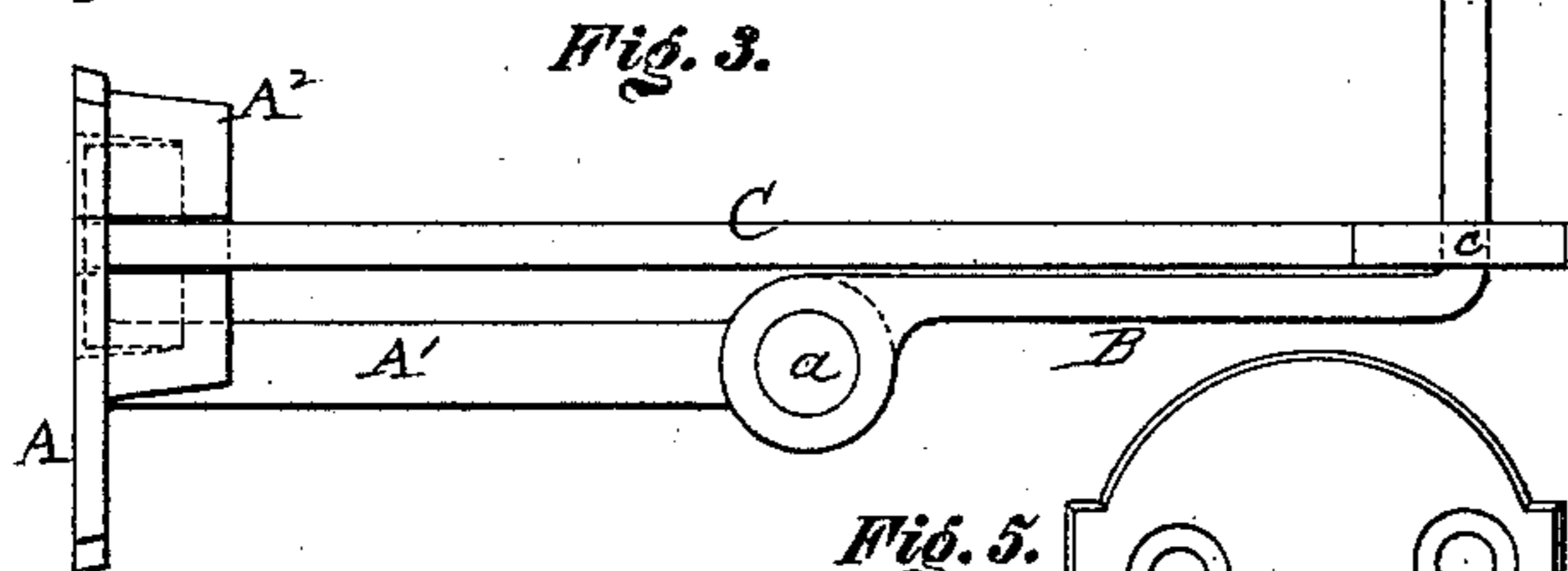
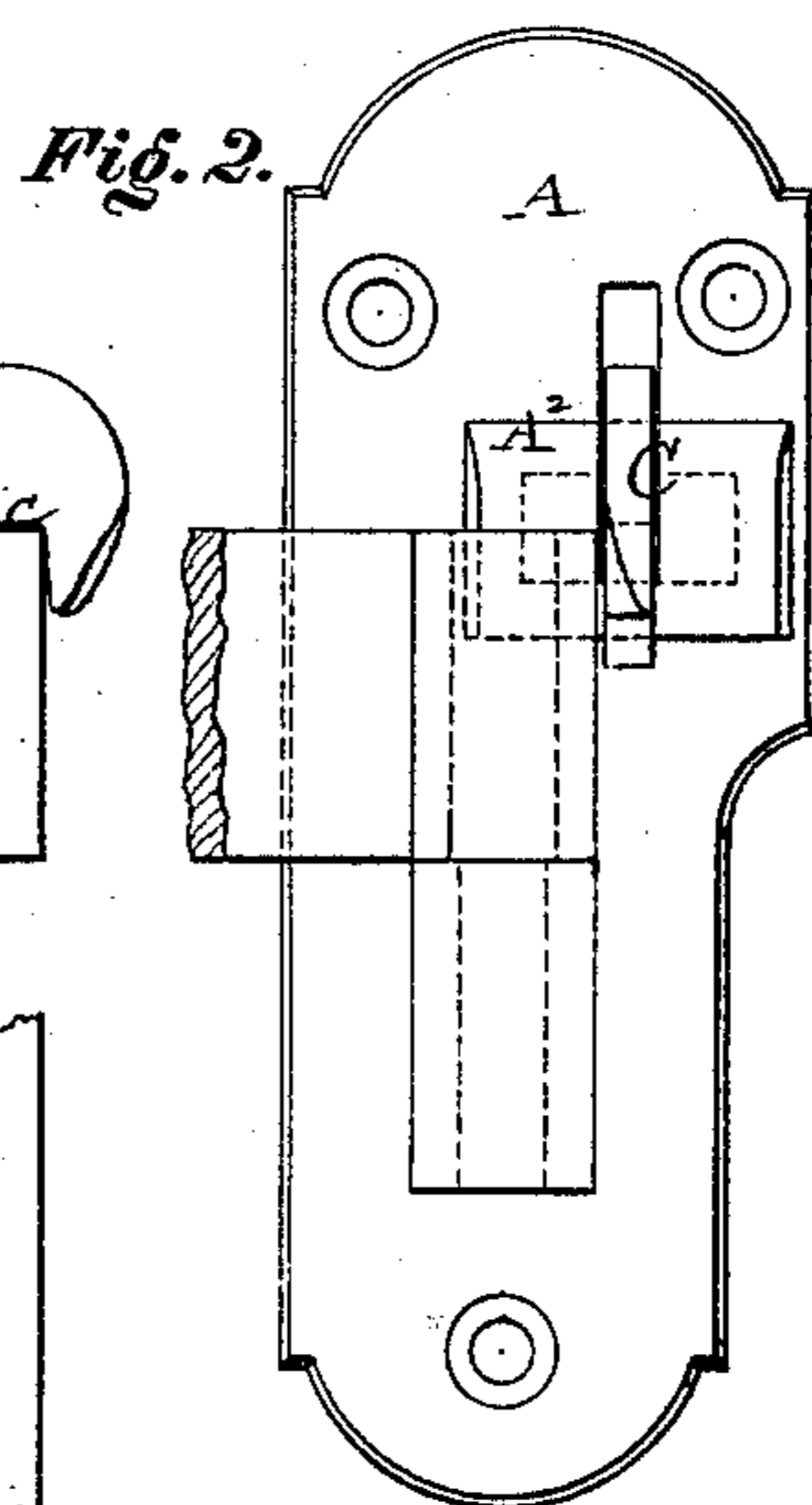
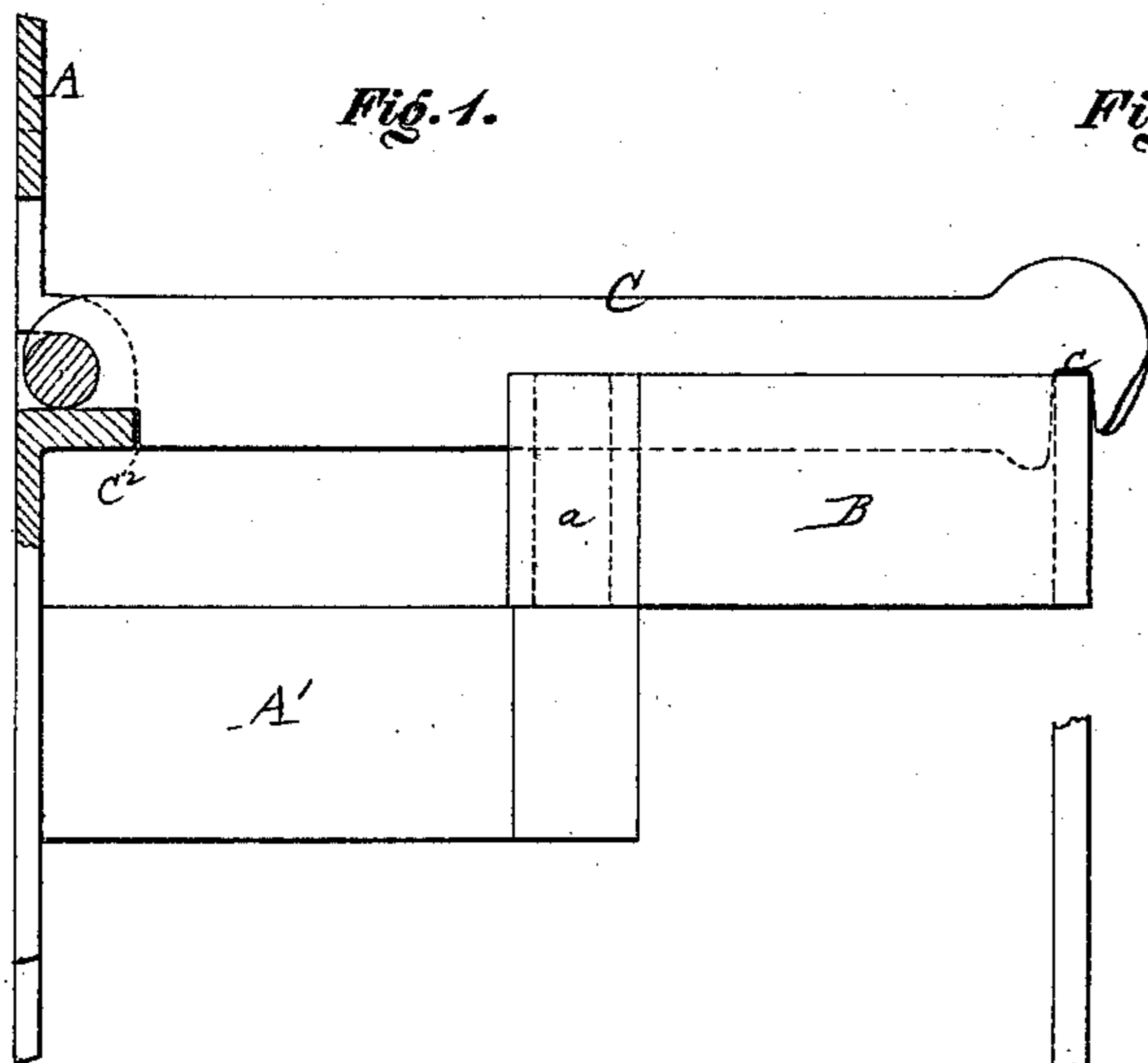


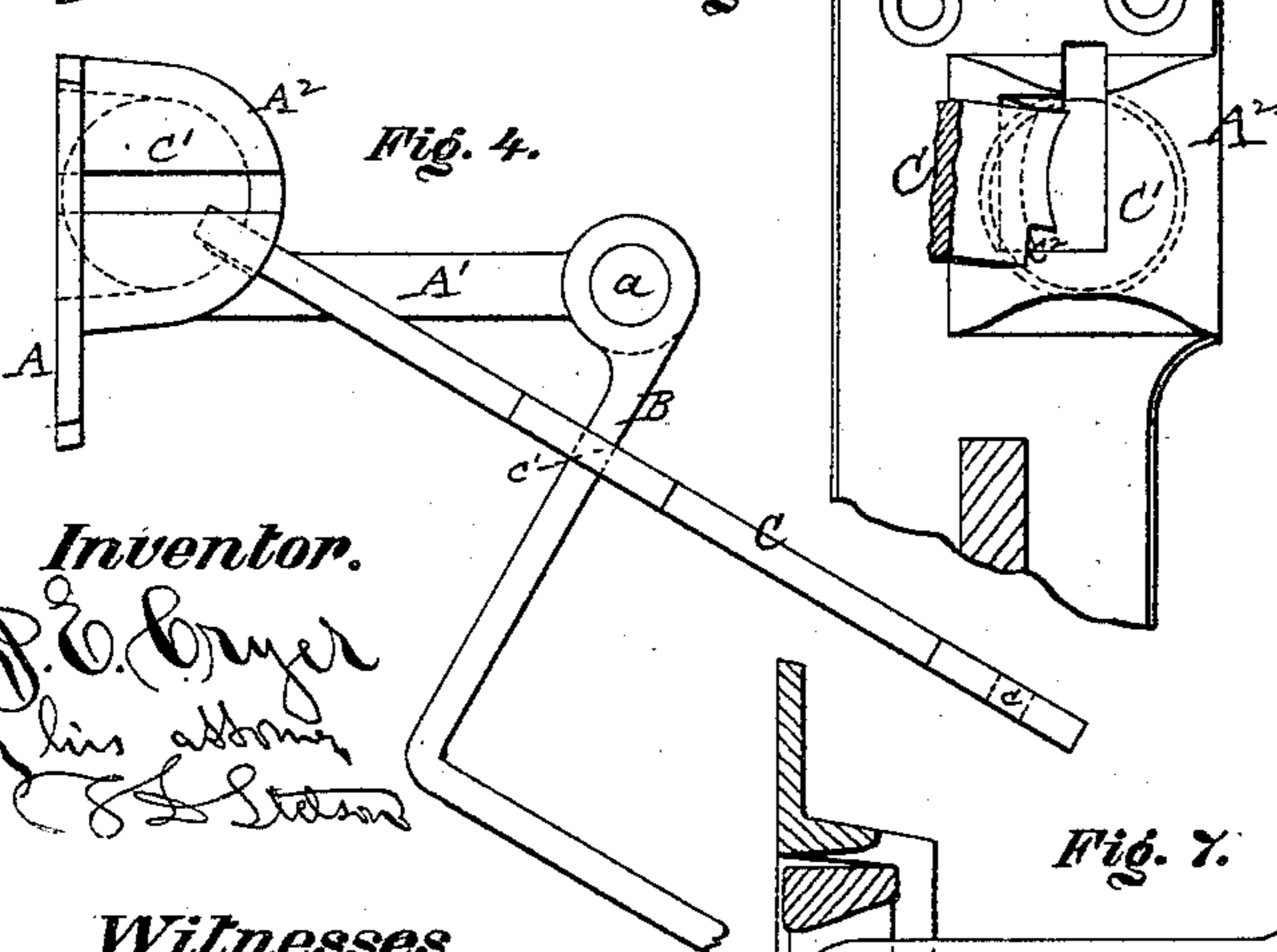
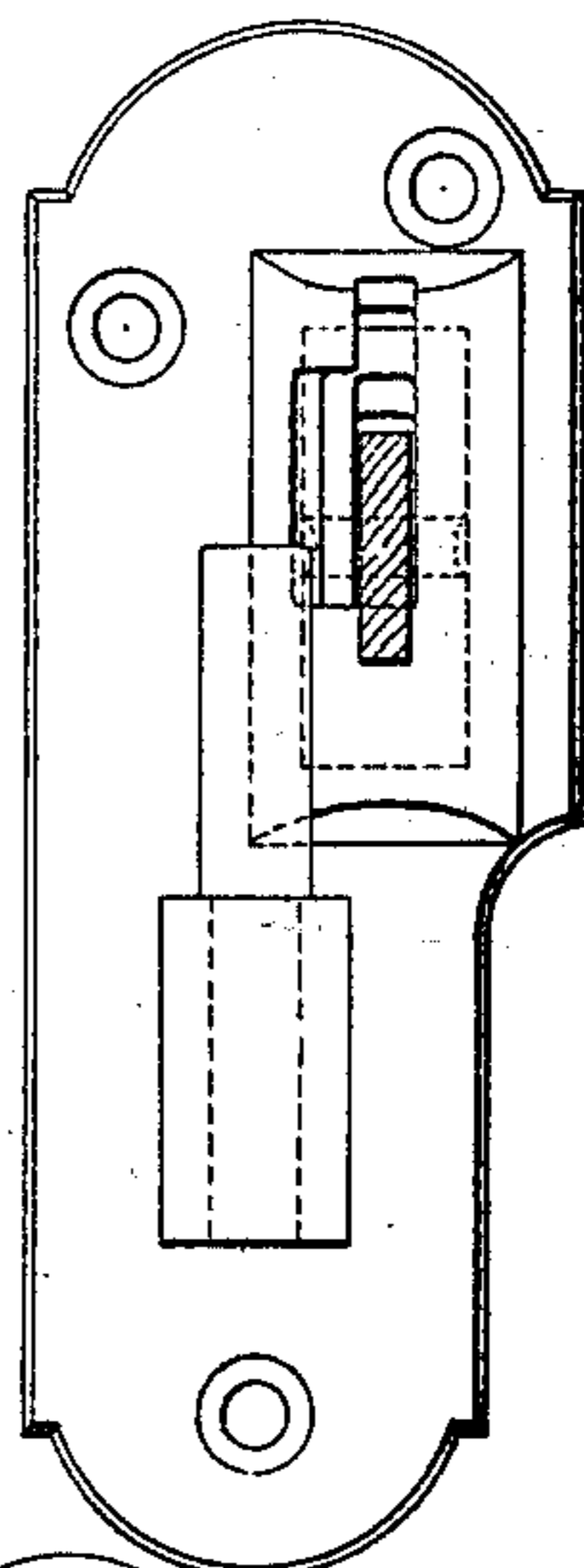
# J. E. Cryer, Hinge.

No. 94,719.

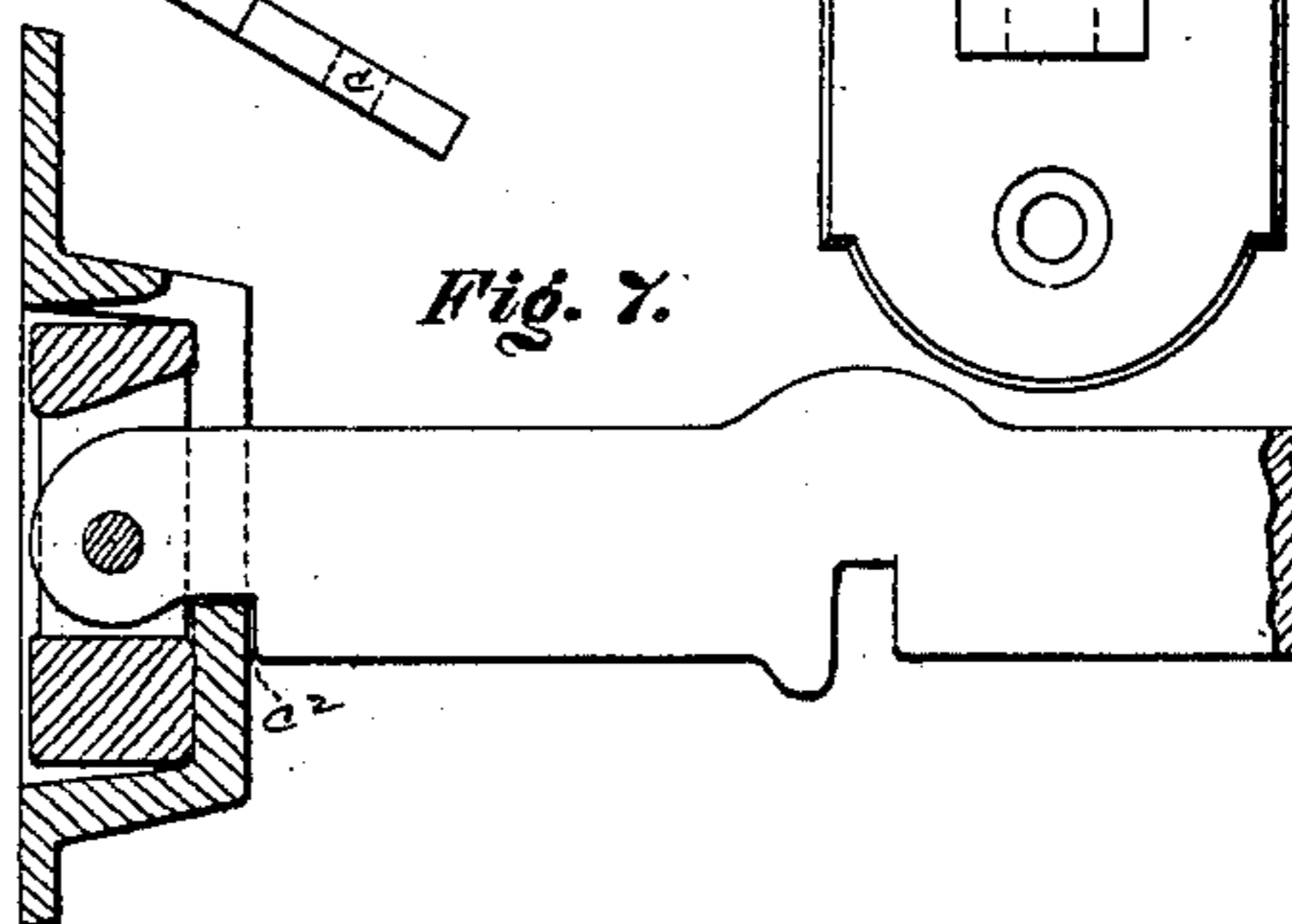
Patented Sep. 14. 1869.



**Fig. 6.**



**Fig. 7.**



**Inventor.**

J. E. Cryer  
by his attorney  
S. S. Stinson

**Witnesses.**

W. C. Livingston  
Wm. C. Cryer

# United States Patent Office.

JOHN E. CRYER, OF GREENPOINT, NEW YORK.

Letters Patent No. 94,719, dated September 14, 1869.

## IMPROVED BLIND-FASTENING.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that I, JOHN E. CRYER, of Greenpoint, in the county of Kings, and State of New York, have invented certain new and useful Improvements in Blind-Fastenings; and I do hereby declare that the following is a full and exact description thereof.

My fastening is constructed in connection with the hinge, and is secured to the building with the same fastenings. This alone is not new, but my mode of construction and operation involves some important points of novelty.

I will proceed to describe what I consider the best means of carrying out my invention, and will afterwards designate the points which I believe to be new therein. The accompanying drawings form a part of this specification.

Figure 1 is a side elevation of the fastening, partly in section. The parts are in the position which they assume when the blind is open.

Figure 2 is a face view, with the parts in the position which they assume when the blind is closed.

Figure 3 is a plan view of fig. 1.

Figure 4 is a plan view of a modification of the form of the parts. This modification allows the same parts to be used to hold the blind secure in a partially closed position, as well as entirely open.

Figure 5 is a front elevation, partly broken, showing the same modification as fig. 4.

Figures 6 and 7 show still another modification. Fig. 6 is a front view of the main or fixed part of the hinge, with the latch broken off. Fig. 7 represents a vertical section of a portion of the same.

Similar letters of reference indicate corresponding parts, or those parts which most nearly correspond with each other, in all the figures.

A is a flat portion, which is adapted to be secured to the wood-work at the side of the window, by screws in the ordinary manner.

A<sup>1</sup> is an arm, which extends out therefrom, and carries an upright pivot, *a*, on which the turning part of the hinge B is supported.

The turning part may be constructed in any approved manner, extending down and outward upon the blind so as to take a very firm hold thereof, if preferred. I have represented it as extending out only a little ways, and forming the usual short turn where it commences to be fitted against the blind. I have not represented the wood-work either of the building or of the blind. The hinge fits against both, and is secured thereto in the ordinary manner, as will be readily understood.

The fastening is effected by means of a latch, C, which is supported, when not in use, in a horizontal, or nearly horizontal position, and which catches upon the upper edge of the turning part B, and holds it

firmly when the blind is swung wide open. The outer end is bevelled, so that the latch will rise of itself as the blind swings open, and will drop again by gravity so as to receive and hold the upper edge of the part B in the notch *c*.

The latch C is secured to the part A, so that it is free to turn. The union or joint is formed by casting them of a peculiar form, (or in case it should be preferred to make the parts of wrought-iron, they would probably be struck up in dies with little labor.) I may say here, that I prefer to make the parts of malleable cast-iron. The latch is pushed through from the rear or back of the face-plate A, and an enlarged head, or equivalent part on the rear end of the latch, is received in a recess prepared for it in the piece A, so that it is free to turn to the proper extent, but cannot be drawn out.

In order to provide a suitable space for this head C', without too greatly increasing the thickness of the part A, I form the latter with a casing, A<sup>2</sup>, which projects outward from the face above the part A<sup>1</sup>, as represented in the several figures. This casing is hollow, and its hollow interior receives the head C', on the back end of the latch C. Its form varies, according to the form of the head, as will appear below.

The several modifications which I propose in the form of the parts, all conform to the above description, but beyond this it will be necessary to describe them separately.

Referring to figs. 1, 2, and 3, the rear end of the latch C is provided with a head at the back end, which is in the form of a short cylinder, extending transversely to the latch. It is received in a corresponding recess, and allows the latch to be simply raised and lowered. It cannot be turned laterally to any considerable extent. It allows the latch to perform the single function of catching upon the part B, and holding the blind open.

Referring to figs. 4 and 5, the head or enlargement C', on the back end of the latch C, is in the form of a sphere. It fits in a corresponding recess in the parts A A<sup>2</sup>, and the opening through the front of the recess is not, (as in the form first described,) a mere narrow slot up and down, but is wider at the front, so as to allow a considerable lateral movement or swinging motion side-wise of the latch. The latch is also provided with a notch, *c'*, at about the middle of its length.

This form of the invention performs the same function of holding the blind open as the form first described, and it also performs the additional function of holding the blind firmly in a partially closed position. It is frequently desired, in admitting air and excluding the sunshine, to hold a blind a little way open, and I have provided for attaining this end by very simple means. The latch with this form of the invention

being in its ordinary position, (that shown in the other form, fig. 3,) the blind on swinging back raises the latch, which again falls by its gravity, and embraces the upper edge of the part B in the notch *c*, and the blind is thereby held firmly open. All this is precisely the same in this second form of the invention, as in the first, and the liberation of the blind with this form, as also a third to be described, is the same; that is to say, the finger is applied under the latch C, to lift it, and immediately that the notch *c* is clear of the part B, the blind is free to close.

Now, to render available the additional function of this second form of the fastening, it is necessary simply to bring the blind into a position about two-thirds closed, that is to say, standing at an angle of about sixty degrees with the window, and then to lift the latch C, and swing it laterally into the position shown in fig. 4. In this position, the notch *c'* drops upon and secures the part B by embracing its upper edge, and it now holds the blind firmly in the partially closed position. When it is desired to change the blind from this position, the latch C is lifted by the finger, and moved back to its original position. In these lateral movements the latch C swings easily, being lifted sufficiently to move it over the pivot *a*.

Referring to figs. 6 and 7, I have here represented a form of the device which involves a little more labor and expense. It corresponds in function with that last described, that is to say, it performs the duties both of holding the blind open, and of holding it partially closed, but the head, as I have termed it, at the back end of the latch C, is in the form of a short vertical cylinder, adapted to turn horizontally, and allow for the swinging or sidewise motion of the latch. The liberty for the vertical motion of the latch is obtained by connecting the latch loosely to this cylinder. This is effected by casting the cylinder with a mortise or slot extending into or through it, and riveting the flat end of the latch C loosely therein.

Instead of mortising the latch through the upright cylinder in this form of the device, I can, if preferred, fork the latch and let it embrace the flattened part of

the cylinder and be riveted there, or it can be matched by that means upon horns or trunnions upon such flattened side of the cylinder, and the fork being made a little open, it can be fitted over the horns or trunnions, and then compressed by any suitable dies or other machinery, so as to form a loose and strong connection. Numerous other modifications in the form of the parts of my invention may be made by any good mechanic.

I esteem it important in all the forms to protect the latch C against any force tending to press it back into the wood-work. It will be observed that the blind, in swinging back into position, may act with considerable force against the bevelled end of the latch before lifting it. This will be particularly liable to occur when the parts are very rough or rusty. Now, if the latch C were to be pressed backward by such force against the wood-work, it might wear or crush the wood so as to allow it to move backward into the wood-work, and thus derange the action. In all the forms of my invention, I protect the device against such derangement by making an offset on the under side of the latch C, as indicated by *c'* striking against the lower part of the projection *A'*. This receives all the force tending to move the latch backward.

Some of the advantages due to certain parts of my invention may be realized without the use of the other parts, but I prefer to employ the whole in combination, as here described.

What I claim, is—

1. A fastening-latch, passed through from the rear of the hinge, and secured thereto by a head, to form a joint.
2. In combination with a latch, arranged as described, the offset or shoulder *c'*, to resist any backward motion of the latch.
3. In combination with the above, the notch *c'* in the latch, to hold the blind in a partially closed position.

JOHN E. CRYER.

Witnesses:

C. C. LIVINGS,  
THOMAS D. STETSON.