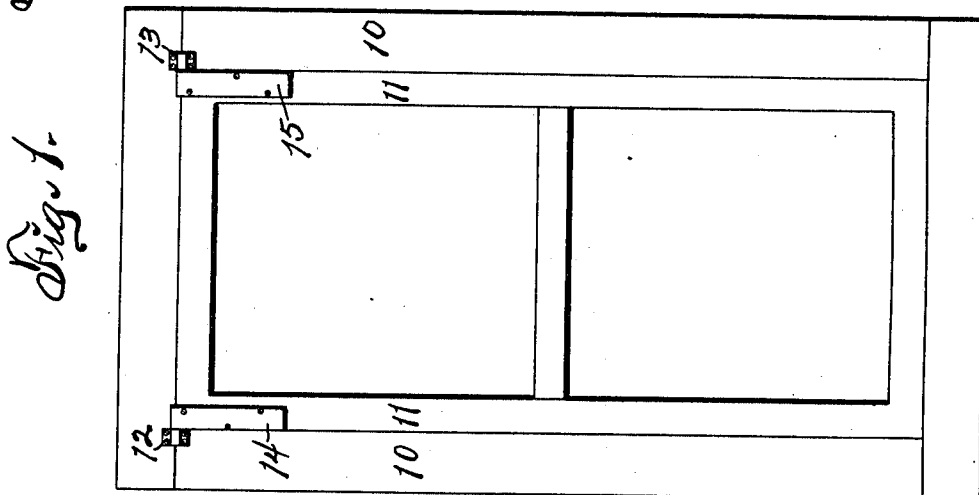
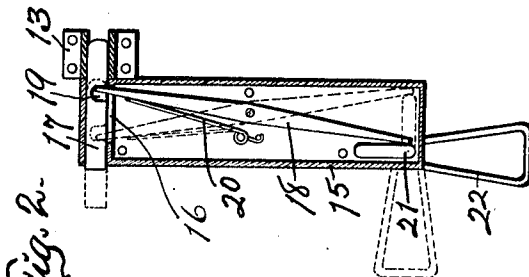
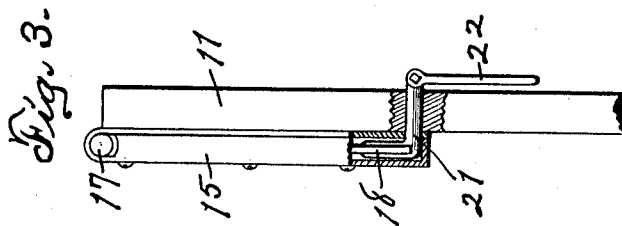


M. C. PALMER.
HANGER FOR SCREENS AND SASH.
APPLICATION FILED MAR. 1, 1911. RENEWED OCT. 23, 1911.

1,019,912.

Patented Mar. 12, 1912.



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UNITED STATES PATENT OFFICE.

MARTIN C. PALMER, OF DES MOINES, IOWA.

HANGER FOR SCREENS AND SASH.

1,019,912.

Specification of Letters Patent.

Patented Mar. 12, 1912.

Application filed March 1, 1911, Serial No. 612,108. Renewed October 23, 1911. Serial No. 656,315.

To all whom it may concern:

Be it known that I, MARTIN C. PALMER, a citizen of the United States of America, and resident of Des Moines, Polk county, Iowa, have invented a new and useful Hanger for Screens and Sash, of which the following is a specification.

The object of this invention is to provide an improved construction for hangers especially adapted for detachably hinging storm sash or window screens to window frames.

A further object of this invention is to provide convenient means for attaching and detaching hinge connections between storm sash or window screens and window frames.

My invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is an outside elevation of a window frame showing my invention applied thereto as required for practical use. Fig. 2 is an elevation, partly in section, showing the interior construction in detail and on an enlarged scale. Fig. 3 is an elevation, partly in section, at right angles to Fig. 2.

In the construction of the device as shown, the numeral 10 designates generally a window frame and 11 designates generally a storm sash or screen frame. Clips 12, 13, formed with central bearings, are mounted on the upper portion of the frame 10 and preferably on the exterior surface thereof, the bearings of said clips being in horizontal alinement. The frame or sash 11 is equipped with housings 14, 15, which housings, together with their contents, are counterparts except as to arrangement, and as to arrangement they are right and left respectively. The housings are secured preferably to the outer surface of the upper portion of the sash or frame. A slide bearing 16 is formed in the upper portion of each housing and a bolt 17 is mounted for rectilinear reciprocation within said slide bearing. A lever 18 is fulcrumed intermediate of its ends in and extends longitudinally of each housing. The upper end portion of each lever 18 extends through a slot in the slide bearing 16 and enters a notch 19 in the bolt 17. A spring 20 mounted within the housing impinges on the upper end portion of the lever 18 and tends to hold said lever and the bolt engaged there-

by in one direction in order that the bolt may project from the housing into a bearing in one or the other of the clips 12, 13. A crank arm or rock shaft 21 is journaled in the sash or frame 11 and extends vertically within the housing at one side of the lower end portion of the lever 18. A looped handle 22 is pivoted to and normally depends from the inner end portion of the crank arm 21 in a position parallel with and adjacent to the frame 11.

In practical use the springs 20 act through the levers 18 and cause the bolts 17 to engage in pivotal relations with the bearings of the clips 12, 13, thus hinging the frame or sash 11 at its top in the window frame. The frame or sash 11 may be wholly removed from the window frame by an operator grasping both handles 22 and by means of said handles (either in pending positions or horizontally extended manually) oscillating the crank arms 21 in such manner that the members thereof within the housings are turned into the positions shown by dotted lines in Fig. 2, in which positions said crank arms move the levers 18 against the pressure of the springs 20 and cause said levers to withdraw the bolts 17 from the bearings of the clips. In like manner the bolts may be withdrawn through the housings preliminary to mounting the frame or sash 11 in the window frame and between the bearing clips 12, 13.

All of the operation of mounting or removing the sash or frame 11 in the window frame can readily and conveniently be performed from the interior of the room containing said frame; which provision is of the utmost importance in manipulating window sash or screen frames relative to upper-story windows.

I claim as my invention—

1. A hanger comprising a housing adapted to be mounted on the outer surface of a sash or screen frame, a bolt slidably mounted in and adapted to project at either end from the upper end portion of said housing, a pivot clip adapted to be mounted on the outer surface of a frame and adapted to receive and pivot said bolt, a lever within said housing and fulcrumed intermediate of its ends to said housing, said bolt formed with a notch opening downwardly, the upper end portion of said lever extending loosely within the notch in the bolt, a spring within the housing impinging one end por-

tion of said lever, a crank arm of a length adapted to extend through and journal in said sash or screen frame and having its laterally bent end portion within the housing and in engagement with the lower end portion of said lever, and a looped handle pivoted to the inner end portion of said crank arm and adapted to depend therefrom at times parallel with the inner face of the sash or screen frame.

2. A hanger, comprising a pivot clip, a housing, a bolt arranged for rectilinear reciprocation transversely of said housing and also arranged for pivotal connection with said clip, said bolt formed with a notch open-

ing within the housing, a lever within the housing engaging the notch in said bolt, said lever spring-pressed in one direction, a crank arm extending within said housing and adapted to engage said lever, and a looped handle pivoted on the inner end of said crank arm and adapted for manual actuation to oscillate said lever against the spring pressure.

Signed by me at Des Moines, Iowa, this fifteenth day of February, 1911.

MARTIN C. PALMER.

Witnesses:

S. C. SWEET,

EARL M. SINCLAIR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."