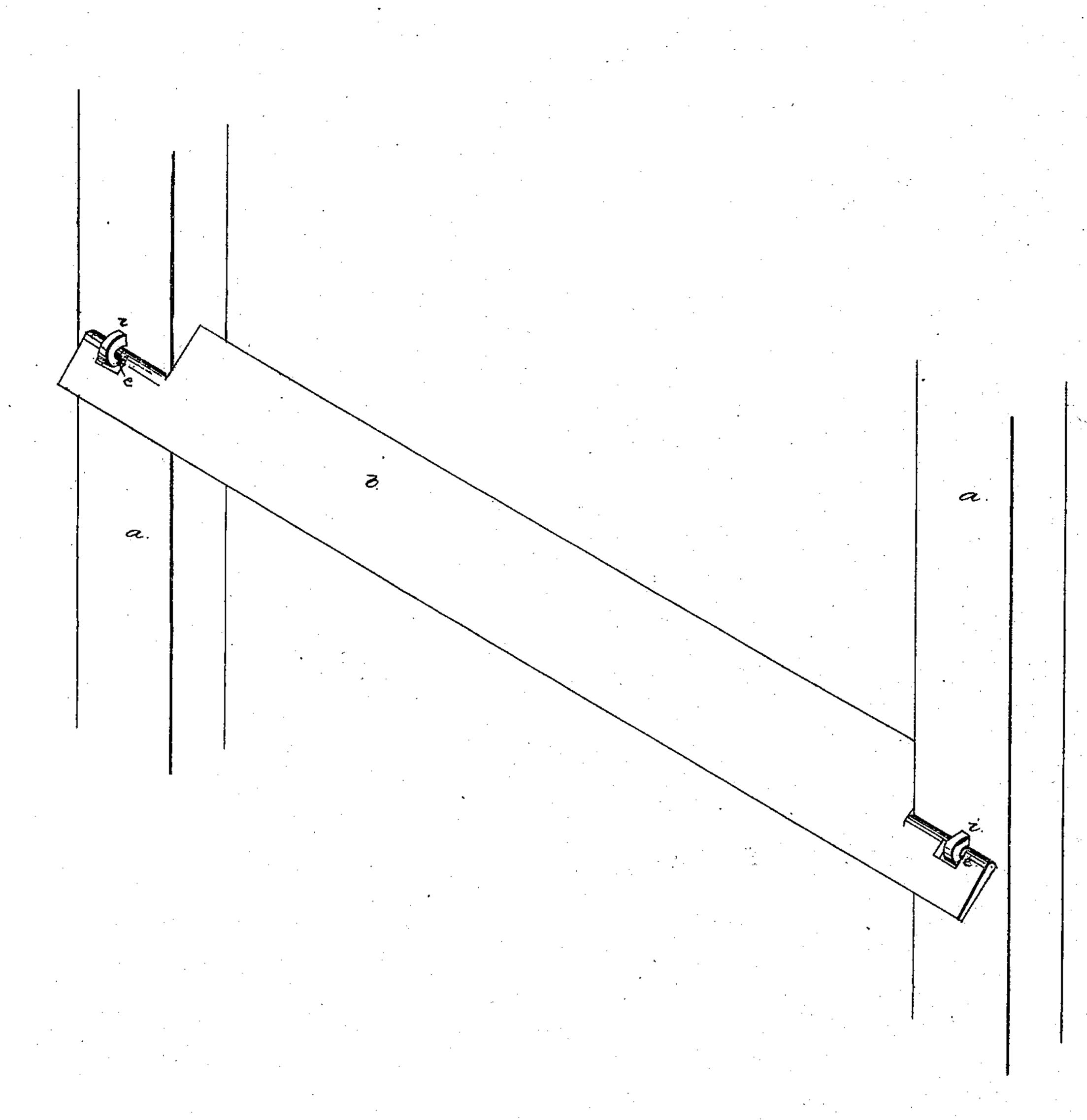
H. Blakely,

Window Shutter,

Patented Jan. 23, 1855.



## UNITED STATES PATENT OFFICE.

HENRY BLAKELY, OF NEW YORK, N. Y.

## IRON WINDOW-BLIND.

Specification of Letters Patent No. 12,292, dated January 23, 1855.

To all whom it may concern:

Be it known that I, Henry Blakely, of the city, county, and State of New York, have invented a certain new and useful Im-5 provement in Blinds for Windows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawing, making a part of this specification, and 10 which is a view in perspective of a portion of the stiles of a blind and having but one of the slats for greater clearness.

My invention consists in certain improvements in the construction of metallic blind 15 shutters for windows and other openings in the walls of buildings having for their object the ability to make the blinds or movable slats of much thinner metal than is now deemed necessary for strength and 20 safety. By these means therefore I am less cost and at the same time to so improve their delicacy of appearance that they will be found applicable in all respects to dwell-25 ings, whereas heretofore such have been confined chiefly to the windows of warehouses wherein elegance of make was not essential.

If a very thin metal shutter is hung in 30 the frame on the old methods, a very slight force is sufficient to bend or deflect them to such extent that the pivots would be easily taken out of their sockets and thus the aperture be opened. By my method this can-35 not be done, and herein lies the chief feature of my improvement.

I hinge or pivot each blind by its end to the frame in such way that the pivot cannot be withdrawn, and thus, although the metal 40 by reason of its thinness and lightness could

be easily bent were it detached, is yet secured against such bending while in its frame in consequence of the resistance offered by the pivots when they are acted upon in a direction tending to withdraw

them from their eyes, since the bending of the blind would in effect shorten the distance between the points of support which are the pivots. This will now be made evident by reference to the drawing wherein 50 (a) represents the frame or stiles of the blind on two sides thereof, and (b) one of the shutters or slats hung on my principle, and made of thin sheet metal. At (e) are the pivots, here shown as formed out of the 55 blind itself, although other forms may be employed, such as riveting up the heads of the pivots, or keying them on the outside of the eyes. At (i) are the eyes by which the blinds are secured to the frame (a). It 60 will now be seen that although the blind by reason of its thinness might easily be bent if detached from the frame, yet when once in place this bending is limited to the deflection allowed by the lateral play of the 65 enabled to construct said blinds at much | joints at the hinge, and hence to bend it further, would require a force sufficient to break the metal at its weakest point, whether in the eye, hinge or elsewhere, and such resistance will be sufficient for all ordinary 70 purposes of security.

> The movement of the blinds for opening or closing is effected by a rod as usual, or in any other manner found most convenient.

I claim— The herein described method of fastening the metal blinds or slats to the frame, by securing their ends, or the pivots on which they turn, in the eyes in such manner as will prevent the blinds from being 80 taken out by any force applied to bend them short of the breaking strength of the several parts, the whole being constructed substantially in the manner and for the purposes set forth herein.

HENRY BLAKELY.

Witnesses:

S. H. MAYNARD, Jas. L. Roberts.