

(No Model.)

L. PORTER.  
LOCK HINGE.

No. 421,511.

Patented Feb. 18, 1890.

Fig. 1.

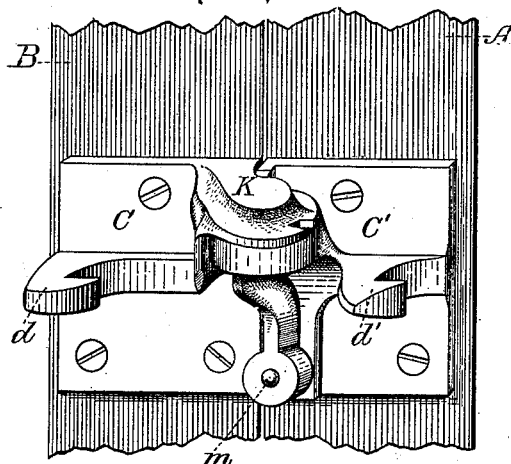


Fig. 2.

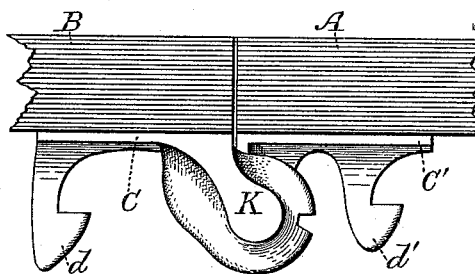


Fig. 3.

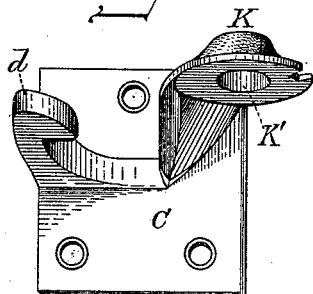


Fig. 4.

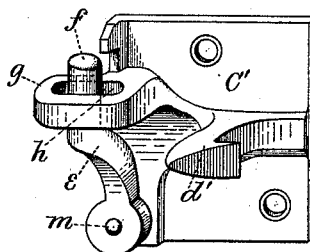
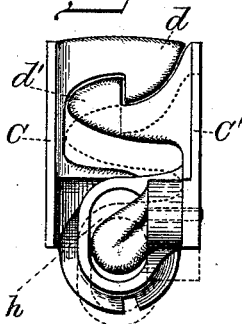


Fig. 5.



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# UNITED STATES PATENT OFFICE.

LANSING PORTER, OF AUBURN, NEW YORK.

## LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 421,511, dated February 18, 1890.

Application filed October 19, 1889. Serial No. 327,594. (No model.)

*To all whom it may concern:*

Be it known that I, LANSING PORTER, of the city of Auburn, New York, have invented certain new and useful Improvements in  
5 Hinges for Blinds, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to that class of blind-hinges which automatically lock the blind in  
10 its open position; and it consists in devices adapted to accomplish this result.

In the drawings, Figure 1 is a perspective view of my invention as it appears when attached to a blind which is closed. Fig. 2 is  
15 a top view of the same. Figs. 3 and 4 show the two leaves of the hinge separated to show further details of structure, and Fig. 5 is a view from below of the hinge in its opened and locked position.

20 Its operation is as follows:

A represents the window-frame, and B the lower part of the blind, which may have at its upper part any of the usual forms of blind-hinges now in use.

25 C and C' are the two leaves of the hinge, secured, respectively, to the blind and window-frame. The hinge-leaves are provided with hooks *d* and *d'*, respectively, adapted to engage as shown in Fig. 5. The leaf C'  
30 has pivoted at one of its lower corners a vibrating pintle or standard *e*, which passes through an elongated slot *h* through the flange-plate *g*. The leaf C is provided with a flange *k*, in the under side of which is a  
35 socket *k'*, adapted to engage the end *f* of the pintle *e*. This pintle is curved so as to stand out before the leaf C', and occupies the position in which the knuckle of such hinges is usually placed.

40 In operation the axis of rotation of the blind is a line from the center of the upper to the center of the lower pintles, or pintles of the upper and lower hinges. Since the cen-

ter of gravity of the blind is outside of this axis, the weight of the blind in any position  
45 pushes toward this lower hinge, as the upper blind-hinge does not admit of motion there, except rotation on its fixed pintle. This tendency of the blind, when it is closed, as in Fig. 1, pushes the pivoted pintle *e* to the end  
50 of the slot *h* nearest to *d'*, and when the blind is open, as in Fig. 5, pushes the pintle *e* to the end of said slot farthest away from *d'* and causes the hooks *d'* and *d* to engage and lock the blind open. The hooks may be disen-  
55 gaged by a moderate force, as by the hand applied in a horizontal direction, and causing the pintle *e* to swing to the end of slot *h* nearest to *d'*.

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

1. In a blind-hinge, a pivoted pintle *e*, secured to one leaf, and a socket engaging there-  
with secured upon the other leaf, substan-  
65 tially as described.

2. A blind-hinge having the leaf C', provided with the pintle *e*, pivoted thereto, and the loop *g*, around the upper part of said pintle, and the leaf C, provided with a socketed  
70 knuckle K, adapted to engage the free extremity of said pintle.

3. A blind-hinge composed of the leaf C', which is provided with a swinging pintle *e*, pivoted thereto at its lower extremity, the loop *g*,  
75 whereby the play of said pintle is limited, and the hook *d'*, and the leaf C, which is provided with a socketed knuckle K, adapted to engage the free extremity of said pintle, and the hook *d*, adapted to engage hook *d'*, as de-  
80 scribed.

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