

(No Model.)

R. G. McCLELLAN.
HINGE.

No. 544,413.

Patented Aug. 13, 1895.

Fig. 1.

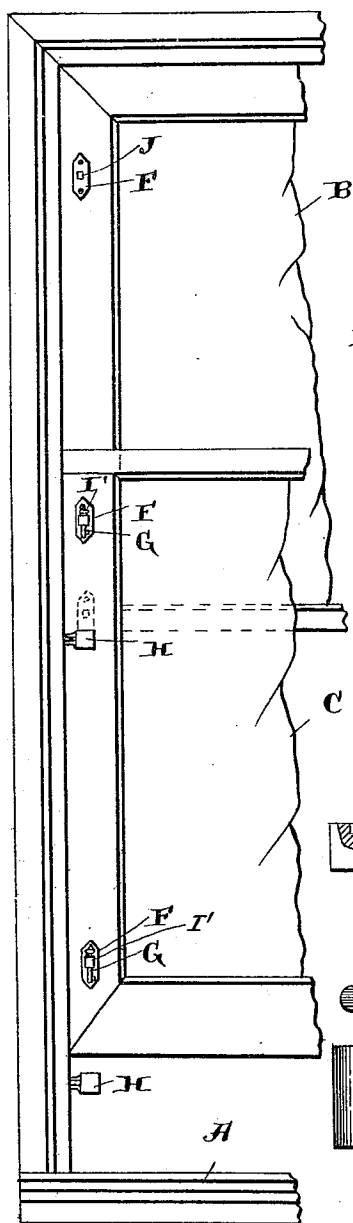


Fig. 2.

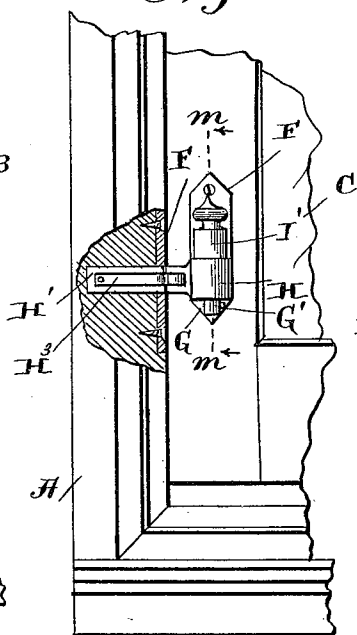


Fig. 3.

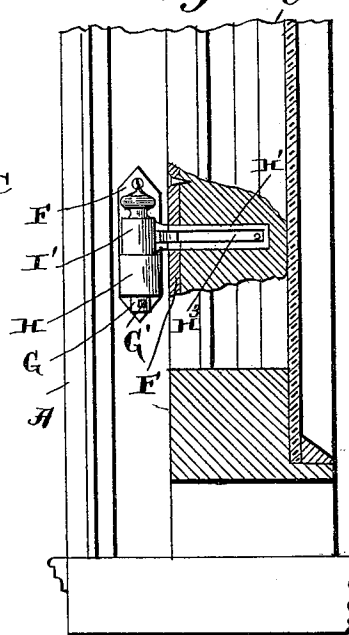


Fig. 4.

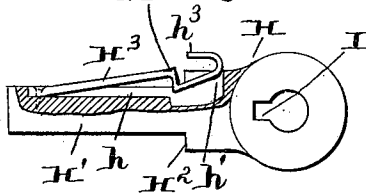


Fig. 5.

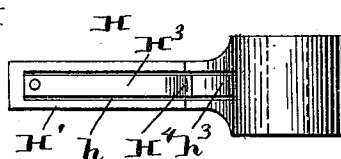


Fig. 6.

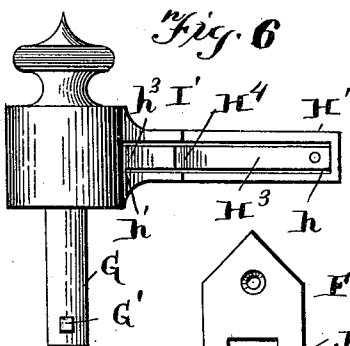


Fig. 7.

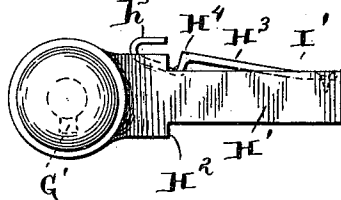
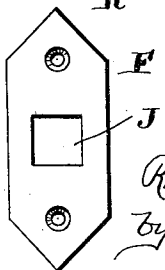


Fig. 8.



Witnesses:

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UNITED STATES PATENT OFFICE.

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HINGE.

SPECIFICATION forming part of Letters Patent No. 544,413, dated August 13, 1895.

Application filed January 18, 1895. Serial No. 535,417. (No model.)

To all whom it may concern:

Be it known that I, ROLANDO GUY McCLELLAN, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented a new and useful Portable, Interchangeable, and Transversible Hinge for Window-Sashes, of which the following is a specification.

This invention relates to builders' hardware, and more especially to that class known as hinges; and the object of the same is to produce a hinge which may be readily applied to the sashes of windows, so as to allow them to swing inward for the purpose of cleaning, &c. To this end my invention consists in the construction hereinafter more fully described and claimed, and as illustrated in the accompanying drawings, wherein—

Figure 1 represents a view in elevation of part of a window frame and sash, showing the disconnected parts of my hinge applied to the proper places. Fig. 2 is a view in elevation of one corner of the sash with a complete hinge attached ready for operation. Fig. 3 is a section on line *m m* of Fig. 2. Fig. 4 is a plan view of one portion of the hinge. Fig. 5 is a side view of the same. Fig. 6 is a side view of the portion of the hinge which carries the pintle. Fig. 7 is a plan view of the same. Fig. 8 is an elevation of one of the plates which are fastened to the frame and sash, and by means of which the hinges are locked in position.

Referring to the drawings, A is the window-frame, and B and C are the upper and lower sashes, which are hung and slid in the usual manner. At a short distance above the sill and in the edge of the frame is a hole, and a little higher and yet below the midrail of the sashes is another hole. There is also another series of holes in the window-frame in line with those just mentioned, and these are located within the front pulley-stile. The window-sashes B and C are also provided with holes in their front faces located near the top and bottom of each sash, but which do not extend entirely through the frame. These holes are in such a position as to be in line with the holes in the frame A when the window stands

at a point where the lower rail of each sash clears the sill-bead of the frame A.

F is a metallic plate provided with screw-holes near its ends, and a square hole J near its center, smaller than that in the frame, and it may be round.

H is one member of my hinge having its inner end H' square and smaller than its outer end, so as to provide a shoulder H², or the reduced portion may be round and provided with screw-threads. Near the outer end it is provided with a vertical hole having an offset or groove I. In the side of this member H is a longitudinal groove *h*, which is continued beyond the shoulder H² into the head of the member, as at *h'*, and opens through one side thereof; and within this groove is a spring H³, which extends the entire length of the groove, but is only secured at its inner end. The body normally springs out of the groove and is bent into such shape as to produce the shoulder H⁴, the outer end being again bent around to form a handle *h*³, terminating at a point just beyond the shoulder H² and projecting normally out of the groove *h'* in the head.

I' is the other member of the hinge formed in the same manner as the member H, except that it has secured in the vertical hole in its front end a pintle or pin G, said pin having near its lower end a laterally-projecting lug G'. This lug is so located that when the two members H and I' are held at right angles to each other the lug G' will pass down through the groove I in the member H.

When it is desired to swing the lower sashes inward it is first raised and the shank H' of the member H is inserted in one of the holes in the window-frame and pushed inward until the shoulder H² strikes the plate F. When it is first inserted the spring is shoved within the groove in the side of the member H until the shoulder H⁴ of the spring clears the edge of the plate F, when it will immediately spring behind the same, thus holding the edges of the plate F between the shoulder of the spring and that of the member H. The member I' is then inserted in the window-sash and is held therein in the same manner. The sash is again lowered and the lugs G' of the pintles G

pass through the grooves I. The window is thus held so as to clear the window-sill, and after the bead has been removed from the opposite side of the window-frame the sash can be swung inward, the lug serving to prevent the displacement or separation of the members of the hinge. When this has been done the upper sash may be lowered, the hinges acting in the same manner, and after the parting-bead has been removed this sash may also be swung inward. It is obvious that the sash-cords must be removed, which can be easily done, as they may be fastened temporarily to the window-frame, and that the beads are screwed in position so that they may be easily removed. When it is desired to again close the window, the sash-cord is first fastened to the upper sash, the latter closed, and the parting-bead replaced, and the sash then raised to disengage the two members of the hinge. These members are removed by compressing the spring by its handle far enough to disengage its shoulder H⁴ from behind the plate F. The lower sash is also replaced in the same manner, and all that is left on the frame and sashes are the metallic plates F, which will not obstruct the operation of the

sashes nor allow the admission of cold air, as the holes do not extend entirely through the frames.

I do not limit myself to the size and materials used, nor to the exact construction of my hinge, as many changes may be made without departing from the spirit of my invention.

What I claim as new, and desired to secure by Letters Patent, is—

In a window having holes in its frame and sash and plates having smaller holes secured over the first-mentioned holes, the herein described separable hinge consisting of two members, each having a shank adapted to enter the hole in a plate, said shank being provided with a longitudinal groove, and a spring secured at its inner end within the groove, having a shoulder near its other end standing normally out of the groove, and continued beyond this shoulder into a handle also standing normally out of the groove, as and for the purpose set forth.

In testimony whereof I hereto set my hand.

ROLANDO GUY MCCLELLAN.

In presence of—

FRED H. MONSON,
THOS. H. TENNENT.