SIGLER STIGER.

Improvement in Hinges.

No. 126,850. Patented May 14, 1872.

Fig. 1

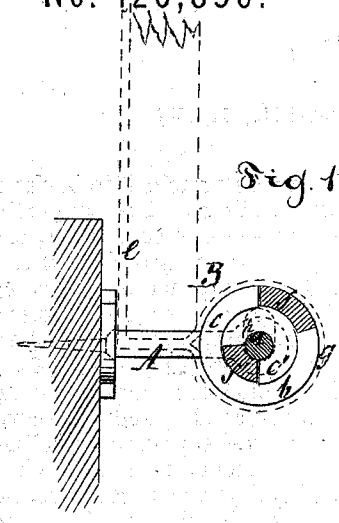


Fig. 3.

Fig. 5.

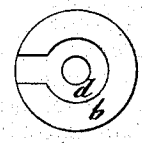


Fig. 4.

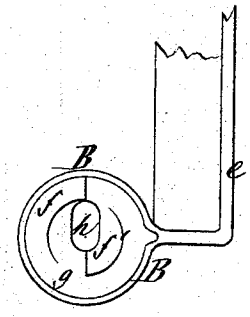


Fig. 2.

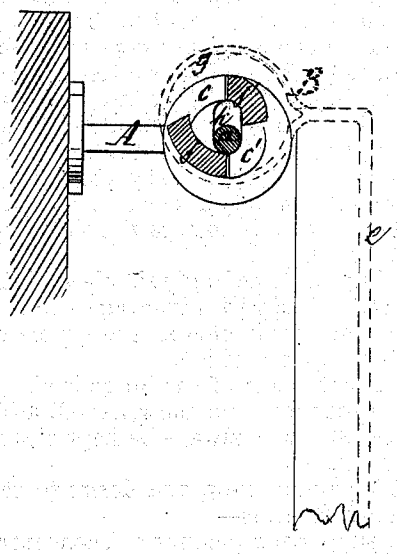
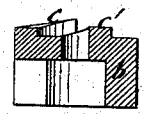


Fig. 6.



Witnesses.
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UNITED STATES PATENT OFFICE.

SIGLER STIGER, OF NEW YORK, N. Y.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. 126,850, dated May 14, 1872.

To all whom it may concern:

Be it known that I, SIGLER STIGER, of the city, county and State of New York, have invented a new and Improved Hinge for Shutters and Doors; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a horizontal section of my hinge when the shutter or door is closed. Fig. 2 is a similar section of the same when the shutter or door is thrown open and locked in its position by the hinge. Fig. 3 is a plan of the supporting inclines which are fitted to the hook of the hinge. Fig. 4 is an inverted plan of the working inclines fitted to the eye of the hinge. Fig. 5 is an inverted plan of the head carrying the supporting inclines. Fig. 6 is a vertical central section of the same.

Similar letters indicate corresponding parts.

This invention consists in the combination of two supporting inclines attached to the hook of a hinge with two working inclines secured to the eye of the hinge, said eye being provided with an oblong hole in such a manner that when the shutter hung on my hinge is closed the eye assumes a position concentrically with the fulcrum-pin of the hook, but when the shutter is thrown open its weight throws the working inclines in an eccentric position with the fulcrum-pin, causing said inclines to interlock with the supporting inclines, and to retain the shutter securely in position until it is pushed out sufficiently to throw the inclines out of gear. The working inclines may be formed on a head detached from the hook, and provided with a socket to fit on said hook in such a manner that the same can readily be fitted to hooks of ordinary hinges, and the labor of converting such ordinary hinges into my self-locking hinges is materially facilitated.

In the drawing, the letter A designates the hook of my hinge, on the pivot *a* of which is secured a head, *b*, which carries the supporting inclines *c c'*. Said head is either cast solid with the hook, or it may be made detached and provided with a socket, *d*, (see Fig. 5,) so that it can be readily dropped over the pivot *a* and over the shank of the hook, and that such heads can be attached to hooks already fastened to buildings. The supporting inclines *c c'* are concentric to each other, each forming about half a circle, (see Fig. 3,) their ends pointing in opposite directions. The eye B of my hinge is connected to the shutter or door by means of an arm, *e*, (see Fig. 4,) and from its lower surface project the working inclines *f f'*. These inclines are secured to a head, *g*, similar to the head *b*, and they correspond in position to the supporting inclines, but the hole *h* which extends through the head *g* is oblong. The head *g* is, by preference, cast separate and secured in the eye B by any suitable means; but, if desired, the eye and head may be cast solid.

If the shutter is closed the working inclines *f f'* occupy the position shown in Fig. 1, and the pivot *a* is in the center of the head *g*; but, if the shutter is opened to the position shown in Fig. 2, the weight of the shutter causes the incline *f* to slide back on incline, *c*, so that its shoulder bears against the shoulder of the incline *c'*, (the oblong hole *h* in the head *g* allowing this motion,) and thereby the shutter is locked, and it can only be closed if it is pushed out sufficiently to disengage the shoulders of the inclines *f* and *c'*.

This hinge is exceedingly simple and cheap, and it can be used with advantage for all shutters, gates or doors which it is desirable to retain in their open position.

The elongated slot of the hinge is closed at top to keep out rain and snow, as well as dust, so that the slot will always be kept clear and unobstructed.

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

1. The supporting inclines *c c'*, concentric to each other, formed on the head of the hook A, in combination with the working inclines *f f'* formed on the head *g* of the eye B, said head *g* being provided with an oblong hole, *h*, whereby the inclines can be thrown out of gear, substantially in the manner shown and described.

2. The head *b*, provided on its upper surface with inclines *c c'*, and on its under surface with a socket, *d*, which fits the end of the hook A, substantially as set forth.

SIGLER STIGER.

Witnesses:

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