(No Model.)

R. CLARKE.

HANGER FOR SLIDING DOORS AND WINDOWS.

No. 375,260. Patented Dec. 20, 1887.

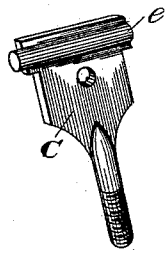


Fig. 4.

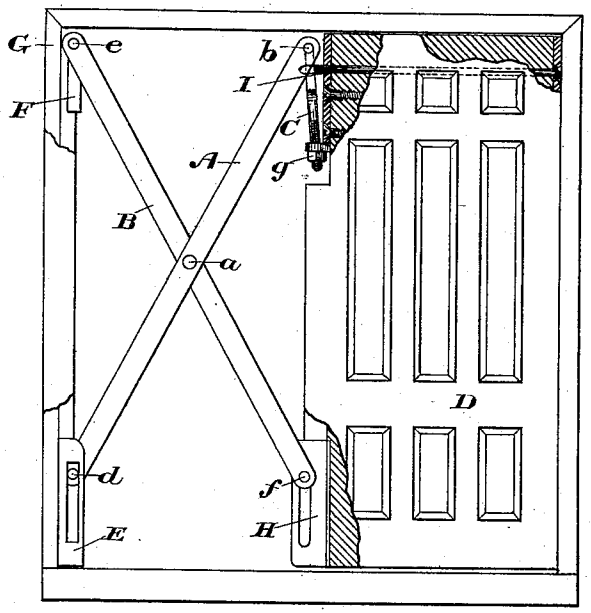


Fig. 1.

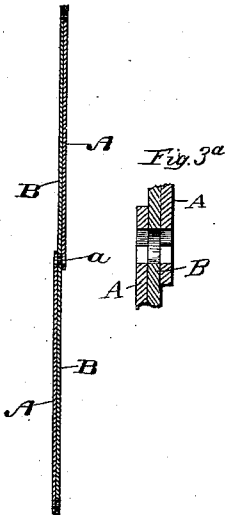


Fig. 3.

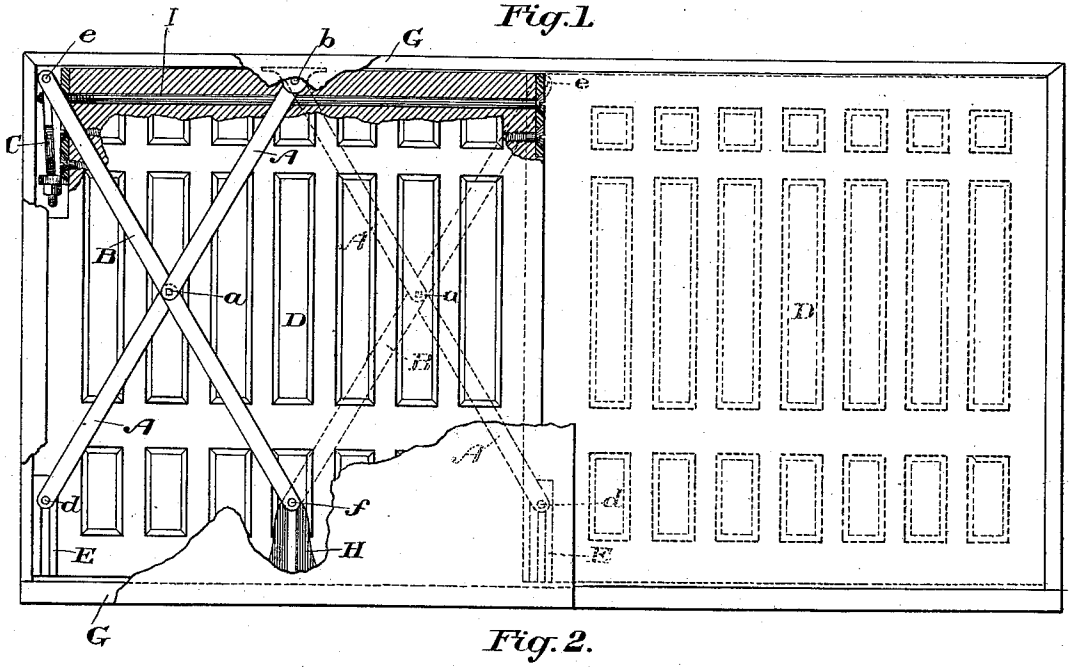


Fig. 2.

Witnesses.

Jack M Jackson

Chas. H. Riches

Inventor.

Reuben Clarke

by Donald C. Ridout & Co

Attys

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

REUBEN CLARKE, OF TORONTO, ONTARIO, CANADA, ASSIGNOR OF TWO-THIRDS TO WILLIAM FERGUSON MUNRO, OF SAME PLACE.

HANGER FOR SLIDING DOORS AND WINDOWS.

SPECIFICATION forming part of Letters Patent No. 375,260, dated December 20, 1887.

Application filed March 14, 1887. Serial No. 230,758. (No model.) Patented in England May 6, 1887, No. 6,675.

To all whom it may concern:

Be it known that I, REUBEN CLARKE, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, machinist, have invented certain new and useful Improvements in Hangers for Sliding Doors and Windows, (for which I have obtained Letters Patent in Great Britain, No. 6,675, May 6, 1887,) of which the following is a specification.

The object of the invention is to design a hanger for a sliding door or window, which will support the door or window so that it may be moved freely without binding or moving from its proper track; and it consists in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described and claimed.

Figure 1 is a side view, partially in section, of a narrow door provided with my improved hanger. Fig. 2 is a similar view of a wide door provided with my improved hanger. Fig. 3 is a detail of a hanger when made for a wide door. Fig. 3ª is an enlarged sectional detail. Fig. 4 is a detail of bracket.

In the drawings like letters of reference indicate corresponding parts in each figure; but for convenience in describing my invention I shall first refer to the construction shown in Fig. 1.

The bars A and B are joined together by a pivot-pin, *a*. The upper end of the bar A is pivoted at *b* to the bracket C, which is adjustably connected to the door D, as shown. The lower end of the bar A is provided with a pin, *d*, which fits into a slot made in the bracket E. The upper end of the bar B is pivoted at *e* to a bracket, F, fixed to the door-frame G, and the lower end of the bar B is provided with a pin, *f*, which fits into a slot made in the bracket H, fixed to the door D, as shown. The bracket C is vertically adjusted by means of a nut, *g*, and is secured to the door D by means of the rod I, which passes through the bracket C and door D as indicated. The bars A B, jointed together, as described, and connected to the door D, and its frame G, as specified, will support the door D and permit it to slide freely, as the entire weight of the door is carried on the pivot-points described. The bars A B further act as braces for the purpose of holding the door in proper line and prevent it from binding or getting off its track.

When my hanger is applied to a wide door, as shown in Fig. 2, the upper end of the bar A is pivoted at *b*, carried in a bracket attached to the door-frame G, while its lower end is provided with a pin, *d*, as usual, which fits into a slot made in the bracket E. The upper end of the bar B is pivoted at *e* to an adjustable bracket fixed to the door D, while its lower end is provided with a pin, *f*, which fits into a slot made in the bracket H, fixed to the door-frame G. In other words, the pivot-points which are connected to the door in Fig. 1 are connected to the door-frame in Fig. 2.

When the hanger is made as shown in Fig. 2, it is necessary that the bar A shall be divided, one half being placed below the bar B and the other half above it, the pivot-pin *a* fitting into square holes in the two parts of the bar A, while a round hole is made in the bar B, so as to keep the two parts of the bar A in their extended position, and yet to permit the bar B to move on its pivot.

It will be noticed that if the bar A were not divided, as shown, the said bars would not pass each other, as indicated in dotted lines, the full lines showing the position of the hanger when the door is open and the dotted lines showing their position when the door is closed.

I should have mentioned that the rod I is for the purpose of preventing the door sagging, as it is merely necessary to screw the rod I into the bracket C should the door sag in the least, either by shrinkage or undue weight.

What I claim as my invention is—

1. The combination, with the door and its frame, of the bracket C, connected to the door, the bars A B, pivoted together at *a* and connected to said door and frame, as described, and the rod I, passed through said door and bracket, as and for the purpose specified.

2. The combination, with the door and its frame, of the vertically-adjustable bracket C, connected to the door, the bars A B, pivoted together at *a* and connected to said door and frame, as described, and the rod I, passed

through said door and bracket, as and for the purpose specified.

3. The combination, with the door and its frame, and the bracket C, connected to said door, of the rod I, passed through said door and bracket, the bracket secured to said frame, the bar B, formed at its center with a round hole, the bars A, formed at their inner ends with square holes coincident with the hole in the bar B, a pivot-pin passing through said holes, and the ends of said bars connected with said door and frame, substantially as described, and for the purpose specified.

Toronto, February 28, 1887.

REUBEN CLARKE.

In presence of--

CHARLES C. BALDWIN,

CHARLES A. RICHES.