

(No Model.)

J. W. KOHN.
SHUTTER FASTENING.

No. 360,964.

Patented Apr. 12, 1887.

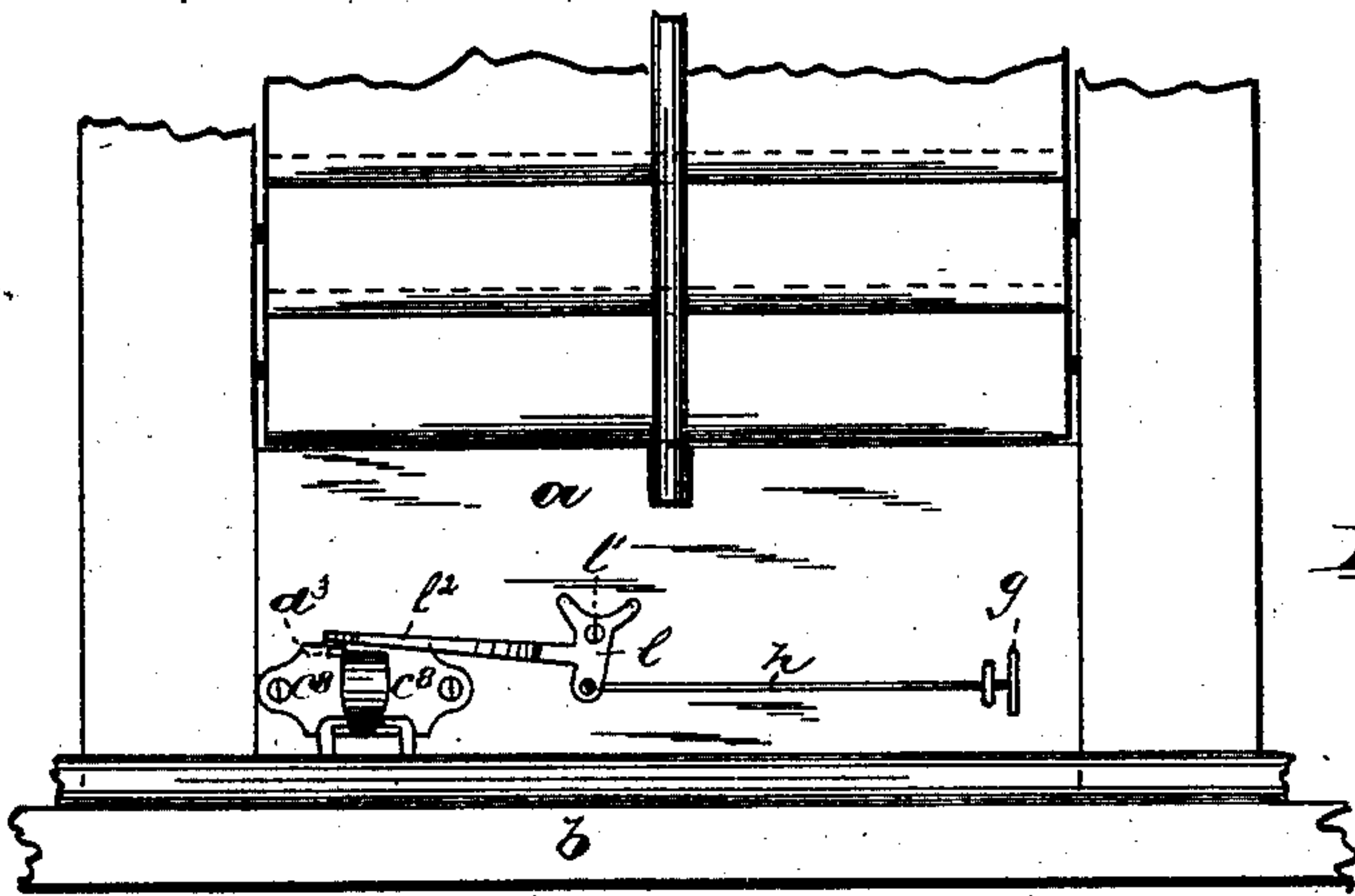


Fig. 1.

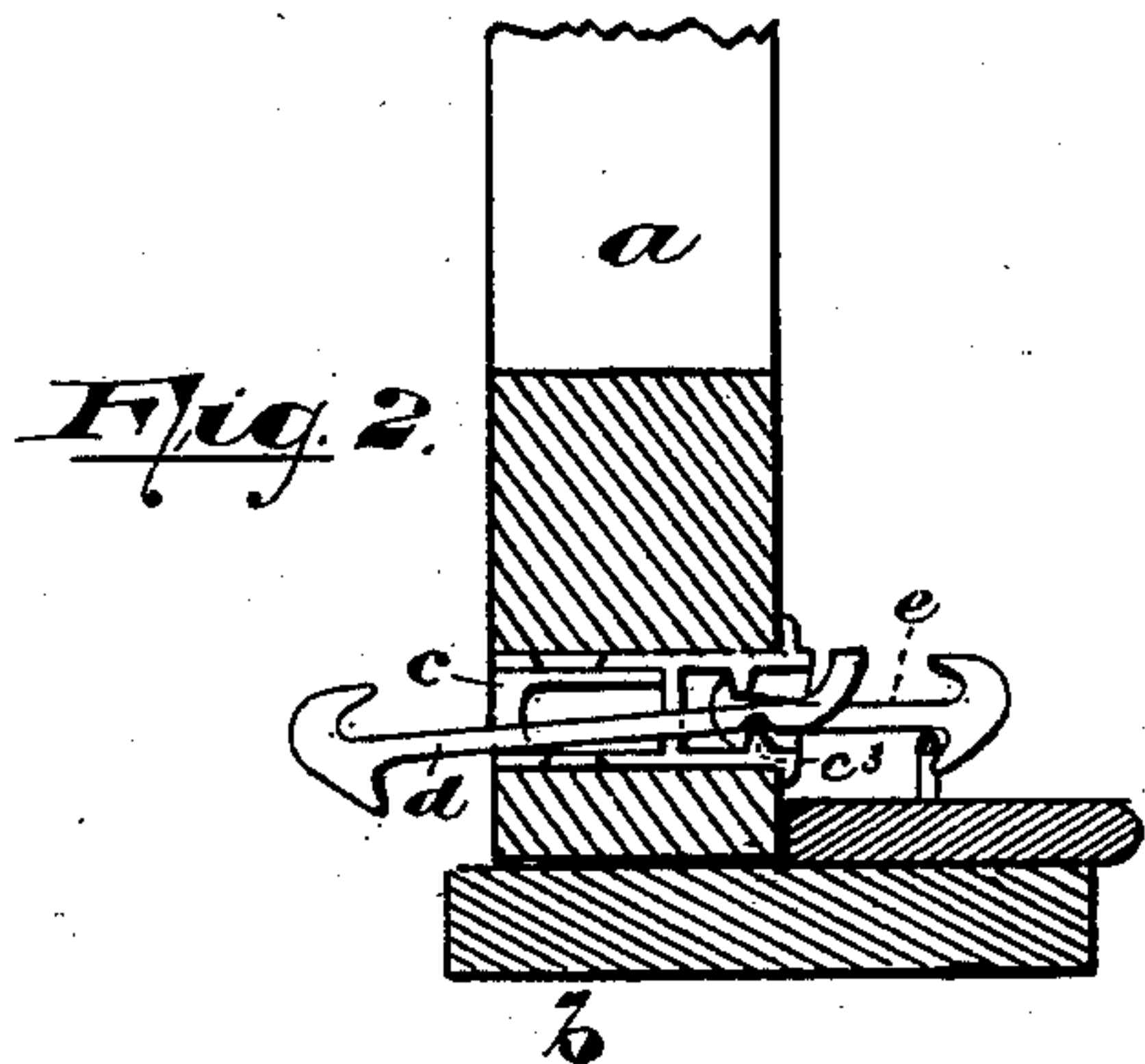


Fig. 2.

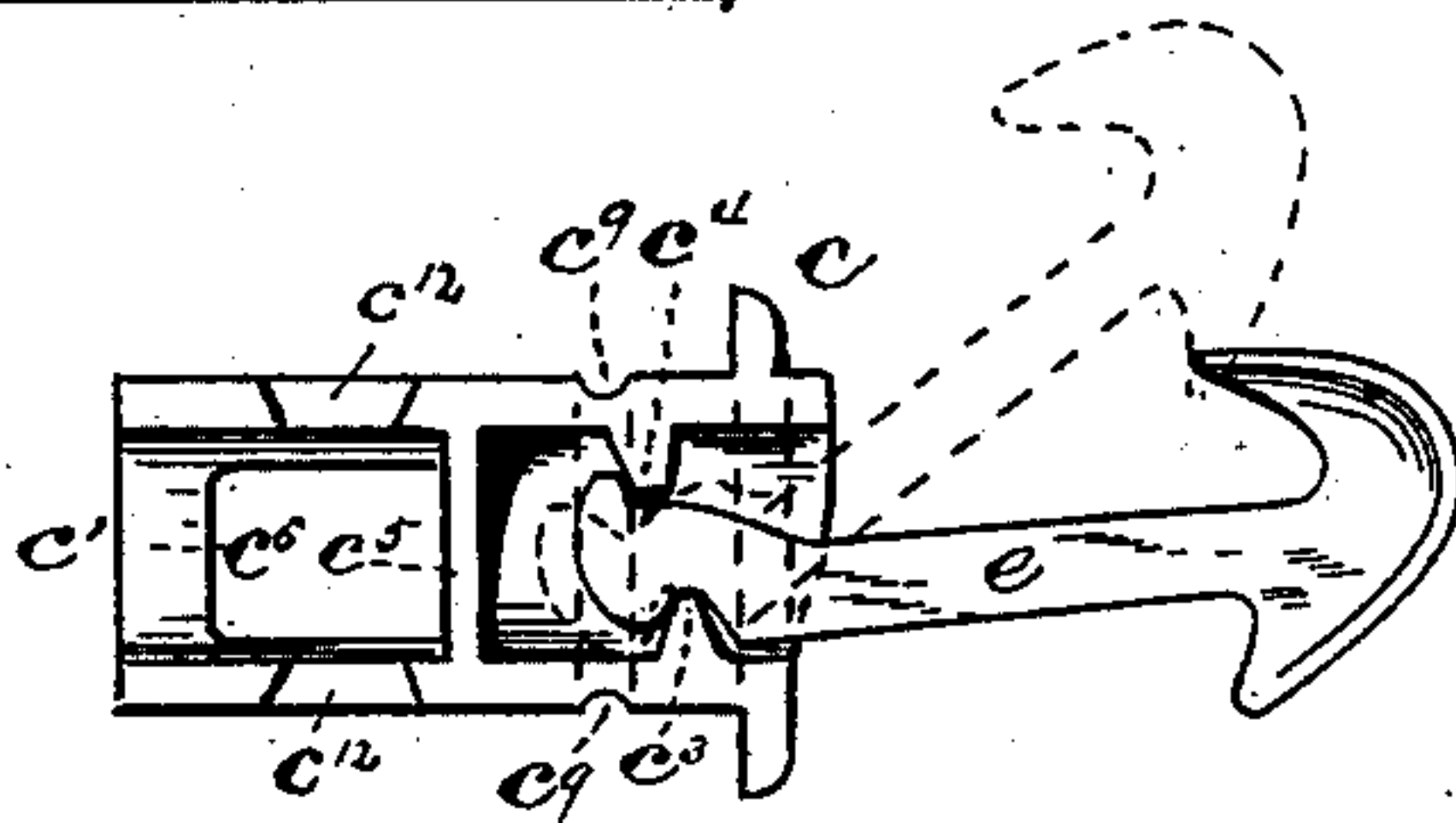


Fig. 3.

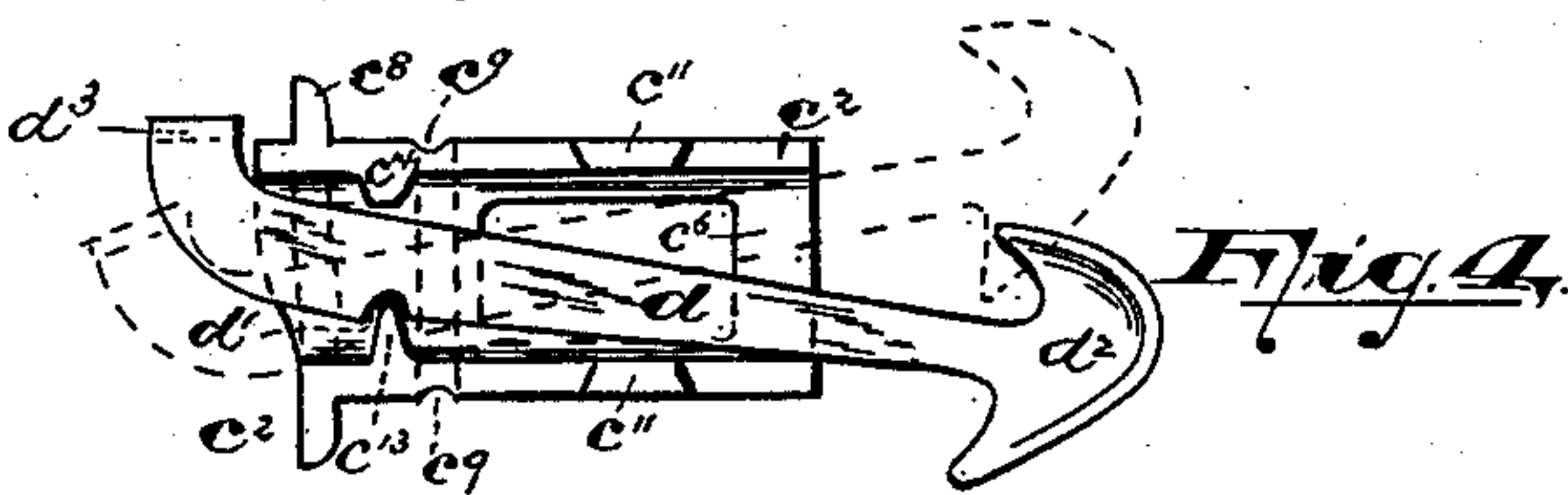


Fig. 4.

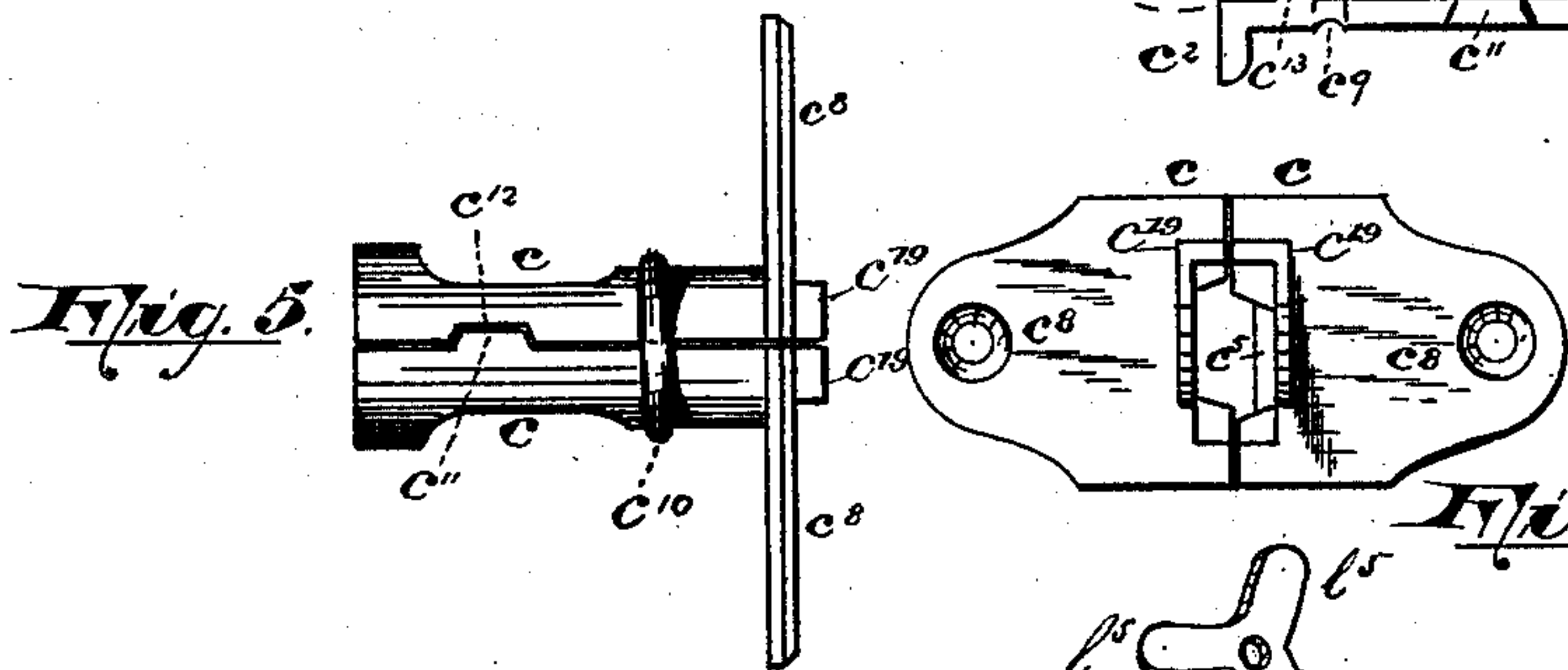


Fig. 5.

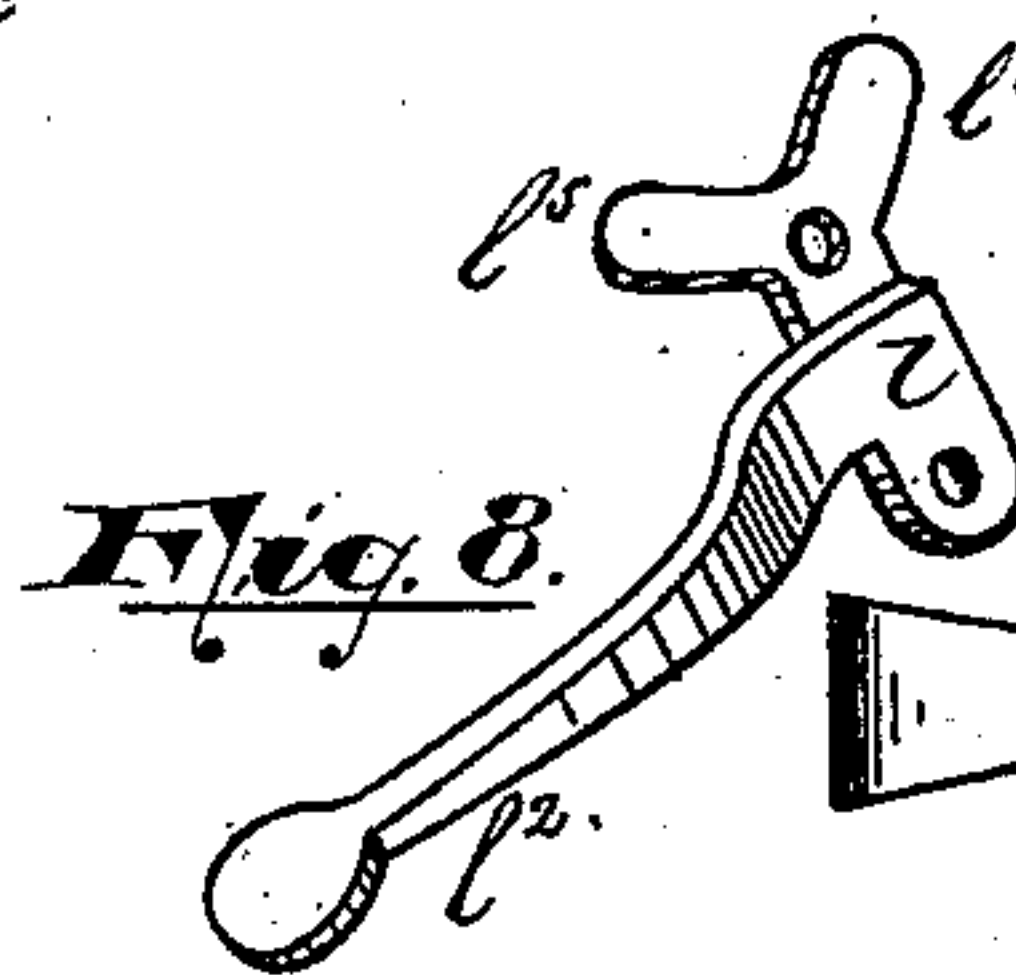


Fig. 6.

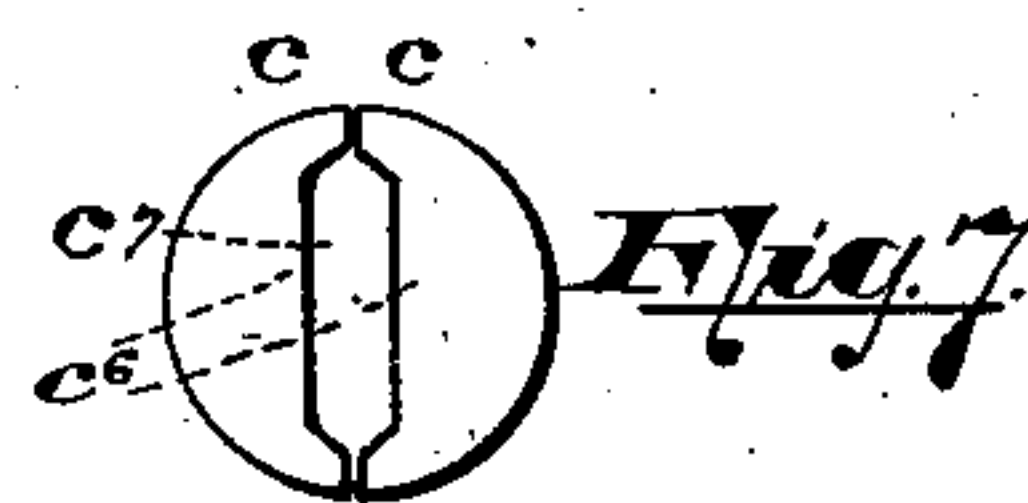


Fig. 7.

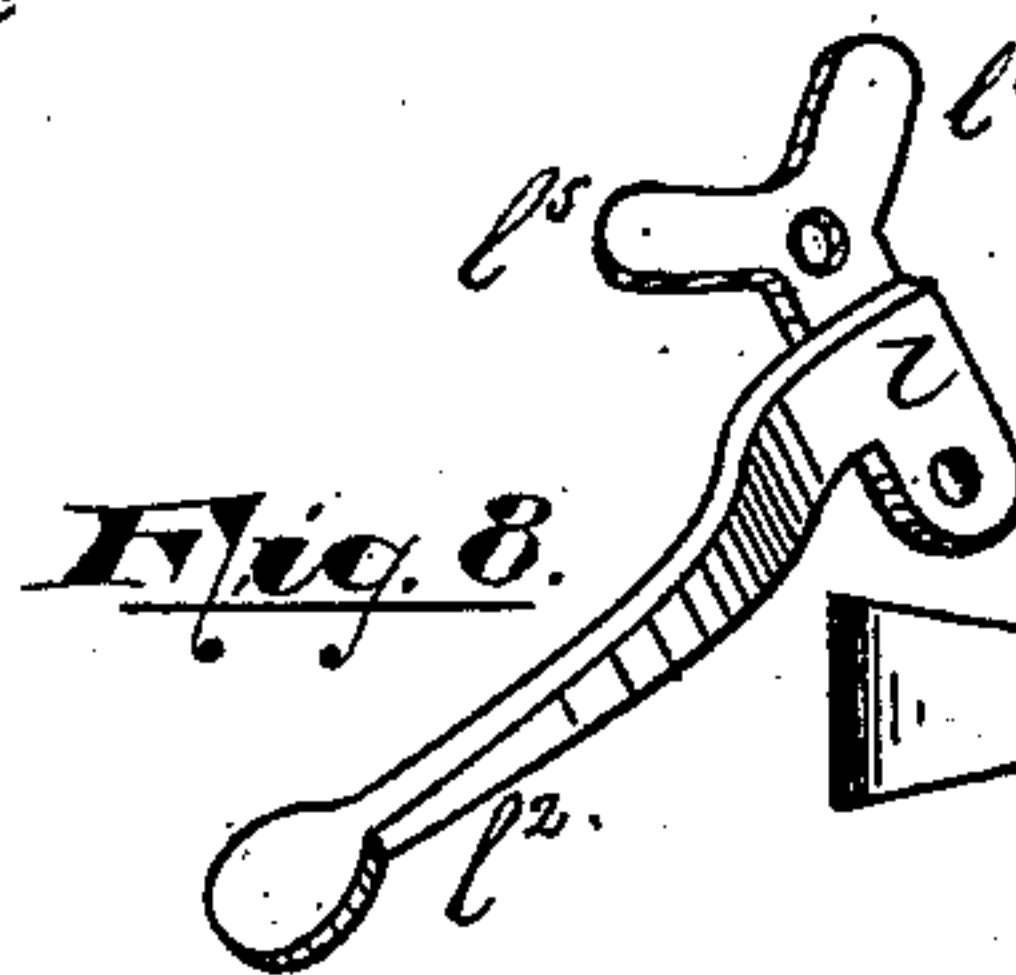


Fig. 8.

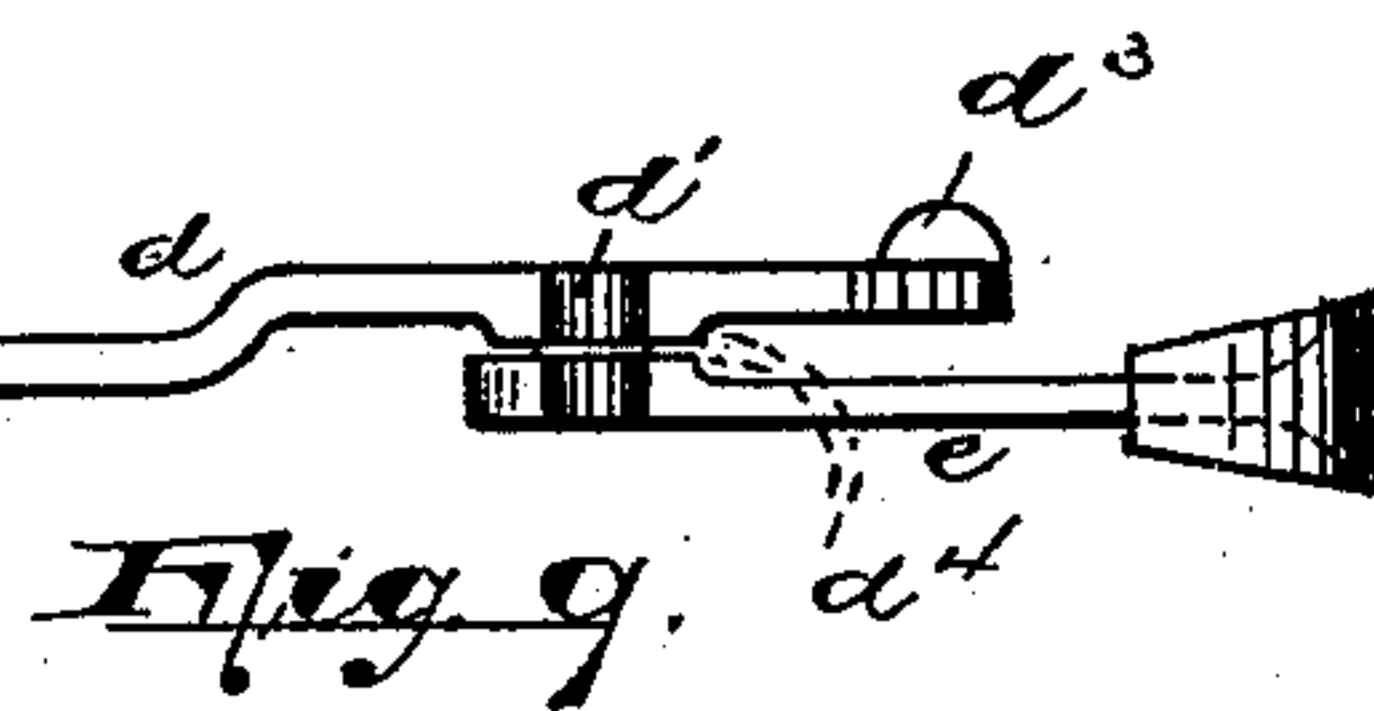


Fig. 9.

WITNESSES:

INVENTOR:

Fredk. F. Campbell.
Fred C. Fraentzel.

Jacob William Kohn,
BY Draxler & Co. ATTYS.

UNITED STATES PATENT OFFICE.

JACOB WILLIAM KOHN, OF NEWARK, NEW JERSEY.

SHUTTER-FASTENING.

SPECIFICATION forming part of Letters Patent No. 360,964, dated April 12, 1887.

Application filed July 1, 1886. Serial No. 206,793. (No model.)

To all whom it may concern:

Be it known that I, JACOB WILLIAM KOHN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Shutter-Fasteners; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a device of increased simplicity and durability, to reduce the cost of construction, and to release the shutter from its outer catch with greater facility and ease.

The invention consists in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several figures, Figure 1 is an elevation of a shutter or blind upon which is arranged the improved fastener. Fig. 2 is a sectional view of the same, showing the fastener in elevation, with one of the shutter-plates removed. Fig. 3 is an elevation of the catching-lever *e* and the plate-section in which it has its bearings. Fig. 4 is an elevation showing the catching-lever *d* and its plate-section. Fig. 5 is a side view or plan. Fig. 6 is an inside end view, and Fig. 7 an outside end view, of the plate-sections together; and Fig. 8 is a plan of a lever or crank by means of which a certain finger-piece of the catch may be depressed. Fig. 9 is a detail plan showing the levers provided at their fulcrums with lateral projections which engage one another and hold the body of the levers apart, so that there will be no excessive frictional contact.

In said drawings, *a* indicates a window-blind, and *b* a window-sill. Upon said blind are secured blind or shutter plates *c c*, which provide bearings for the catching-levers *d e*, which latter engage the respective co-operating catches on the sill and outside of the house

automatically, because of the weight of the catching extremities of the levers, in a manner fully described in Patent No. 336,054, issued February 9, 1886. In the device described in said patent the levers were fulcrumed on a pivotal pin which extended through the shutter-plate and said levers, and thus necessitated considerable labor, quantities considered, to adjust the parts and bring the catch into a condition for the market. In the present improvement the use of the pivotal pin and the process of drilling the plate to provide bearings for the same is avoided.

The plates *c c* are formed in sections adapted to allow the introduction of the levers to their fulcrumal bearings, and when said levers are arranged on said bearings the sections are placed together, to prevent the longitudinal withdrawal of the levers.

The sections are composed principally of socketed parts *c' c'*, the first of which is integrally provided with a fulcrumal lug, *c'*, for the inner lever and a stop-lug, *c'*, to limit the downward play of the lever *e* and prevent its withdrawal from the plate. Said part *c'* is also provided with a curtain or guard, as at *c'*, to protect the lever from outside manipulation or prevent access thereto with an instrument.

At the outer end of the inner wall of the part *c'*, and also that of the part *c'*, said walls are contracted, as at *c'*, so that a vertical slot, *c'*, Fig. 7, is formed of only sufficient width to allow a free passage and operation of the long or outer catching-lever. The inner ends of the said parts *c' c'* are provided with perforated flanges *c' c'*, which engage the inner face of the shutter or blind and allow the catch-plates to be securely fastened thereto. The face of said flanges is provided with a projecting hood, *c'*, to protect the plate from an inflow of water, said hood being formed at the upper end of the slot over the levers as indicated in Figs. 4 and 6. The levers are thus protected or prevented in their vertical movement from being clogged by ice. On the outside of said parts *c' c'* are formed grooves or notches *c'*, Figs. 3 and 4, which coincide with each other in position and receive a binding-wire, *c'*, Fig. 5, by means of which the parts are held together prior to being placed in the hole or boring in

the shutter. Lugs c^{11} , fitting into corresponding apertures, c^{12} , are provided, which co-operate with the binding-wire in giving rigidity to the union of the parts. The socketed part c^2 is also provided with a fulcrumal lug or bearing, c^{13} , for use in connection with the long lever d , said lug entering the notch d' of said lever. Said part c^2 is also provided with a depending lug, c^{14} , which prevents the lever d from rising out of engagement with its fulcrum. The said long lever, weighted at its outer catching end, d^2 , is provided with a finger projection on its inner end, which differs from that of the device in the patent above referred to in that it has a lateral projection, d^3 , Figs. 1, 4, and 9, extending in a direction away from the lever c , and thus presents a broad surface to the finger without interfering with the movement of the short or inner lever.

At the fulcrumal or notched centers of the levers the same are, or one of them is, provided with a projection or projections, d^4 , by means of which said levers are held apart, so that there will be no danger of one of them being moved to any material extent when the other is operated by the finger.

To render it unnecessary for the operator to extend his person out of the window to disengage the outer catches in closing the shutter, I have provided mechanism by means of which the same may be accomplished by simply thrusting the hand out to a point near the hinged edge of the shutter to a hand-piece, g , thereat arranged, which latter is connected by means of a rod, h , to an angle crank or lever, l , Fig. 1. Said lever or crank is fulcrumed on the shutter, as at l' , near where the blind or shutter plates are secured, and has a depressing-finger, l^2 , which rests upon the finger-bearing of the long lever, as shown. By drawing on the finger-piece g the lever l is turned on the fulcrum l' and the long catching-lever disengaged from its co-operating catch on the house. The lever l is provided with prongs or bearings l^3 , to prevent lateral movement of the depressing-finger and to secure a more steady and positive action.

It will of course be understood that the improved catches may be utilized independent of the depressing mechanism.

The operation of the catching-levers is practically the same as that in the prior patent, and further description on this point is deemed unnecessary.

I am aware that changes may be made in the construction of the device without departing from the invention.

What I claim as new is—

1. The combination, with the catching-levers d and e , of plate-sections, one of which has a curtain

or guard, c^5 , and both of which have fulcrumal bearings, substantially as and for the purposes set forth.

2. The combination, with the lever d , adapted to fasten the shutter in its open position, of a depressing-finger connected with and operated by a hand-piece, g , arranged on the shutter at a distance from the catch, substantially as set forth.

3. In a depressing device for releasing shutter-catching levers, the lever l , having prongs or bearings l^3 and a depressing-finger, l^2 , substantially as set forth.

4. In a shutter-fastening, the shutter-plate section c' , having the fulcrumal lug c^3 , stop c^4 , guard c^5 , and flange c^6 , all formed of one integral piece, substantially as and for the purposes set forth.

5. In a shutter-fastening, the combination of the shutter-plate sections and independent catching-levers, the longer of which is provided with a finger projection, d^3 , which extends in a direction away from the shorter one, substantially as herein set forth.

6. In a shutter-fastening, the shutter-plates consisting of sections c' and c^2 , each of which has a lever-opening, and has also a face-flange, c^6 , and a hood, c^{19} , integral therewith, said hood formed above the lever-opening and extending from the face of said flange, in combination with catching-levers located in the lever-openings, substantially as and for the purposes set forth.

7. The improved shutter-fastening combining therein the longer and shorter levers, the former of which extends entirely through the opening in the sectional shutter-plate, whereby it may be manipulated on both sides thereof, said levers being arranged side by side, and sections c' and c^2 , each provided with integral bearings for the levers, which bearings coincide, the said sections being separable to allow the introduction of said levers to their respective bearings, substantially as and for the purposes set forth.

8. In combination with shutter-sections c' and c^2 , separable from one another and each provided with fulcrumal bearings integral therewith, independent catching-levers arranged side by side and provided at their fulcrumal centers with projections d^4 , by which said levers are parted, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of June, 1886.

J. WILLIAM KOHN.

Witnesses:

CHARLES H. PELL,
OSCAR A. MICHEL.