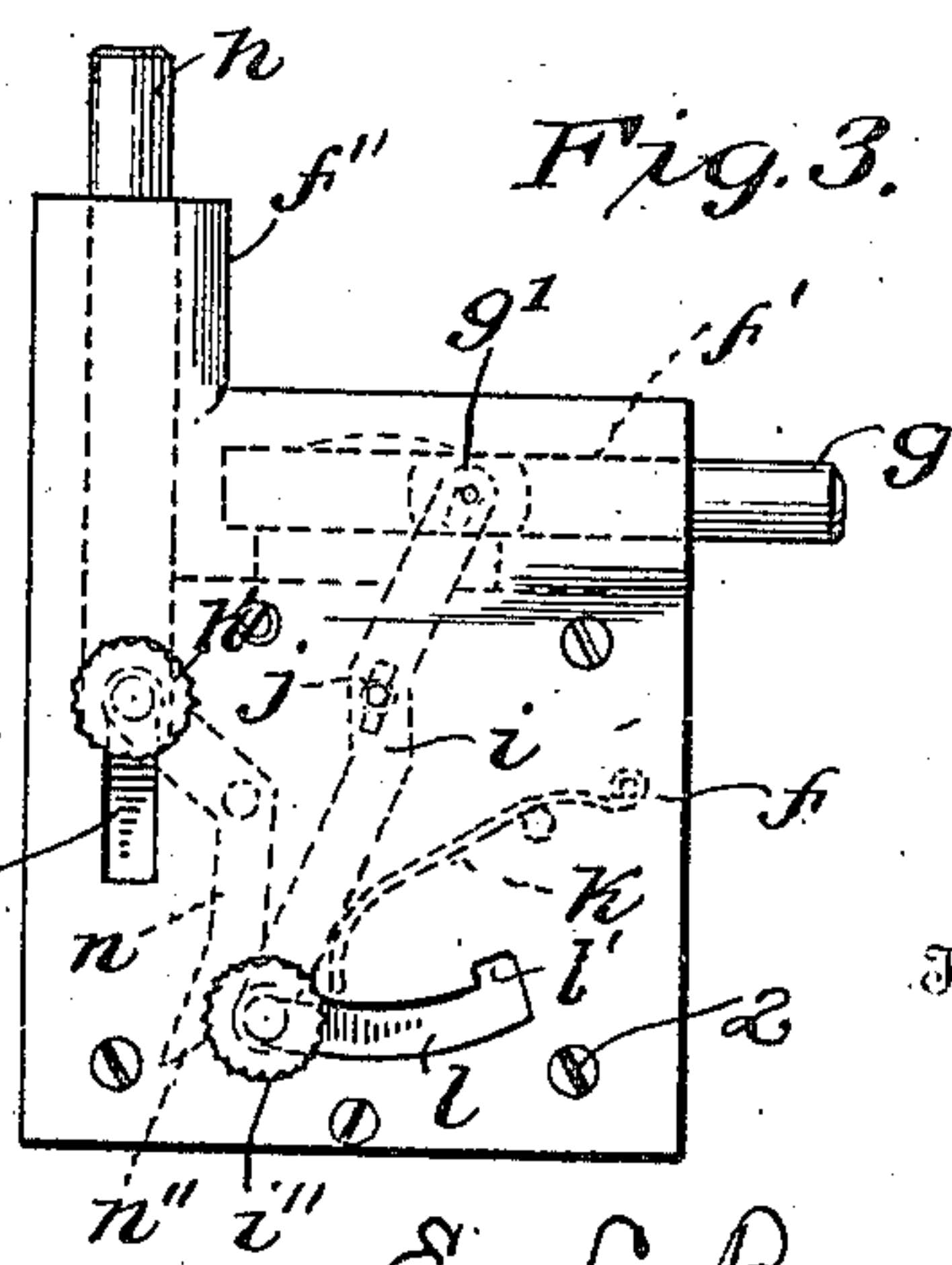
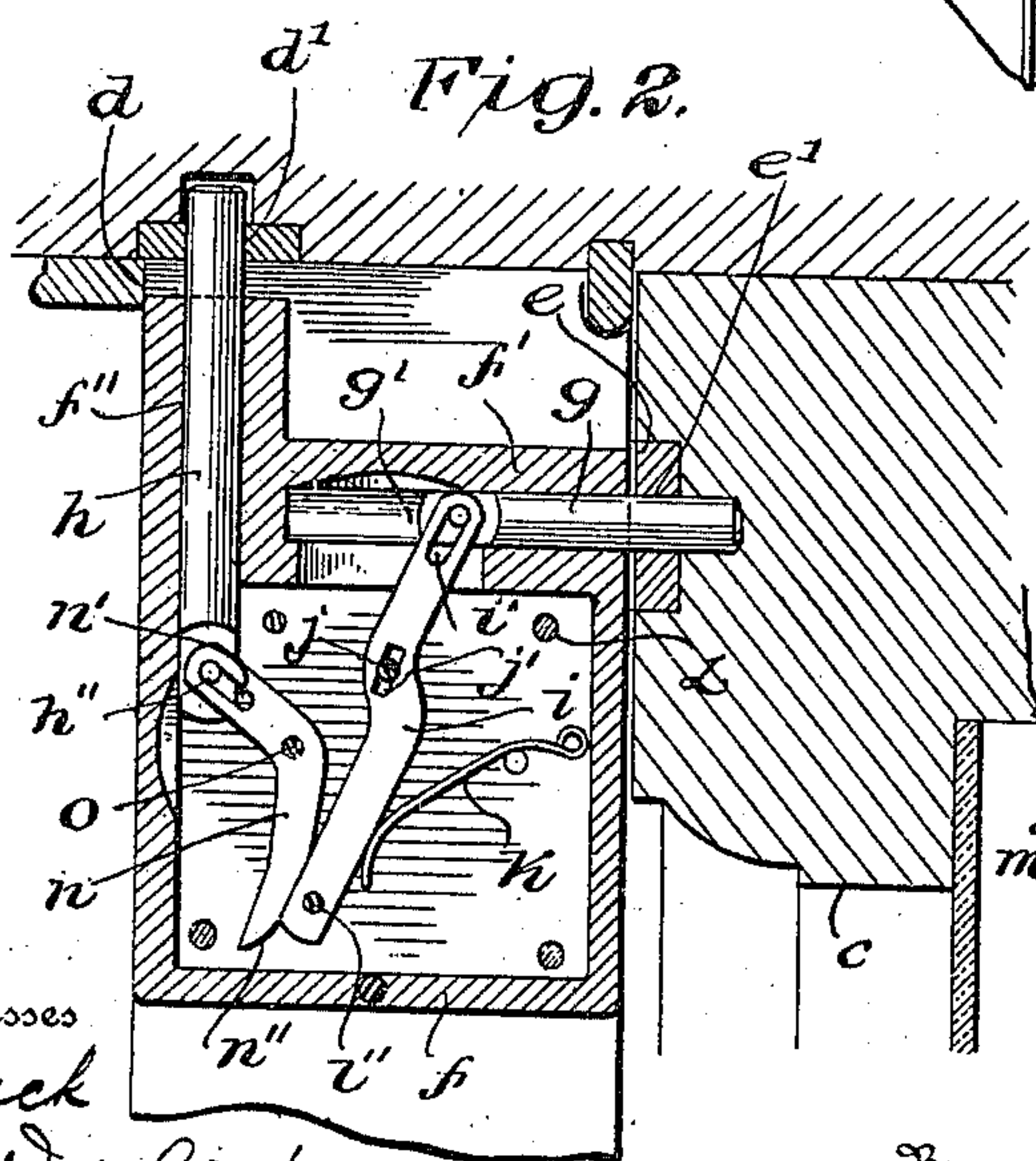
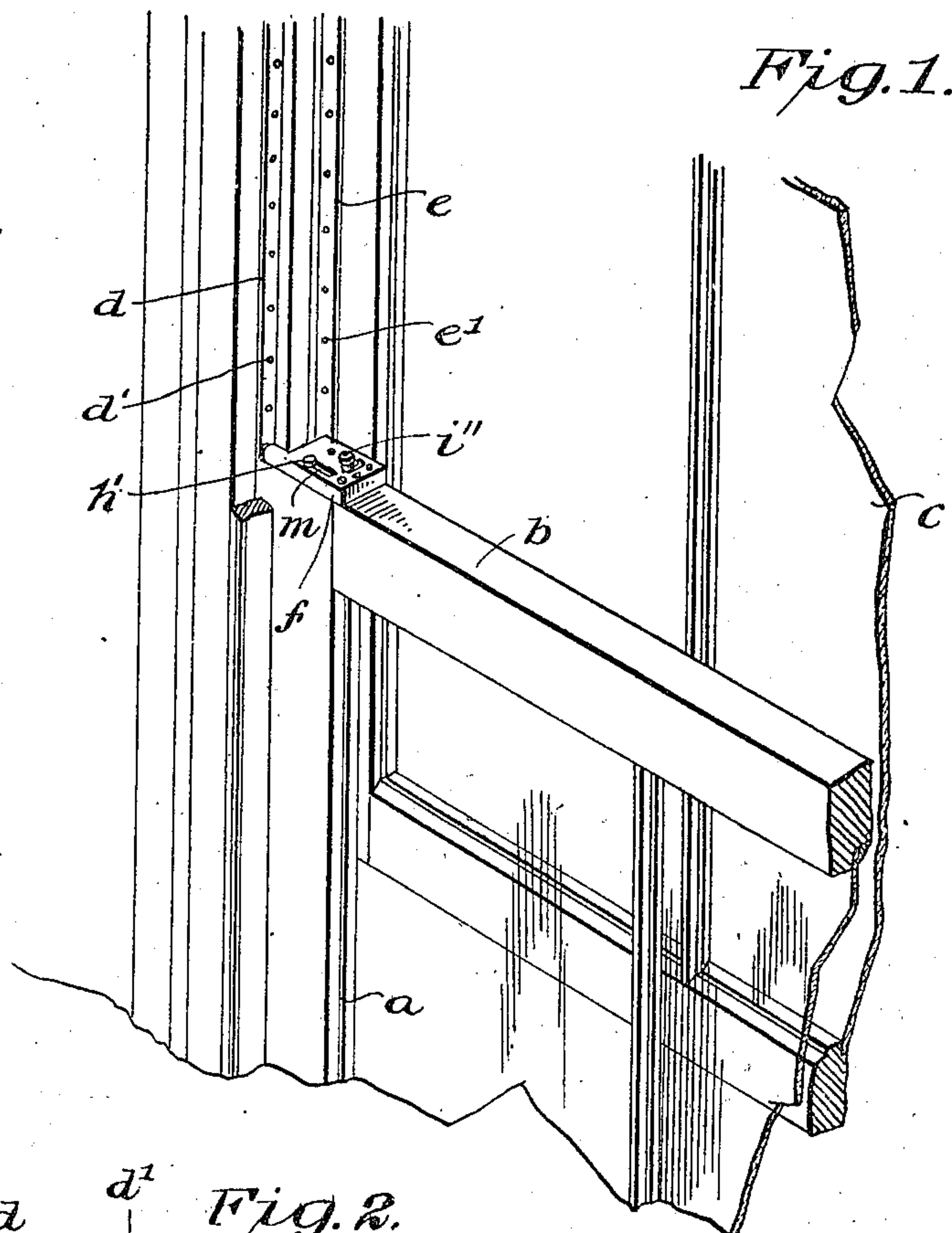


948,918.

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SASH FASTENER.  
APPLICATION FILED JUNE 3, 1909.

Patented Feb. 8, 1910.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## SASH-FASTENER.

948,918.

Specification of Letters Patent.

Patented Feb. 8, 1910.

Application filed June 3, 1909. Serial No. 499,881.

*To all whom it may concern:*

Be it known that I, EMMA L. BRENNER, a citizen of the United States, residing at Milwaukee, Milwaukee county, Wisconsin, have invented certain new and useful Improvements in Sash-Fasteners; and I do hereby declare the following to be a full, clear and exact description of the invention, such as it appertains to make and use the same.

This invention relates to certain improvements in sash fasteners, and more particularly relates to combined window and sash fasteners; and the objects and nature of my invention will be readily understood by those skilled in the art in the light of the following description of the accompanying drawings illustrating what I now consider my improved embodiment from among other formations and arrangements within the spirit and scope of my invention.

An object of the invention is to provide an improved lock adapted to fasten together both the lower and upper sashes of a window against vertical movement and whereby the lower sash can be held locked against raising while the upper sash can be released for vertical movement, and whereby the sashes can be locked together in various vertical positions with either or both sashes partially opened.

A further object of the invention is to provide certain improvements in formation, arrangement and combinations of parts whereby a highly efficient and advantageous sash and window lock will be produced.

The invention consists in certain novel features in construction, arrangements and combinations of parts as more fully and particularly set forth hereinafter.

Referring to the accompanying drawings:—Figure 1, is a perspective view of the meeting portions of the upper and lower sashes of a window and the adjacent frame, showing a lock of my invention applied thereto. Fig. 2, is a horizontal sectional view. Fig. 3, is a detail top plan of the lock, dotted lines indicating hidden parts.

In the drawings, *a*, is the lower sash of a window having the top rail *b*, and *c*, is the upper sash of the window; *d*, is an elongated metal plate arranged vertically of and secured to the window frame adjacent to the lower sash so that said sash will move longitudinally of said plate when being raised.

This plate is formed with a vertical series of spaced openings or sockets *d'*.

*e*, is an elongated metal plate arranged vertically and secured to a vertical rail of the upper sash *c*, and formed or provided with a vertical series of spaced openings or sockets *e'*.

The lock mechanism of my invention is adapted to be fixed on the top rail of the lower sash adjacent to the vertical plates *d*, *e*, and is provided with bolts to enter the sockets or openings of said plates, respectively, to lock the lower sash to the frame and the upper sash to the lower sash. The lock mechanism comprises a suitable strong metal casing *f*, usually flat and of any suitable shape or form and adapted to fit horizontally on the top face of the lower sash top-rail and be rigidly secured thereto by screws 2, or the like. The casing is formed usually near one end with a transverse bolt slide or guide-way *f'*, opening through to the edge thereof adjacent the upper sash to receive bolt *g*, for locking the upper sash to the lower sash. At the outer corner of the inner end of said casing, that is, at the same end as guide-way *f'*, the casing is provided with a longitudinally arranged slide or guide way *f''* projecting longitudinally beyond the casing end and open at its outer end to receive the longitudinally movable bolt *h*, for locking the lower sash to the window frame. The bolt slide-ways *f'*, *f''*, at their inner portions open into the interior of the casing, and said slideways are usually arranged at the same end of the casing and about at right angles to each other. A lever *i*, is arranged longitudinally of and within the casing and about midway its length is fulcrumed thereon a vertical pin or axis *j*. At one end this lever extends transversely of the inner end of the bolt *g*, and is coupled thereto to project and withdraw the same through the medium of pin *g'*, rigid with the bolt end and confined in slot *i'*, formed longitudinally in the lever end. A plate or other suitable spring *k* is arranged and secured in the casing with its free end bearing against the free end of lever *i*, and constantly exerting its tension to swing said lever in a direction to hold the bolt *g* projected. The free end of lever *i* is preferably provided with an operating finger-piece, knob or handle *i''*, arranged at the exterior of the casing top-plate with its



shank or post secured to the lever end and passing vertically through curved or segmental slot  $l$ , in the casing cover or top-plate, whereby the bolt  $g$ , can be operated from the exterior of the casing by moving the knob  $i''$ , longitudinally of the slot  $l$ , and the bolt can be held withdrawn against the tension of spring  $k$ , by pressing the shank of knob  $i''$  into the offset or recess  $l'$  at the inner or right hand end of slot  $l$ , and on moving or springing the knob shank from said recess, the spring  $k$ , will return the bolt to projected or locking position. The bolt  $h$ , can be operated from the exterior of the casing through the medium of finger piece, knob or handle  $h'$ , at the exterior of the casing and secured to the inner end of said bolt by a vertical pin or shank  $h''$ , passing through elongated slot  $m$ , in and longitudinally of the casing top-plate. The pivot  $j$ , can pass through longitudinal slot  $j'$ , in lever  $i$ , to permit longitudinal movement of the lever to carry the shank  $i''$ , into or from the locking notch or offset  $l'$ , as will be understood by those skilled in the art.

I provide means whereby the bolts  $h$ ,  $g$ , can be operatively connected to operate in unison, that is, whereby the bolts can be withdrawn or can be projected simultaneously, and in the particular example illustrated, such means is arranged to operate the bolt  $g$ , to perform its withdrawing stroke by or from the bolt  $h$ , when moved on its withdrawing stroke, and to actuate the bolt  $h$  on its projecting stroke by the movement of the lever  $i$ , when projecting the bolt  $g$ . In the example shown, a horizontally swingable lever  $n$ , is arranged within the casing, and mounted to swing on vertical pin or fulcrum  $o$ , to form the operative connection between bolt  $h$ , and lever  $i$ . One end of the lever  $n$ , is connected to the inner end of the bolt  $h$ , by the knob shank  $h''$ , passing loosely through elongated slot  $n'$ , in said lever end, so that the lever will swing as the bolt  $h$ , reciprocates. The lever  $n$  is of angular or approximate bell-crank formation with its fulcrum  $o$ , arranged at the apex of the angle and its outer arm extending outwardly and laterally at an inclination from the fulcrum to the bolt  $h$ , while the inner or free end of the lever extends inwardly beside or longitudinally of the free end of lever  $i$ , and is formed with a longitudinally curved cam or bearing face  $n''$ , against which the free end of the lever  $i$  is yieldingly held by spring  $k$ , in a direction to project bolt  $g$  and to rock the angle lever  $n$ , to project the bolt  $h$ . When the bolt  $h$  is withdrawn by its knob  $h'$ , the slotted end of lever  $n$  is swung inwardly or to the right and the bearing-surface end of said lever is swung laterally against lever  $i$ , and lever  $i$  is thereby swung against the tension of the spring and in a direction to withdraw bolt  $g$ , and the bolts  $h$ ,  $g$ , will

thus be simultaneously withdrawn from the plates  $d$ ,  $e$ , and both window sashes will be released for raising or lowering. When the operating knob or handle of bolt  $h$ , is moved in the opposite direction so as to release the parts, the spring  $k$  will propel the lever  $i$  in bolt-projecting direction and through the medium of lever  $i$  will simultaneously project lever  $n$ , in bolt projecting direction. The bolt  $h$ , enters the holes or sockets of plate  $d$ , to lock the lower sash to the frame, and the bolt  $g$ , enters the holes of plate  $e$ , to lock the upper sash against movement, but bolt  $e$ , can be withdrawn in the manner hereinbefore described, independently of bolt  $h$ , to release the upper sash for vertical movement while the lower sash remains locked to the frame.

It is evident that various changes and modifications might be resorted to in the forms, constructions, and arrangements of the parts described without departing from the spirit and scope of my invention, hence I do not wish to limit myself to the exact constructions disclosed.

What I claim is:—

1. In a window and sash lock, in combination, two bolts movable in lines substantially at right angles, a spring-actuated lever coupled to and for actuating one bolt, and another lever coupled to the other bolt and separate from and abutting against said spring actuated lever to form an operative connection between said other bolt and said spring-actuated lever for causing simultaneous projection of said two bolts, said spring actuated lever being operative to retract its bolt independently of said other bolt.

2. In combination, in a sash fastener, two reciprocatory bolts movable in intersecting planes, a pair of coöperating bolt-operating levers operatively connected to said bolts, respectively, and forming an operative connection between said bolts for simultaneously projecting the same, one of said levers being movable independently of the other lever in a direction to retract its bolt independently of the other bolt, substantially as described.

3. In a lock mechanism, in combination, a casing having bolt guideways angularly arranged with respect to each other, separate reciprocatory bolts arranged in said guideways, respectively, a swinging lever for reciprocating one of said bolts, a spring acting on said lever to move the same and said bolt in one direction, an exterior handle for operating said lever, a lever coupled to the other bolt, and operatively engaging said first mentioned lever, and an exterior handle for reciprocating said last mentioned bolt.

4. In a lock mechanism, in combination, a casing, a sash-engaging bolt carried there-



by, an actuating lever pivotally joined thereto, a frame-engaging bolt carried by said casing, a lever pivotally coupled to said last-mentioned bolt and at one end disconnected from but normally operatively bearing against said first-mentioned lever, a spring constantly tending to project said two bolts and to hold said levers in operative engagement, an exterior handle whereby said actuating lever can be moved to withdraw its bolt independently of the other lever and bolt, and another exterior handle whereby said window-frame and sash-engaging bolts can be simultaneously withdrawn against the tension of said spring and through the medium of said engaging levers.

5. In combination, a casing, two reciprocating bolts therein movable in different directions, a lever fulcrumed between its ends in said casing and at one end pivotally joined to one bolt and at its opposite end having an exterior operating handle, a spring acting on said lever in one direction, another lever fulcrumed between its ends in said casing and at one end pivotally joined to the other bolt and at its opposite end having a bearing face to operatively engage the handle end of the other lever to swing the same, and an exterior handle for with-

drawing said last-mentioned bolt and swinging its lever to operatively engage the first mentioned lever and swing the same to simultaneously withdraw its bolt.

6. In combination, a casing, two reciprocating bolts therein movable in different directions, said casing having slots in its top, an angle lever in said casing at one end pivotally joined to one bolt and at its opposite end having a bearing face, said bolt having an exterior operating handle extending through one of said slots, another lever in said casing pivotally joined to the other bolt to actuate the same and normally operatively engaging said bearing face of the angle lever and mounted to operatively swing independently of said angle lever and provided with an operating handle extending to the exterior of the casing through another of said slots, and a spring acting to normally hold said levers in engagement and said bolts projected.

In testimony whereof I affix my signature, in presence of two witnesses.

EMMA L. BRENNER.

Witnesses:

ANNA WOHLERS,  
GEO. P. BRENNER.