

T. FOWLER.
Hinge.

No. 202,162.

Patented April 9, 1878.

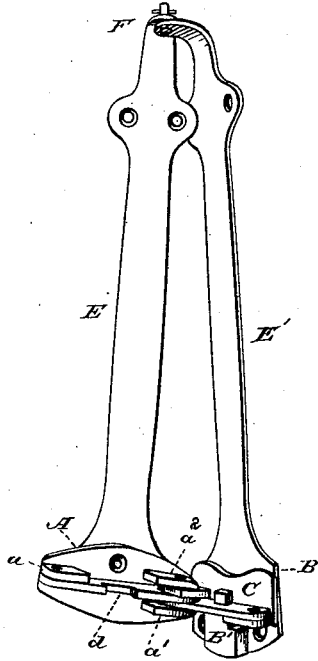


Fig. 1.

Fig. 3.

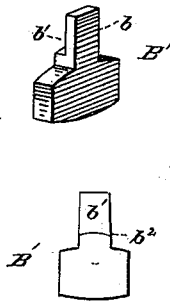


Fig. 2.

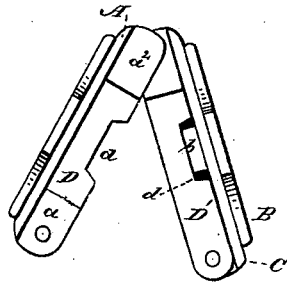
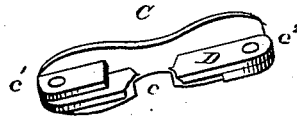


Fig. 4.



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IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. **202,162**, dated April 9, 1878; application filed October 12, 1877.

To all whom it may concern:

Be it known that I, THADDEUS FOWLER, of Seymour, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Hinges; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which they appertain 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.

This invention relates to that class of reversible hinges which have connecting-links to prevent them from being opened fully in either direction; and it consists in combining with such hinges a rocking-plate and pivot-block to prevent binding, and in certain other improvements, all as hereinafter set forth and claimed.

Figure 1 is a perspective view of my self-locking hinge when in its most open position. Fig. 2 is a top view of the same when nearly closed. Figs. 3 and 4 are detail views of the pivot-block and rocking-plate.

A and B respectively designate the straps of a door-hinge, the former being provided on its face with three lugs, a a^1 a^2 , and the latter with a pivot-block, B' , having the shape of an inverted T. Lugs a and a^1 are diagonally opposite one another at the ends of strap A, and lug a^2 is at the end thereof immediately above lug a^1 . All three lugs are horizontal when the hinge is applied to an ordinary door.

Pivot-block B' is located in the middle of strap B, and its upwardly-extending shank b is recessed on the side next to the last-named strap from the top downward at b^1 . The bottom b^2 of this recess is made convex, so as to serve as a pivot for a rocking plate, C, arranged longitudinally with regard to strap B. This plate is provided on its under side with a recess, c , concaved to fit on the convexity b^2 . Shank b prevents said plate C from separating from said strap B, except when raised vertically, and also braces said rocking plate.

The face of rocking plate C is provided at

its ends with two diagonally-opposite horizontal lugs, c^1 c^2 , similar to lugs a a^1 a^2 already described.

Lugs a , a^1 , c^1 , and c^2 constitute pivot-blocks for link-bars D D', ordinary pintles or studs being employed for the pivots. Each of these link-bars is recessed in the middle at d , so as to set over shank b when the hinge is folded together. They are preferably made flat, and placed horizontally, so that they will fold compactly, D being a little above D'. D links lug a of strap A to lug c^1 of rocking plate C, and D' in like manner links lower lug a^1 of strap A to lug c^2 of said rocking plate.

When turned in either direction the hinge opens freely until the straps A B are at right angles to one another. The attempt to open the hinge farther results in forcing the link-bars D D', respectively, against the faces of strap A and plate C, thereby locking the hinge in the position above stated, and holding the door only half open.

Plate C, by rocking, prevents the hereinbefore-described parts from binding. The attachment of the links D D' to the lugs a c^1 , &c., prevents the said rocking plate from being detached. Lug a^2 acts as a guide and shield to said link-bars.

The hereinbefore-described hinge is intended for use as the lower hinge of a door. Metal straps or plates E E' extend from straps A B to an upper hinge, F, of ordinary construction. Said parts E E' may be dispensed with.

Block B' may be made broad enough to extend across the entire face of strap B, and pierced with screw-holes, or provided with other means of attaching it and strap B to the door or jamb. The link-bars D D' may be pivoted to the respective pivot-lugs in any suitable manner.

The form and arrangement of any of the hereinbefore-described devices may be varied considerably without departing from the spirit of my invention.

Having thus described said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of straps A and B with

link-bars D and D', upright straps E and E', and upper hinge F, substantially as set forth.

2. The combination of strap A, having lugs *a a'*, with strap B, having recessed pivot-block B', rocking plate C, having lugs *c' c''*, and link-bars D D', substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THADDEUS FOWLER.

Witnesses:

GEORGE TERRY,
WILLIAM F. HOPSON.