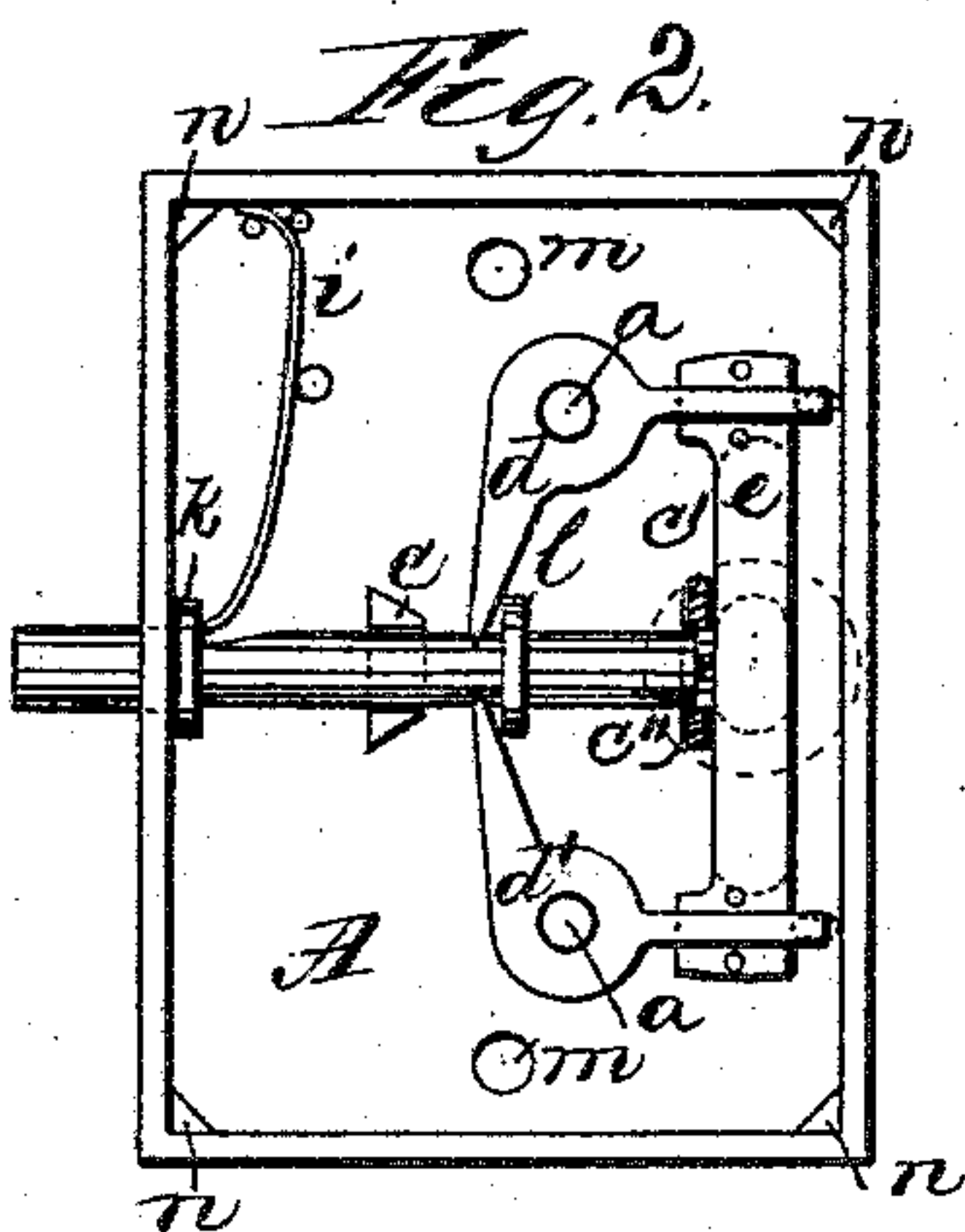
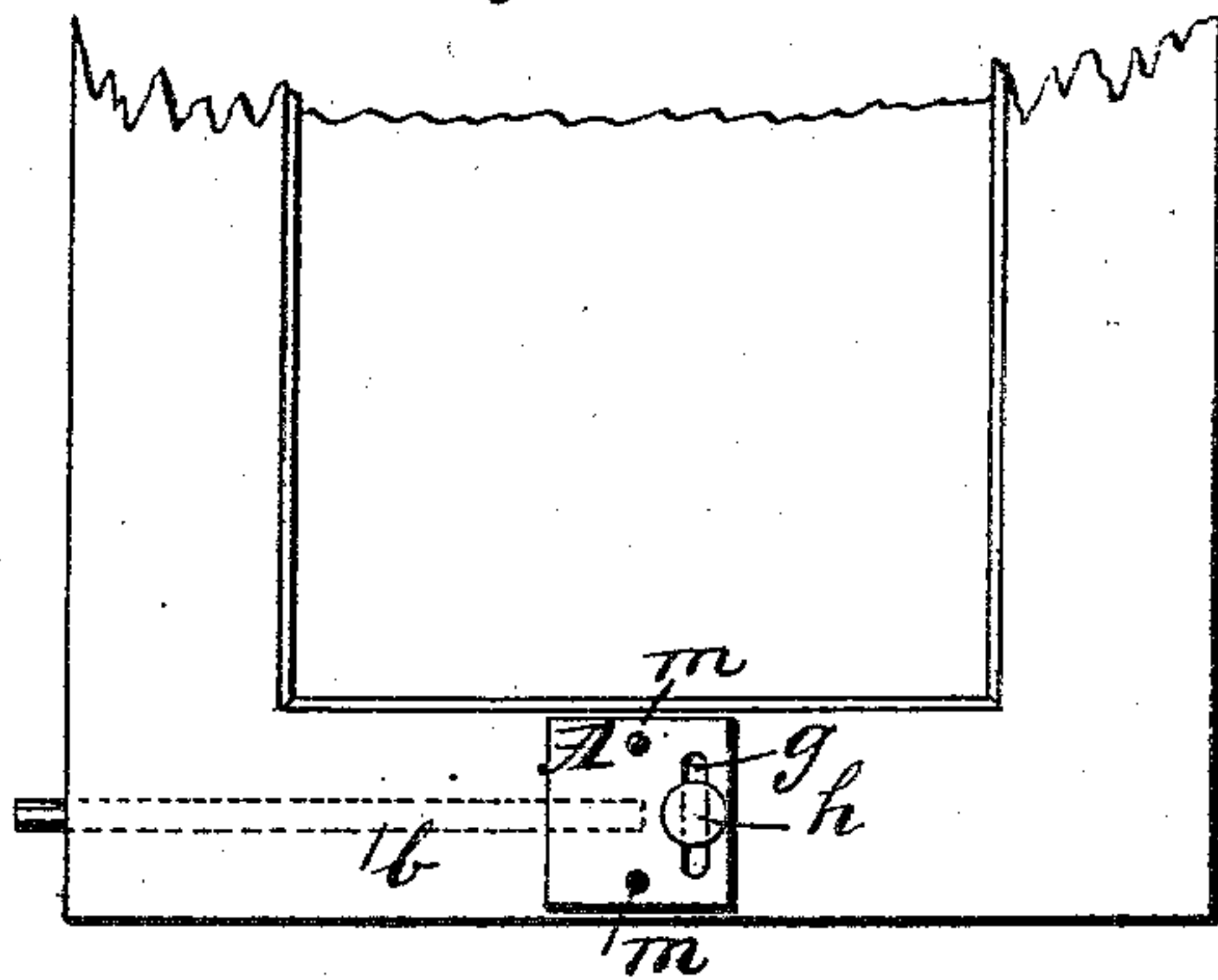
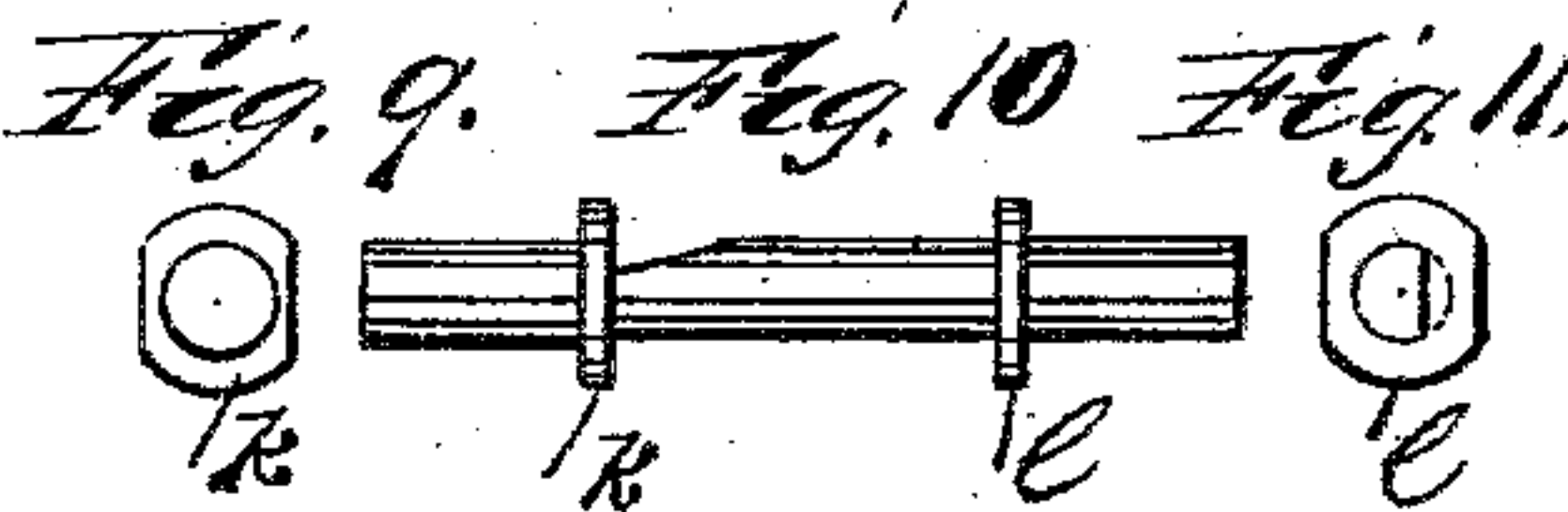
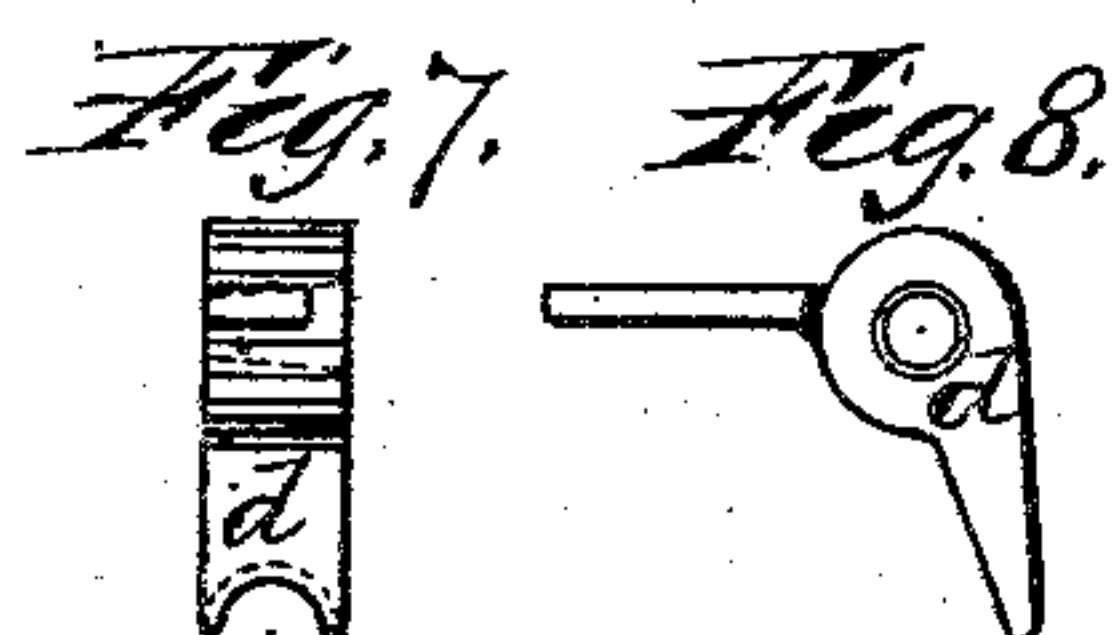
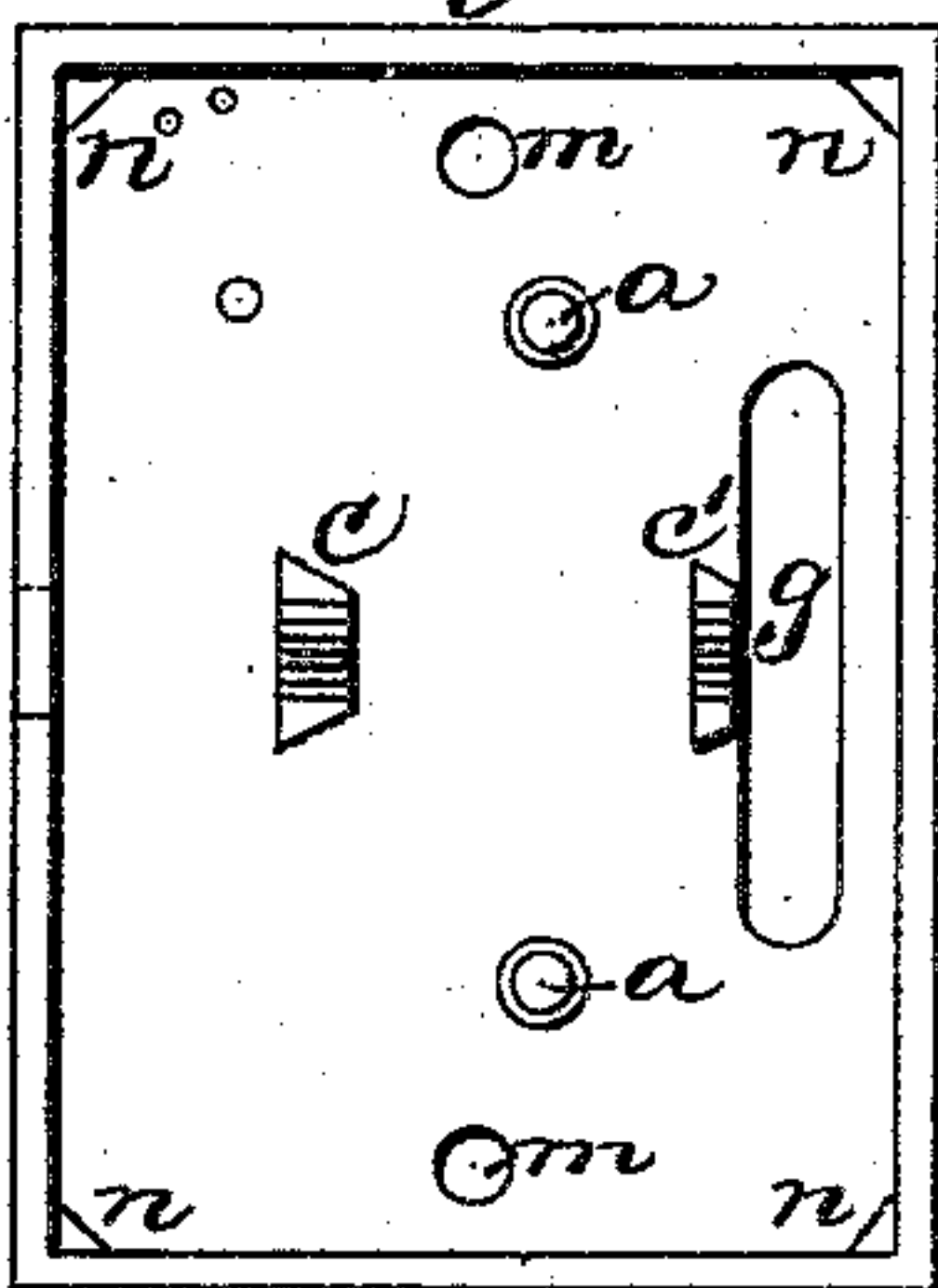


Fig. 6.



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SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 281,291, dated July 17, 1883.

Application filed October 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. OHL, JR., of the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Locks or Latches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, and of its mode or manner of operation, reference being had to the accompanying drawings, making part of this specification.

My invention relates to an improvement in spring-latches adapted to be used for car-windows and kindred purposes; and it consists in such an arrangement of the parts that the bolt will be withdrawn when the knob is lifted up, and also when the knob is pulled down, thus making a latch in which the knob will perform the function of a knob for withdrawing the bolt, and at the same time and by the same motion will lift or lower the sash, as desired.

In the drawings, Figure 1 shows one method of applying my latch to a window-sash. Fig. 2 is a front view of the latch-case open, showing the different parts in position when the latch is out. Fig. 3 is a side view of the latch, showing the outer case cut away in section, and disclosing the interior parts. Fig. 4 is an inside top view of the slide *e*, showing its various parts more clearly. Fig. 5 is a side view of the slide *e*. Fig. 6 is a front view of the latch-case with the inserted parts removed. Fig. 7 is an end view of the dog or pawl *d*. Fig. 8 is a bottom view of the same pawl *d*. Fig. 9 is an end view of the bolt *b* from the projecting end. Fig. 10 is a side view of the bolt *b*, and Fig. 11 is an end view of the bolt *b* from the inclosed end.

Similar letters of reference indicate like parts in all the drawings.

A is the latch-case, provided with suitable bosses, *n*, for the lid B to rest upon.

B is the lid or other part of the case A, and it is pierced with suitable holes for screws to hold it to the case, and also with holes corresponding to the holes *m*, for screws to pass through the case and lid A B to secure the latch-case to sash, when desired.

b is the bolt running in a suitable channel,

made in the example of my invention shown in the drawings by the grooves or studs *c c'*, attached to the case A, and similar studs, *c''*, attached to the inner side of the lid B, and this bolt *b* may have the under side, or part which moves over the slide *e*, somewhat cut away, as indicated in Fig. 11.

a a are pintles on which turn the dogs or pawls *d d'*, which have cut away a portion of that part of the under side of the arm which moves over the slide *e*, as shown in Figs. 7 and 8. The portions of these pawls or dogs which grasp and move the bolt may be cut away concave to secure better engagement, as shown in Fig. 7.

e is a slide having pins *f f* at each end, between which play the engaging ends of the arms of the dogs *d d'*, and provided on its side with the projections *o o*, which are of a suitable size to reach the end of the latch-case, and serve to steady the slide in its movements; and *p* is a lug which fits into the slot *g*, and guides the movement of the slide *e*, and limits the movements upward and downward of the slide.

g is a slot in the side A of the case, in which the lug *p* moves, and into this lug is secured the knob *h*, by means of which the slide *e* and the bolt *b* are actuated.

i is a suitable spring to throw out the bolt *b*, and it is secured in position in any convenient manner.

k is a projection on the bolt *b*, which limits its movement outward, and against this the spring *i* presses, as shown in the drawings.

l is a similar projection for the engaging face of the pawls *d d'* to press against to draw back the bolt when desired. These projections *k l* may be made of suitable size to move easily between the sides A B of the case, as shown in the drawings, and thereby the bolt is steadied in its movements.

The operation is as follows: When it is desired to raise the sash, the knob *h* is lifted, drawing up the slide *e*. This raises the end of the pawl *d* between the pins *f f* and forces the other end of the pawl back and against the projection *l* on the bolt *b*, drawing back the bolt and lifting the sash. Upon letting go the knob the spring *i* throws out the bolt into a suitable recess provided for it on the side of the window-frame. When it is desired to

lower the sash, the knob *h* is pulled down, which draws down the slide *e*. This draws down the end of the pawl *d'* between the pins *f f* on the slide *e* and forces the other end of the pawl
5 back and against the projection *l* on the bolt, drawing back the bolt and lowering the sash.

For fastening the lid *B* to the case, small screws may be introduced through it and into the pintles *a a*, if desired.

10 Instead of having a straight spring to throw out the bolt, a coiled spring may be placed over the bolt *b*, if desired, one end pressing against the projection *k* of the bolt and the other end resting against the stud *c* of the lock-case *A*.

15 When it is desired to raise the sash it will be well to press down upon the sash until the bolt is withdrawn from its recess, so that the pressure upward on the knob *h* will not press the end of the bolt against the upper side of
20 the recess in the window-case with such force that it will be difficult to withdraw it, and so the sash may be pressed upward, until the bolt

is withdrawn, when drawing down the knob *h*, when the sash is to be lowered, for the corresponding reason.

This makes a simple latch that will not get out of order, is much better than the latches heretofore known, and can be very cheaply made.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A latch provided with a bolt, in combination with a suitable mechanism to actuate the same, and a lift, the actuating device arranged
35 to engage with the bolt and withdraw the same when the lift is forced upward to raise the sash, and also to engage with and withdraw the bolt when the lift is forced downward to lower the sash, substantially as described.

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