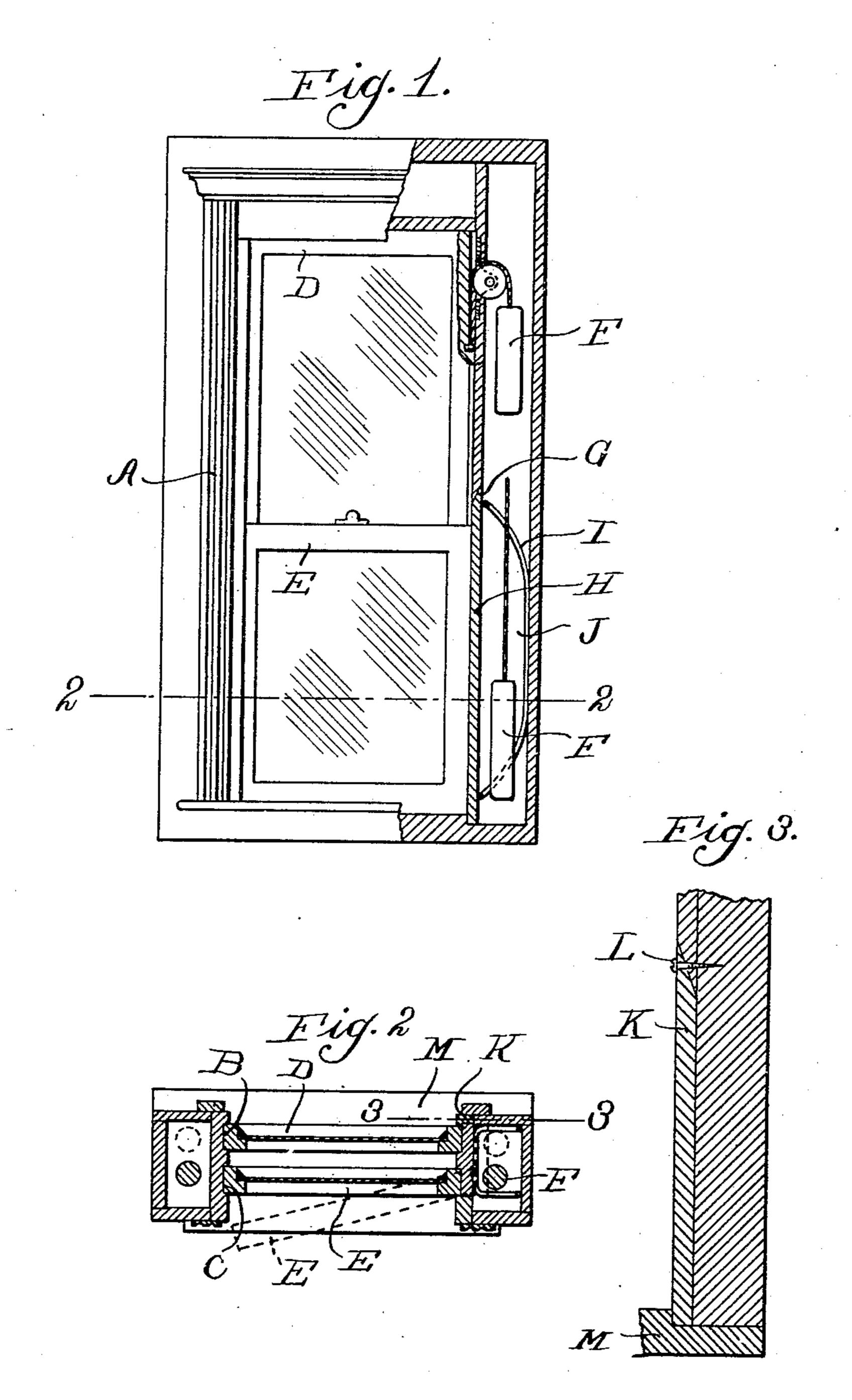
## H. H. ROBERTS. WINDOW.

(No Model.)

(Application filed Mar. 9, 1901.)



Witnesses: E. T. Wilson John Snowhook

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## United. States Patent Office.

HENRY H. ROBERTS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO ORREN V. STOOKEY, OF SAME PLACE.

## WINDOW.

SPECIFICATION forming part of Letters Patent No. 677,274, dated June 25, 1901.

Application filed March 9, 1901. Serial No. 50,482. (No model.)

To all whom it may concern:

Be it known that I, Henry H. Roberts, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Windows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel construction in a window, the object being to provide a device whereby the sashes and glass can be cleaned on both sides from the inside of the building and in which neither the appearance of the sash-frame nor construction of the sashes is changed; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is an inside elevation, partly in section, of a window constructed in accordance with my invention. Fig. 2 is a transverse section of same on the line 2 2 of Fig. 1. Fig. 3 is a detail section on the line 3 3 of Fig. 2.

As before stated, the main object of my invention is to provide a window in which the sashes can be easily turned to the inside of the building and the glass cleaned on both sides.

Further objects of my invention are, first, to avoid the use of any fixtures or mechanism which will change the appearance of the window either internally or externally; second, to so arrange the parts of the window-frame as to enable the sashes to be operated for washing in the way now common, thus giving the operator the choice of either method, and, third, to so arrange the operating parts as to offer no obstacle to the movements of the sash-weights or sashes and to make the operating parts easily accessible for purposes of repair.

frame A, provided with the usual guides B and C, in which the sashes D and E move, the latter being counterbalanced by the sashweights F in the usual manner. One of the through laterally preferably on a diagonal

line G, and the lower piece H thereof made removable. Said piece H exceeds both the sashes in length and is held in place in alinement with the upper rigid portion of said in- 55 ner wall by means of a spring I, mounted in the sash-weight well J, said spring bearing against the rear wall of said well and being secured thereto in any suitable manner. The said spring I is preferably made of wire bent 60 to form an oblong, and said oblong is longitudinally bent to a curve. Said oblong spring is secured between the ends of its long sides to the rear wall of said well J, so that its short sides bear against said removable member H. 65 This spring takes up very little room and does not in any part lie in the path of the sashweights, thus leaving the latter perfectly free movement in said well. The blind stop K on said side of said window-frame A is also cut 70 through on a slant between its ends and the lower portion made removable, being held in place by a screw L and by the outer sill M. Said blind stop K is rabbeted on its inner face to form a shoulder, against which said mem- 75 ber H bears when at the forward limit of its movement. By first removing said blind stop K and then forcing said member H inward against the action of said spring and then upward until its lower end passes the upper face 80 of said sill the said member H can readily be removed.

If it is desired to remove either sash in order to clean it and its glass exteriorly, it is necessary only to slightly raise the lower sash and 85 then press it against the member H, thereby moving the latter inwardly until the opposite side of the sash has left its guide. The sash is then swung inwardly, as indicated in dotted lines in Fig. 2. After cleaning the 90 lower sash the latter is raised without returning same to its guides, and the upper sash may then be lowered and removed in a similar manner.

A window made in accordance with my in- 95 vention is just as weather-tight as the ordinary window, has the same appearance, and constitutes the least possible change from the usual construction.

I claim as my invention—

inner walls or jambs of said frame A is cut | 1. In a window, the combination with a through laterally, preferably on a diagonal | frame having guides, of sashes movable in

**677,274** 

said guides, a movable section in one of said guides, a blind stop, a removable section therein having a shoulder against which said movable section of said guide is adapted to bear and by which the latter is held against removal, and a spring engaging said movable section and adapted to hold same normally in engagement with said shoulder on said blind stop.

2. In a window, the combination with a window-frame having guides, of sashes movable in said guides, one of said guides being composed partially of a movable member, means for holding said movable member normally in position comprising stops and a spring engaging said member and holding same nor-

mally in engagement with said stops.

3. In a window, the combination with a win-

dow-frame having guides, of sashes movable in said guides, counterweights connected with 20 said sashes and movable in wells in said frame, a movable section in one of said guides, stops for limiting the movement of said section in one direction, a spring mounted in said well and engaging said section to hold same normally in engagement with said stops, said spring being adapted to form a hollow quadrangle in vertical elevation and afford free movement to said counterweights through the same.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY H. ROBERTS.

Witnesses:

RUDOLPH WM. LOTZ, E. F. WILSON.