

C. B. Clark,
Lock Hinge.

Nº 82,920.

Patented Oct. 13, 1868.

Fig. 1.

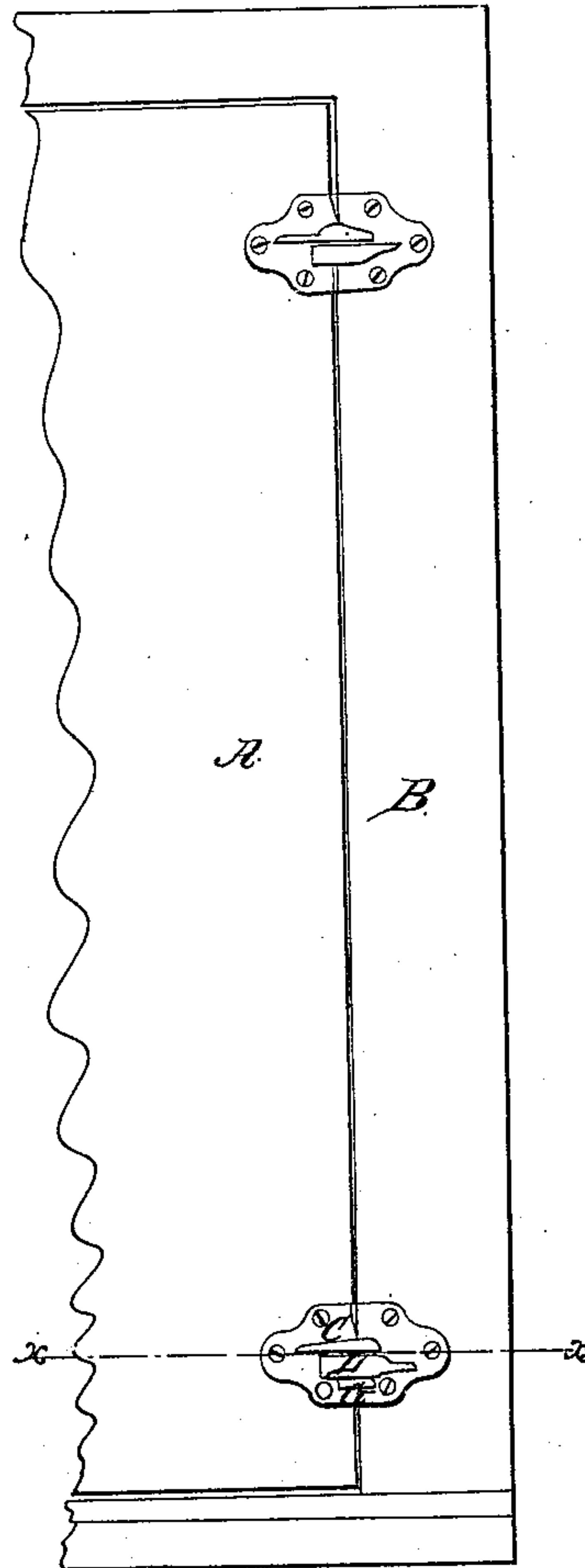


Fig. 2.

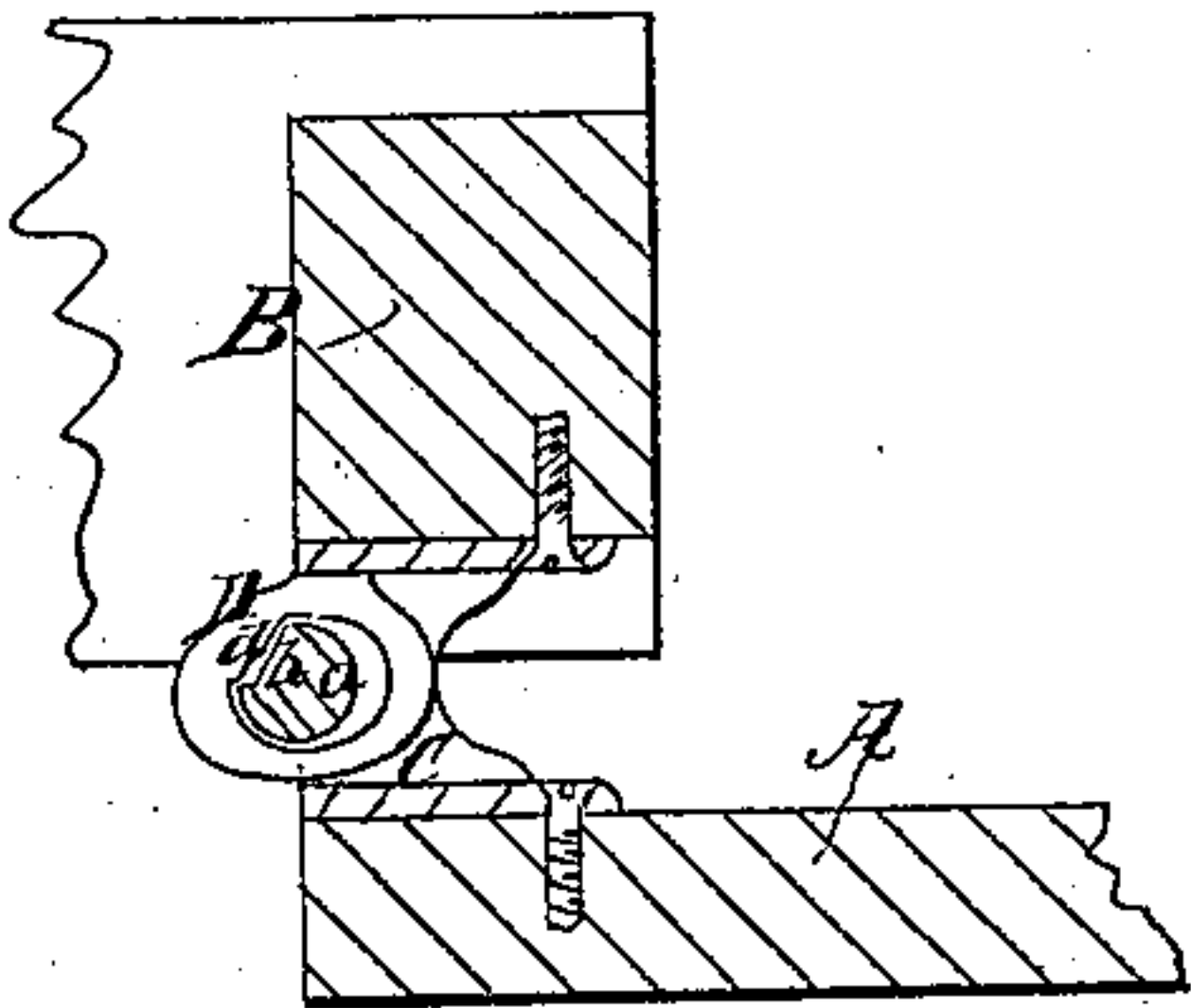


Fig. 3.

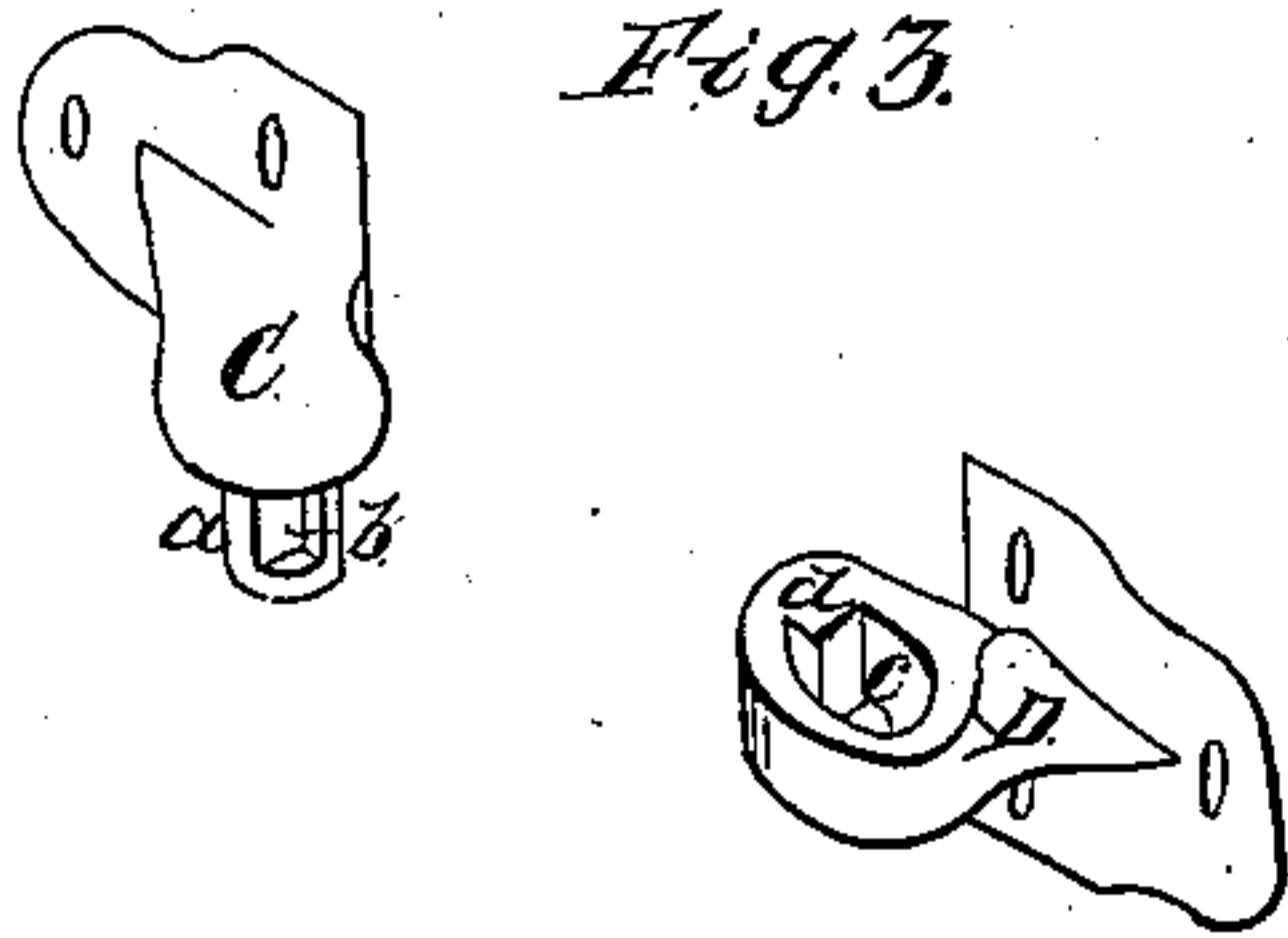


Fig. 4.



Witnesses:

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CHARLES B. CLARK, OF BUFFALO, NEW YORK.

Letters Patent No. 82,920, dated October 13, 1868.

IMPROVEMENT IN BLIND-HINGE.

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, CHARLES B. CLARK, of the city of Buffalo, county of Erie, and State of New York, have invented a certain new and useful Improvement in Self-Locking Blind or Shutter-Hinges; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an elevation, showing the application of my improved hinge to a shutter.

Figure 2, a horizontal section thereof, in plane of line *x x*.

Figure 3, a view in perspective of the two leaves of the hinge, detached.

Figure 4, a diagram showing the pintle and socket reversed in position from fig. 2.

Like letters of reference indicate corresponding parts in all the figures.

My improvement belongs to that class where the joint of the lower hinge has a degree of looseness or play, to allow the parts to lock and unlock by simply throwing the bottom of the shutter out or in.

The object is to so form the pintle and socket that when the shutter is opened, a positive lock will be produced, but in all other positions, either turning or closed, the pintle will form a close joint with the eye, thereby preventing rattling.

In the accompanying drawings, A indicates the blind or shutter, B the casing, C the upper, and D the lower hinge-plates. The pintle, *a*, of the lower hinge, is made cylindrical, but has formed in its surface, on one side, a longitudinal angular recess or slot, *b*, as clearly shown.

The socket or eye *c*, to receive the pintle, is circular, or nearly so, except that on one side, outside its periphery, it is so notched or recessed as to form a projecting catch, *d*.

When the shutter is wide open, the catch *d* and recess *b* engage, and a free space *f* is left in the eye for disengagement again, as clearly shown in fig. 2. In all other positions, however, either turning or closed, the pintle simply rests in the circular part of the eye or socket, and fills the same without any irregular motion or play. When the blind is wide open, the bottom falls back by its own gravity, and self-locks. It is opened by a single push.

I am aware that many blind-hinges are in use in which the bottom of the blind is thrown in and out

to engage and disengage the connection. In some of these the blind is held by running down an inclined plane; in others, a positive lock is insured; but in such cases, so far as I know, the eye or socket, in which the pintle rests, is made elongated, and in such form that the joint between the pintle and eye is loose, and in turning open or closed, an irregular shaking or rattling effect is produced.

It is my object to obviate these difficulties by so constructing the parts that, when opened, a positive lock is produced, but when in any other position, turning or closed, the pintle will rest closely in the eye without any loose play. This I do by making the pintle cylindrical, with the depressed slot *b* and the eye circular, with the projecting catch *d*, as before described. This accomplishes perfectly the purpose designed, keeping the parts tight, except at the moment of locking.

This hinge is simple and cheap in construction, since the whole can be cast, with the pintle and eye complete, without fitting or dressing, and the whole connection is formed with the lock inside, and without the addition of a loose pin or any other parts. The complete hinge is formed by the union of the two ordinary leaves or plates.

In addition to the above, this simple construction gives the lower hinge the same exterior form as the upper, thus conducing to general harmony of appearance. In ordinary self-locking hinges, the construction necessitates a deviation from the usual form, which disfigures the blind.

By my method of recessing the pintle, and its consequent self-engagement with the projection in the eye-piece, I believe my invention to be thereby the simplest and best of the class of self-locking hinges.

I do not claim broadly a loose-jointed, self-locking hinge, as I am aware that the same is not new; but

What I claim as my invention, and desire to secure by Letters Patent, is—

Forming the cylindrical pintle *a* with the depressed slot *b* and the circular eye *c*, with outside catch *d*, the whole combined and arranged as described, and operating in the manner and for the purpose specified.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES B. CLARK.

Witnesses:

J. R. DRAKE,

E. L. FERGUSON.