C. B. CLARK. Lock-Hinges.

No.156,277.

Patented Oct. 27, 1874.

Fig. 1.

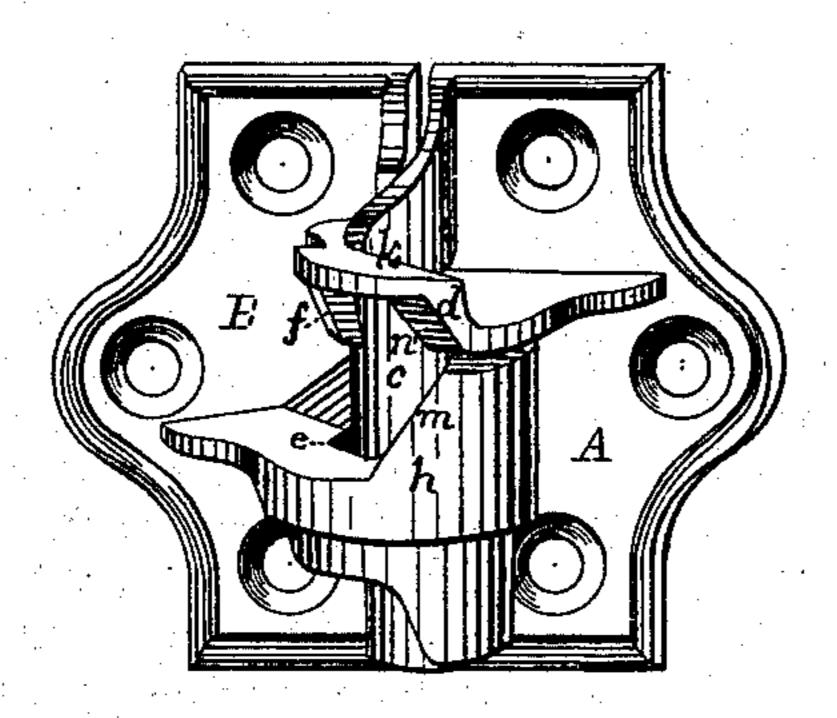


Fig. 2.

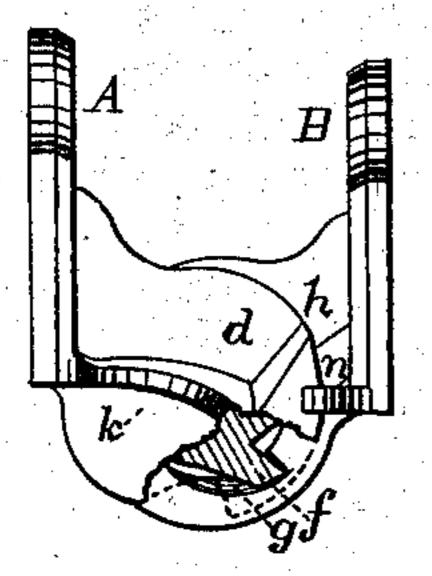
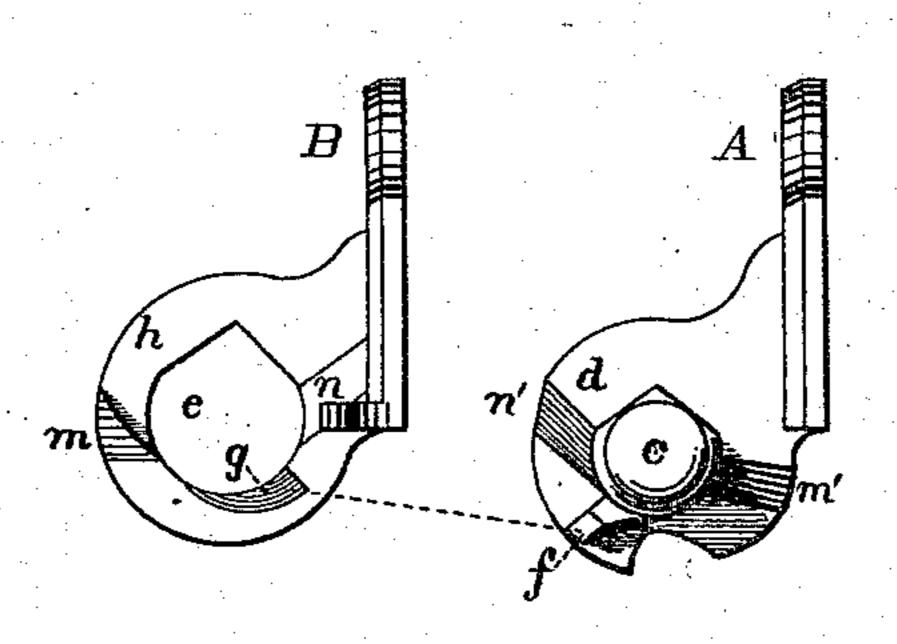


Fig. 3.



Witnesses:

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United States Patent Office.

CHARLES B. CLARK, OF BUFFALO, NEW YORK.

IMPROVEMENT IN LOCK-HINGES.

Specification forming part of Letters Patent No. 156,277, dated October 27, 1874; application filed June 1, 1874.

To all whom it may concern:

Be it known that I, CHARLES B. CLARK, of Buffalo, Erie county, New York, have invented an Improved Blind-Hinge, of which the follow-

ing is a specification:

My invention relates to that class of blindhinges which are self-locking, or those which fasten the blind, when opened, by the half of the hinge to which the blind is attached sliding down an incline on the half attached to the house; and it has for its object the more effectually to secure the blind when in an open position, and prevent its being closed by the wind or other accidental cause, and yet admit of its ready closing by hand when required; and it consists in the combination, with a gravity-locking hinge provided with gravitating locking inclines, of a projecting catch or stop formed upon the pin of the hinge, which, when the blind is swung open and the male portion descends—the inclines of the knuckle on the female portion of the hinge drops into a notch formed in the eye of the female half, and acts in conjunction with and | auxiliary to the locking-inclines, to increase the resistance, and thus serve to hold the blind securely in an open position.

Figure 1 of the accompanying drawings is a perspective view of my improved hinge when closed. Fig. 2 is a plan and part section of the same when open; and Fig. 3 a plan of the parts detached, in which A represents the male portion inverted, and B the female por-

tion of the hinge.

In the drawings, A represents the male portion of the hinge, provided with the pin c, and B the female portion, having the eye e. The pin c is surmounted by the knuckle k and the flange d, on which are formed the inclines m'n'. Corresponding inclines m n are also formed on the proximate side of the knuckle k. The part A being rotated upon the part B, the face of the lower part of the flange d bearing against the upper surface of the higher part of the knuckle k, until the blind is nearly open, bringing the double inclines m m' coincident, when the blind gravitates to the bottom of the inclines, in which position it rests, being fully open and locked against accidental causes. When desired to close it, it is disen-

gaged by steadily pulling, the force of the hand overcoming the resistance caused by the inclines.

The pin c and socket e are preferably formed cylindrical on one side, and angular on the opposite one, as seen in Fig. 3, leaving, however, sufficient room in the socket to admit of

the pin turning freely.

In gravity-locking blind-hinges, constructed with inclines which engage, by the gravitation or descent of one half upon the other, when the blind is open, to lock it in that position, it is found that, although the locking-inclines offer sufficient resistance to ordinary winds to prevent the closing of the blind, yet will yield to unusually strong winds, and it is hence desirable to provide such hinges with a means which will increase the resistance to unintentional closing, and effectually prevent the same. To this end I provide the hinge with a stop, f, on the circular side of the pintle, situated so as to come into action when the blind gravitates down the inclines. The stop f projects radially on one side. Its other side is beveled, and its outer face inclined to correspond with the inclines m' n', and its base joined with the flange d. The female portion has a corresponding recess, g, formed in the eye next the bearing-surface of the knuckle k, one side of which is abrupt, and the other beveled like the stop f. The positions of this projection and its recess are such that when the blind is opened to the fullest extent their abrupt sides approximate, and the blind is so firmly held by the engagement of this stop, aided by the inclines and the pin bearing against the side of the eye, that it is secure against accidental causes, such as sudden gusts of wind, &c., unlocking the blind, and yet it yields to the effort of the hand, the steady lateral pull of which raises the stop f out of the recess by the movement of the inclines m m'weight of the blind is borne by the under sur- | upon each other. It will be observed that the stop and recess offer no resistance to this movement, as they are formed parallel with, or with the same inclination as, the inclines m n m' n', so that the blind may thus be closed by the hand with as much ease as if the stop were not used.

The construction is such that the blind may be thrown violently open without straining the hinge, and it may be molded and cast as readily as the old form.

I claim as my invention—

In combination with the locking-inclines mn m' n', the auxiliary locking-stop f and recess g, said inclines, stop, and recess arranged and operating in conjunction with each other, as and for the purpose herein set forth. Wm. W. Clark.

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

CHARLES B. CLARK.

H. R. CLARK, I and I am a second and the second and