

J. D. SHEPARD.
Improvement in Hinges.

No. 131,032.

Patented Sep. 3, 1872.

Fig. 1.

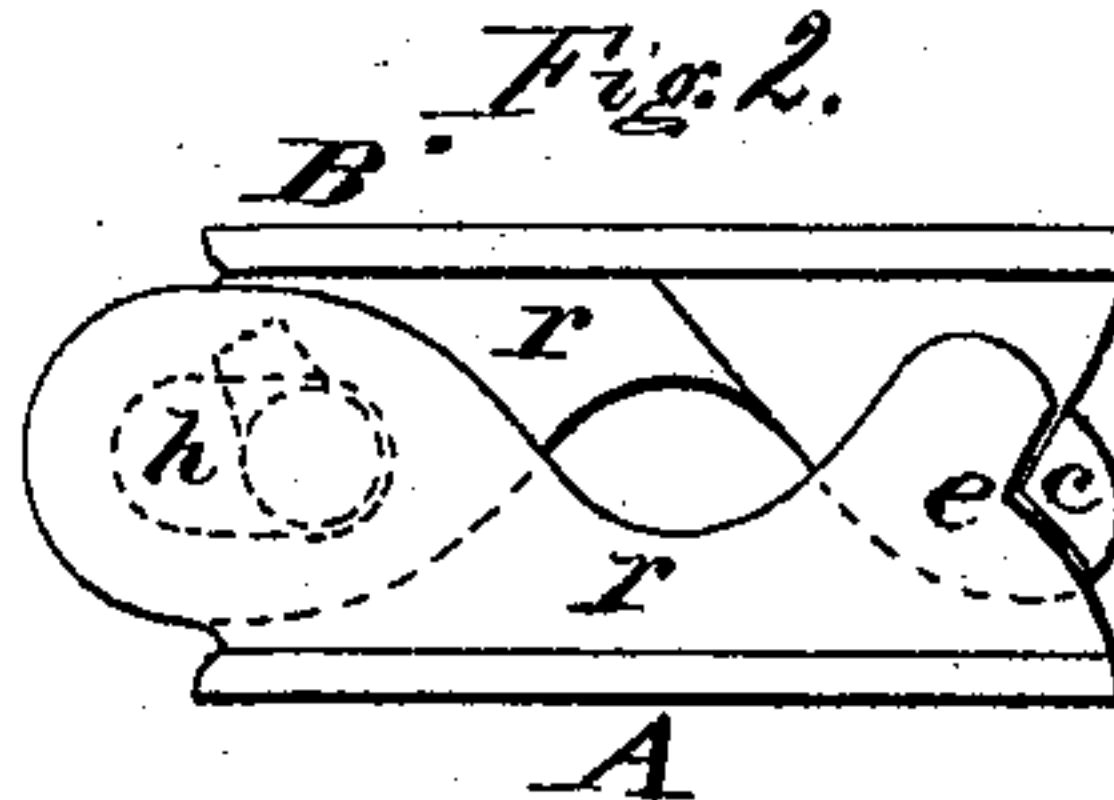
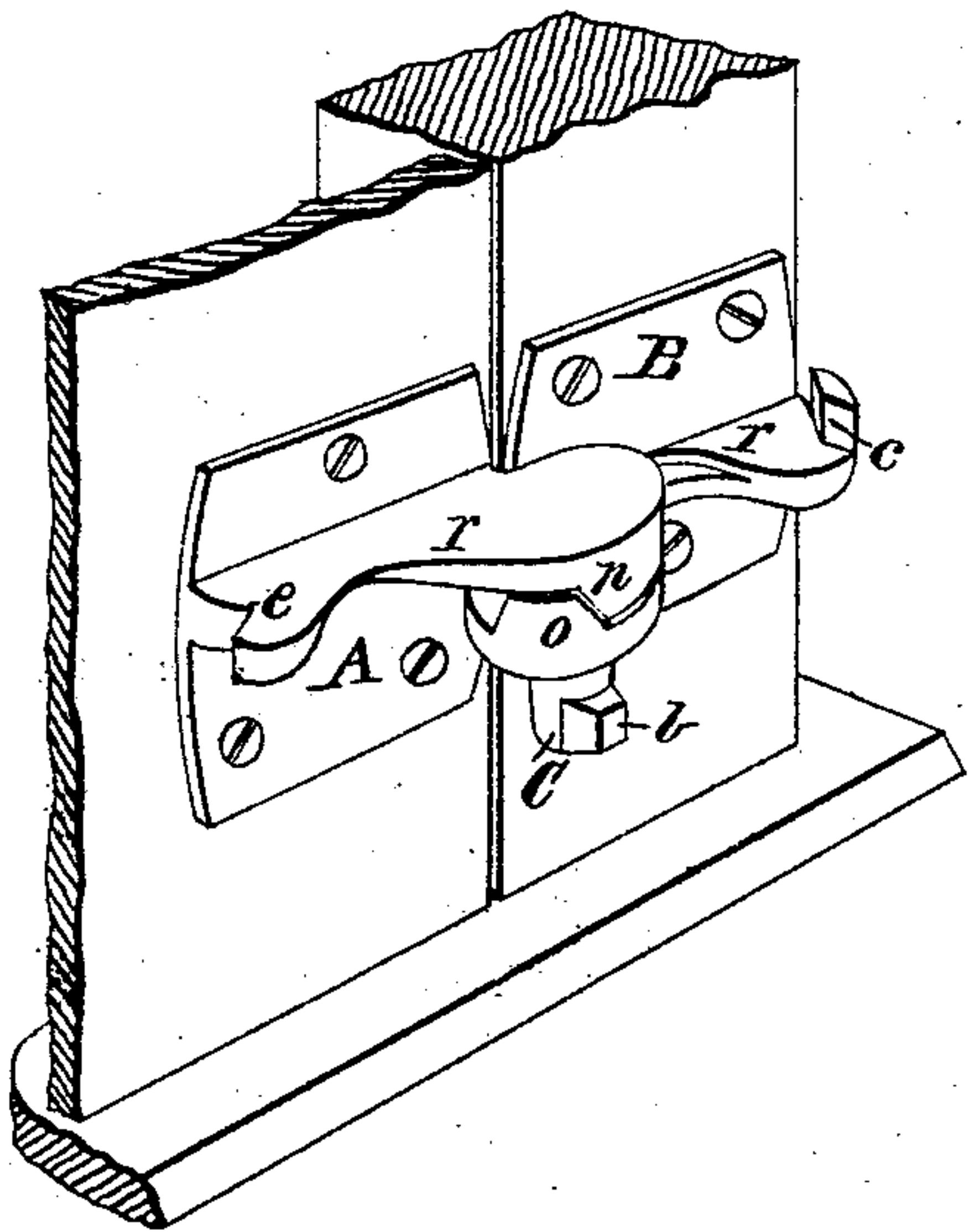


Fig. 3.

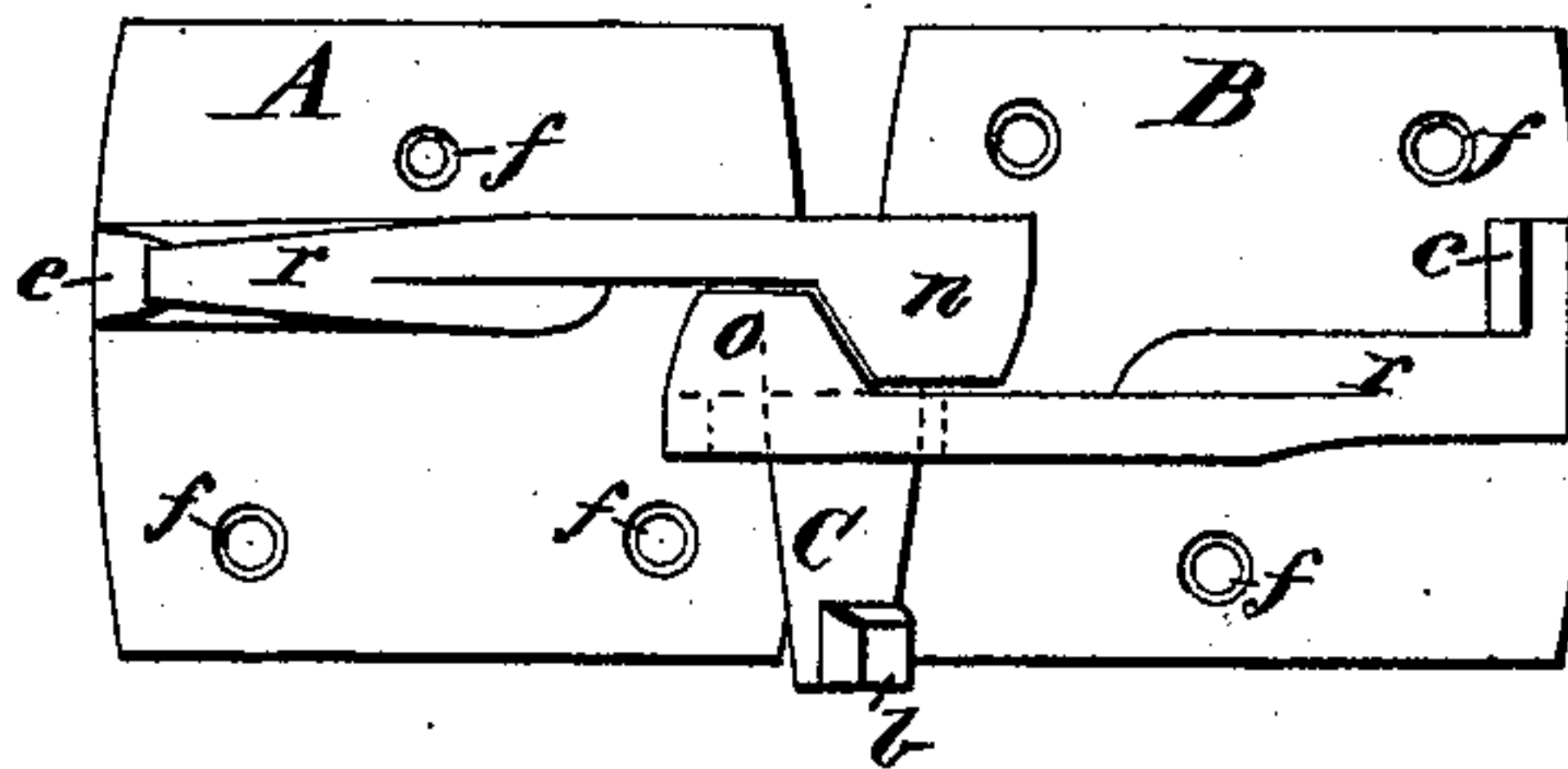


Fig. 4.

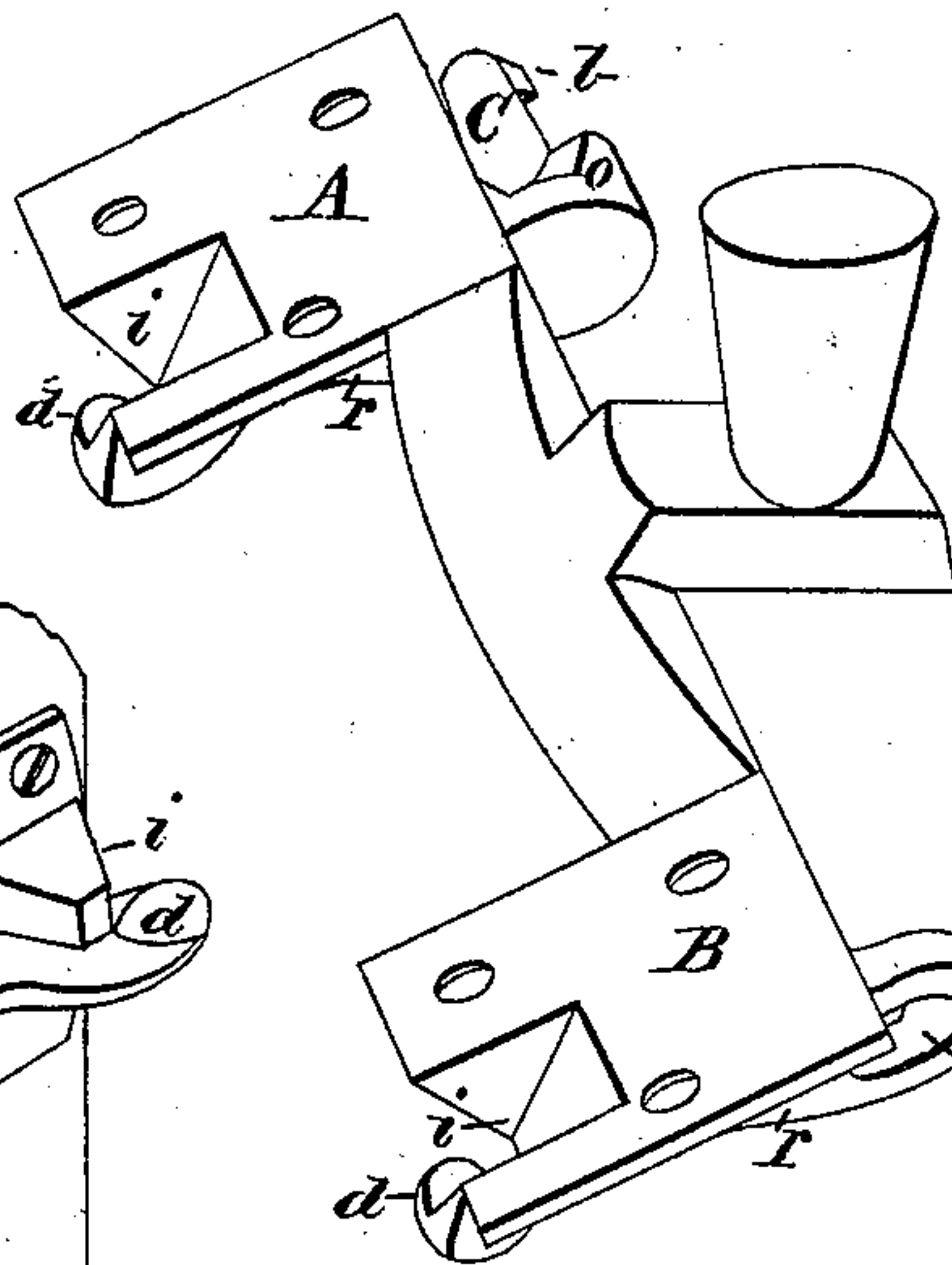


Fig. 4.

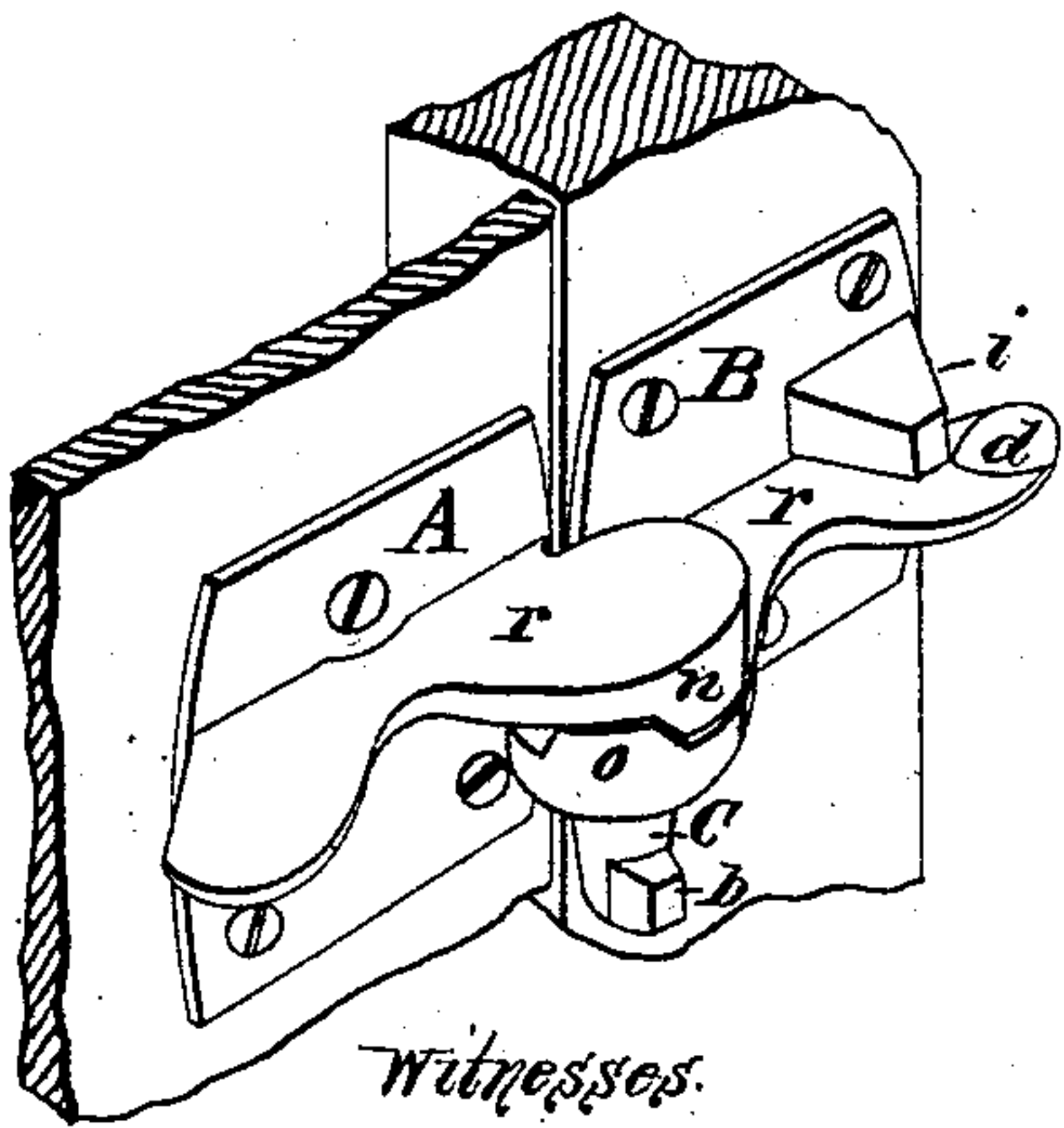


Fig. 6.

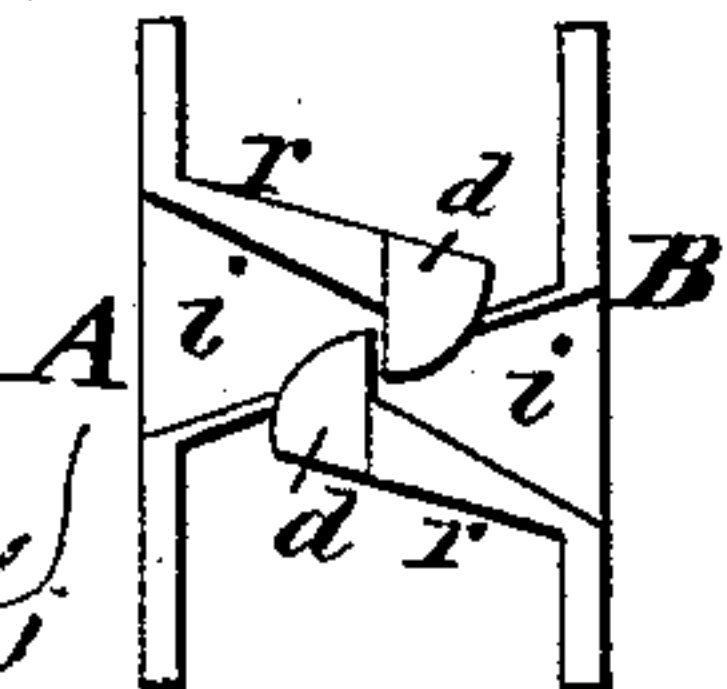


Fig. 5.

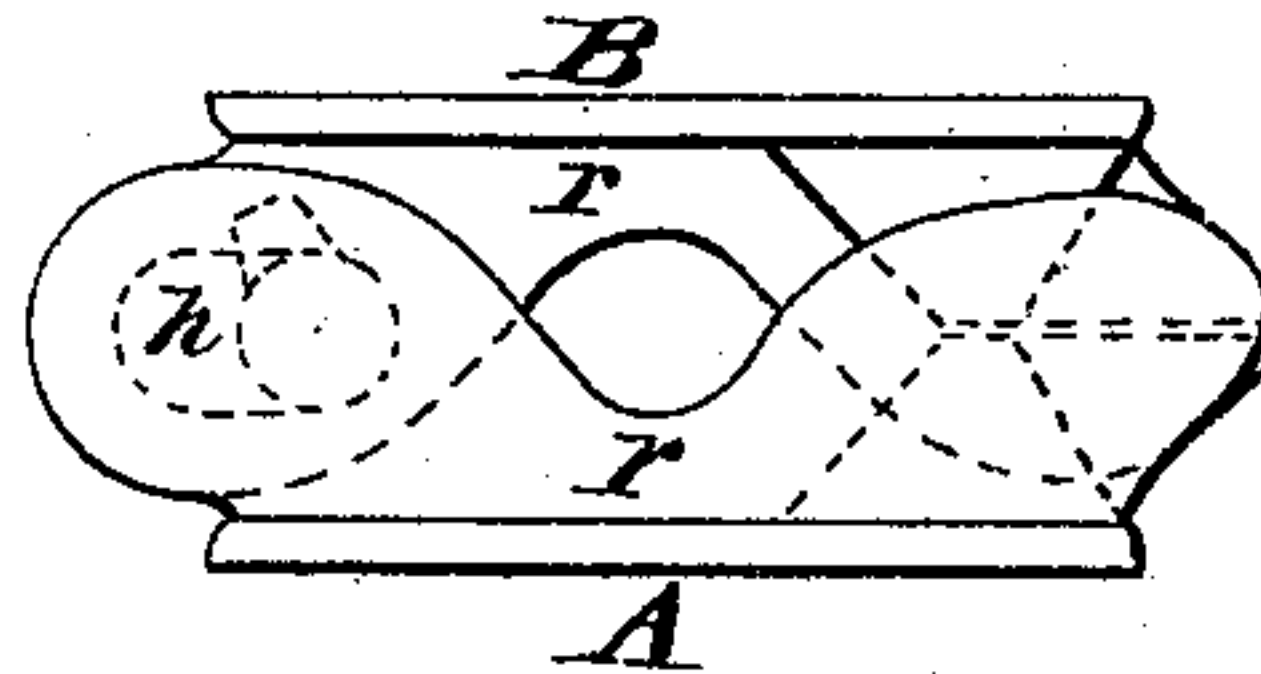
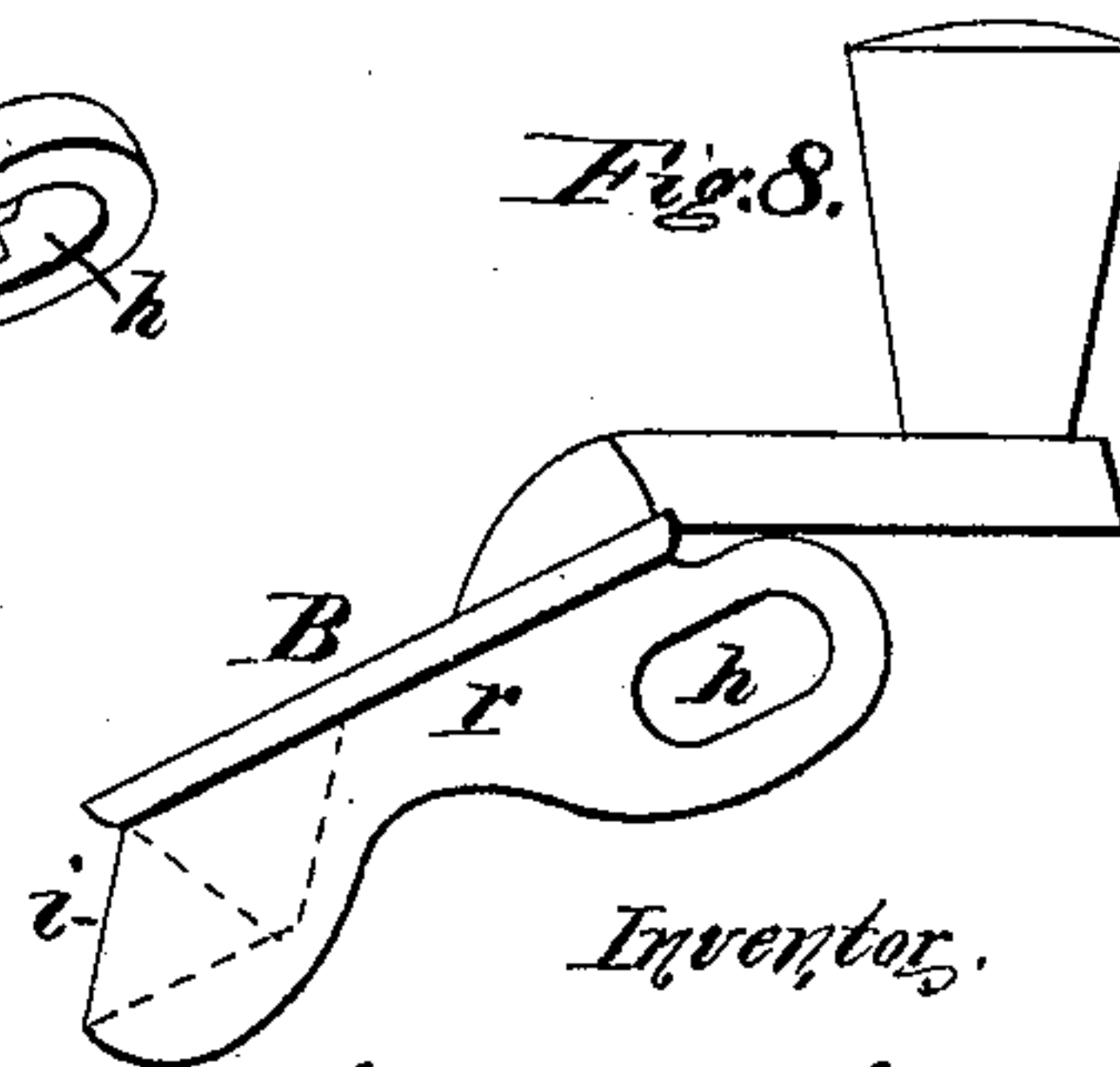


Fig. 8.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN D. SHEPARD, OF BUFFALO, NEW YORK.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. 131,032, dated September 3, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, JOHN D. SHEPARD, of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Blind-Hinges, of which the following is a specification, reference being had to the accompanying drawing.

My invention consists in a novel mode of constructing the locking-hinges for use on window-blinds, whereby I am enabled to cast the hinge complete with the screw-holes therein and the locking devices thereon, so that after the hinge is cast it requires no other finishing than simply smoothing in a tumbling apparatus, as herein-after more fully described.

Figure 1 is a perspective view of my improved hinge as applied to a blind. Fig. 2 represents the hinge locked to hold the blind in position when opened. Fig. 3 is a front elevation of the hinge as it stands when the blind is shut. Figs. 4, 5, and 6 represent the same hinge slightly modified in its locking devices; and Figs. 7 and 8 represent the hinge as taken from the mold.

It has heretofore been customary to make hinges of this class in one of two ways—that is to say, they have been cast with the screw-holes in them—but when so made the locking devices were cast separately in detached parts and subsequently applied to the hinge. In the other case the hinge was cast with the locking devices on them, but the screw-holes in such hinges had afterward to be drilled in the hinges.

The object of my improvement is to so construct the hinges that they may be cast with the all at one operation, thereby greatly cheapening their production or manufacture.

In order to accomplish this object I construct the hinge as represented in the drawing, it consisting of two plates, A and B, having a projecting rib, *r*, extending laterally across each and projecting beyond the adjoining edges far enough to have the pintle *C* and the eye *h* formed on them, respectively, as shown in the several figures. The pintle *C* is formed with a projection, *b*, on its lower end to prevent it from being accidentally unshipped, and the eye *h* is made oval or elongated to permit the projection to pass through it, and also to permit the pintle to be moved sidewise therein to

lock and unlock the hinge. As shown in Fig. 1 the part B has a cam, *o*, formed on the upper face of the inner extremity of the rib *r*, and the rib of plate A has a corresponding cam, *n*, on it, these cams or inclines being so located in relation to each other that when the blind is opened they will operate to throw the bottom of the blind outward or backward along the face of the wall to insure its locking automatically as it is thrown open. On the outer extremity of the rib *r* of plate B I make a vertical projection, *c*, the inner face of which is made V-shaped in cross-section; and in the outer extremity of the rib of plate A I form a corresponding V-shaped notch, *e*, as shown in Figs. 1, 2, and 3. When thus constructed, the hinge being applied in the usual manner, as the blind is opened the incline *n*, riding over the cam *o*, forces the part A backward and thereby causes the notch *e* to engage with the projection *c* and thus to lock the blind open. To close the blind, it is slightly raised and drawn forward at the bottom, thereby disengaging the locking devices, when the blind is swung shut. Instead of making the locking devices as represented in Figs. 1, 2, and 3 they may be modified, as shown in Figs. 4, 5, and 6. In this case each of the plates A and B are formed as before, except that each has at its outer edge a recess, *i*, formed on its flat face, and a catch or hook, *d*, on the extremity of the ribs of each, as shown more clearly in Fig. 7. These hooks or catches are made with their inner faces vertical and their outer faces inclined, as shown in Fig. 6, so that when the blind is opened they will ride one up over the other and engage or lock together, as represented in Figs. 5 and 6, the construction and operation otherwise being the same as above described. In this case it will be observed that the parts A and B are duplicates so far as the locking devices are concerned.

In casting hinges made on this plan the patterns are placed in the mold or flask, as represented in Figs. 7 and 8, and by their peculiar construction I am thus enabled to mold and cast them complete with the screw-holes and locking devices, all at a single operation. In practice the patterns for several hinges or parts of hinges are united, as represented in Fig. 7, and are thus all molded and cast together, thereby greatly expediting the operation.

When taken from the mold the hinges have simply to be detached or broken apart, when they are tumbled to smooth them, and they are then ready to be packed for sale or use.

By this improvement in the method of constructing and casting the hinges I am enabled to produce them with great rapidity and at reduced cost, and, at the same time, to make a complete and automatically-locking hinge by the simple act of casting them.

I am aware that blind-hinges have, heretofore, been made with locking devices cast on them, but without the screw-holes being cast therein. I am also aware that hinges have been cast with the screw-holes in them but without the locking devices, and, therefore, I

do not claim either of these separately considered; but

Having fully described my invention, what I do claim is—

A blind-hinge composed of the parts A and B, each part being provided with a locking-catch, *e*, formed on the leaf of the hinge at or near its outer edge, said catch being arranged in relation to the leaf in such a manner that the hinge can be molded flatwise, whereby it can be cast complete with the screw-holes in it, substantially as described.

JOHN D. SHEPARD.

Witnesses:

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