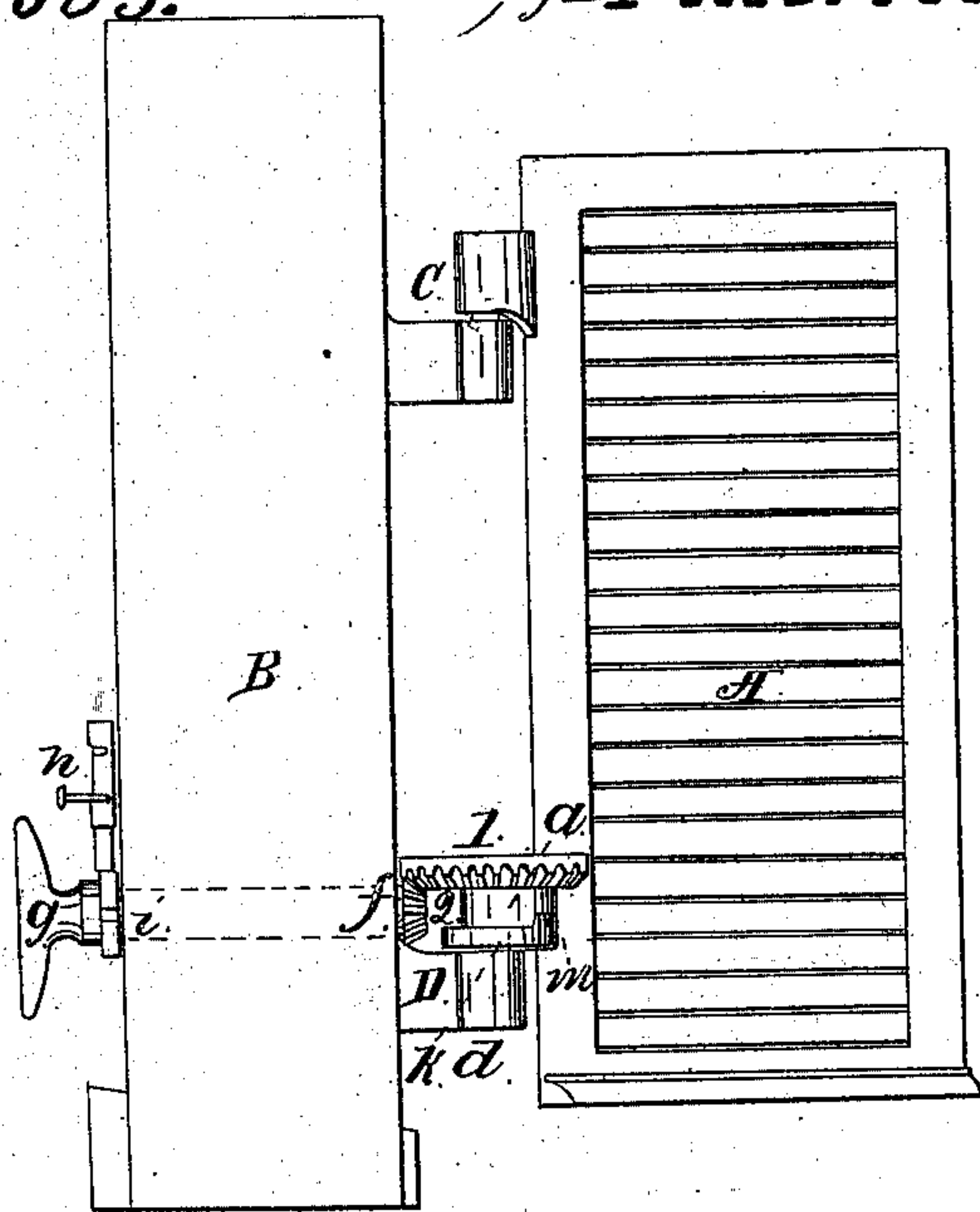
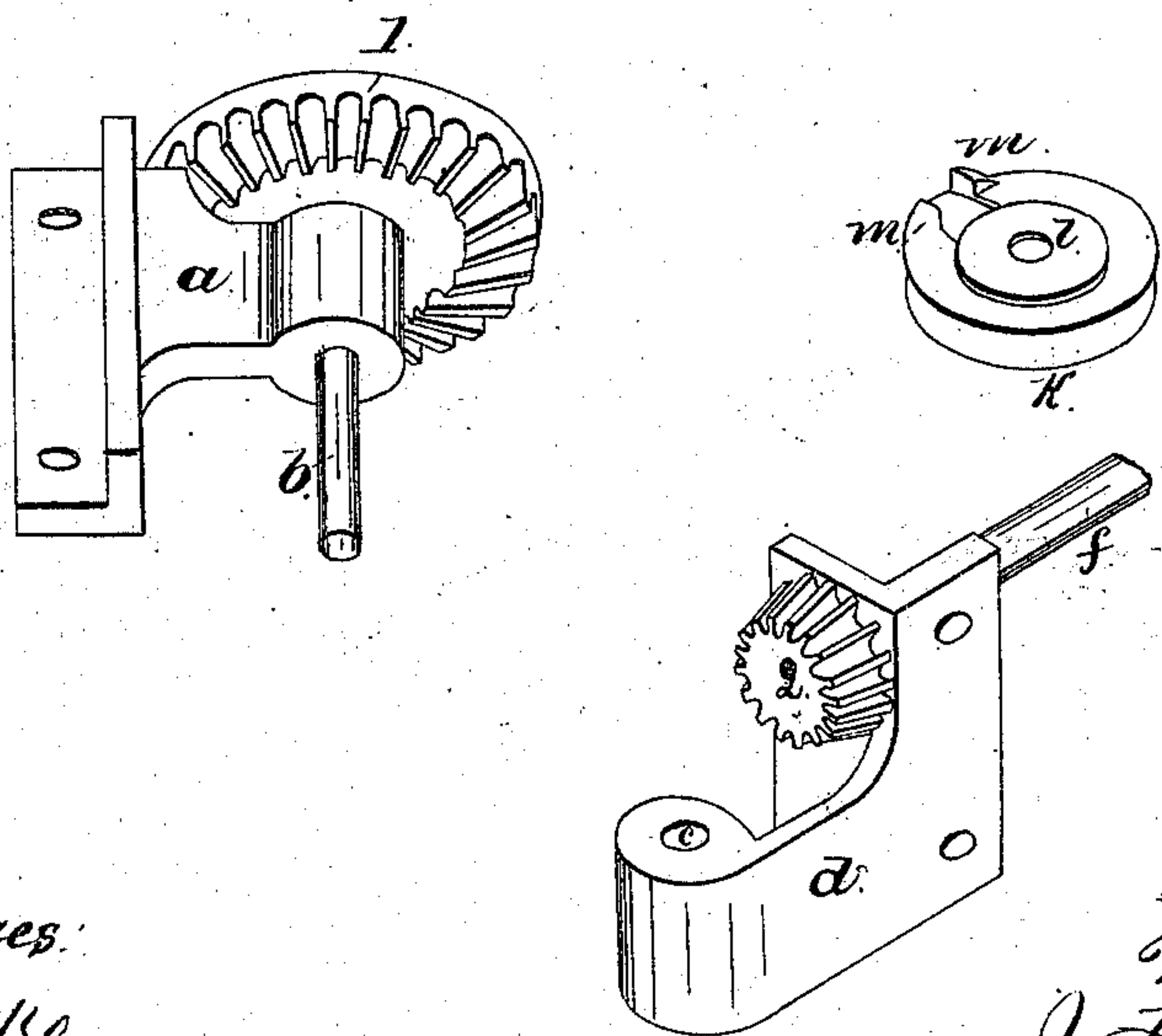


*M. Adler,*  
*Shutter Worker.*  
*N<sup>o</sup> 83,585. Fig. 1 Patented Nov. 3, 1868.*



*Fig. 2.*



*Witnesses:*  
*J. R. Drake.*  
*E. W. Munt.*

*Inventor:*  
*Max. Adler.*  
*J. Fraser & Co.*  
*Atty.*



MAX ADLER, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF  
AND HENRY BREITWIESER, OF SAME PLACE.

*Letters Patent No. 83,585, dated November 3, 1868.*

**IMPROVEMENT IN BLIND-HINGES.**

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, MAX ADLER, of the city of Buffalo, county of Erie, and State of New York, have invented a certain new and useful Improvement in the Operating-Hinges of Window-Blinds ; 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.

Figure 1 is an elevation of a blind and casing, with my improvement attached.

Figure 2, a perspective view of the several parts of my improved hinge, detached and separated.

Like letters of reference indicate corresponding parts in both figures.

My invention consists in the employment of a bearing-cushion between the leaves of the lower hinge, combined with suitable gearing, whereby, when the blind is turned, there is no jarring or irregularity of motion.

In the drawings,

A indicates a blind or shutter ;

B, the casing ;

C, the upper, and

D, the lower hinges.

The upper leaf or plate *a* of the lower hinge is cast with an inverted bevel-gear, 1, and also with pintle, *b*, which rests in the socket *c* of lower plate. The lower leaf *d* of the hinge has a pinion, 2, which gears with 1, to turn the blind open or shut, and this receives motion by shaft *f*, which extends through the casing into the room inside, and has a knob, *g*, or other handle, by which it is turned.

Catches *h h* are attached in the inside, which, when depressed, engage with notches *i i*, formed in a collar

of the shaft, and retain the latter in any desired position.

Around the pintle *b*, and between the leaves of the hinge, is placed a separate bearing-block, *k*, holding a cushion of India rubber, *l*, on which rests the upper leaf with the full weight of the blind. This bearing is made to turn with the upper leaf, upon the lower one, by means of lugs *m m*, which embrace the edge of said upper leaf, as clearly shown.

This bearing-cushion presents an especial advantage, in supporting the weight of the blind or shutter, as it were, on a spring, whereby all shock, jarring, and irregularity of motion are obviated. This is very desirable, since it is much easier to operate, and more enduring. At the same time, the rubber cushion is subject to no friction, since it moves with the blind, resting stationary upon it.

Sharp-edged slats *p p* are attached to the lower edge of the blinds, outward, resting closely over the window-sill. These serve to scrape off snow and ice, as the blind opens.

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

The combination of the interposed bearing-cushion *k l* with the geared hinge-leaves *a d*, 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.

MAX ADLER.

Witnesses :

J. R. DRAKE,

GEO. W. MATT.