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W. C. CANFIELD

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DETACHABLE SUSPENSION HINGE

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FIG. 1.

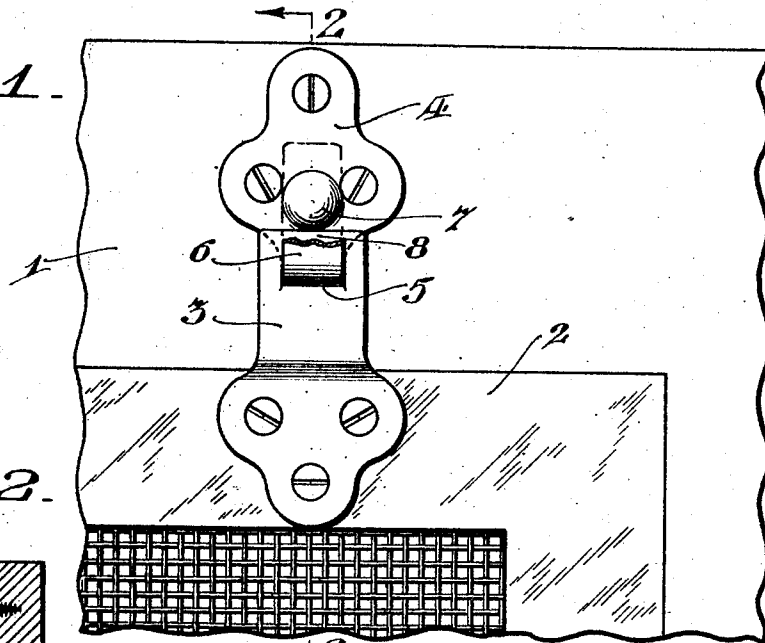


FIG. 2.

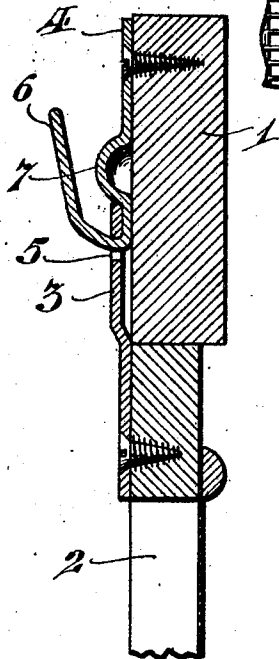


FIG. 3.

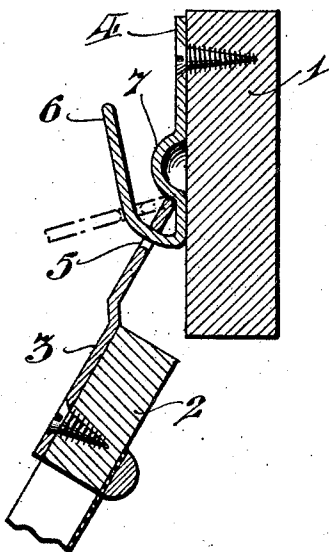
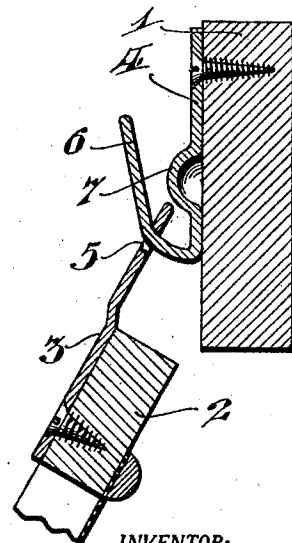


FIG. 4.



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DETACHABLE SUSPENSION HINGE.

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My invention relates to means for detachably hinging screen frames, blinds or other protective devices, to a window frame or other fixed support. It is practically essential that the screen frame be so attached that it may be swung relatively to its support, that it may be readily detached and that it will be held against accidental detachment. Some of the attachments heretofore used are objectionable because they are complicated and expensive, some because they are not readily attached or detached and others because they permit of accidental detachment.

The object of my invention is to provide attaching means of simple and inexpensive construction which permit ready attachment and detachment and which cannot be accidentally detached.

This object, and other advantageous ends which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawing in which—

Figure 1 is a front view of parts of a window frame and a screen frame attached thereto by a device embodying my invention,

Figure 2 a section on line 2—2 of Figure 1, showing the parts in one position,

Figure 3 a like view showing the parts in other positions, and

Figure 4 a like view showing the parts in position for detachment.

Referring to the drawing, 1 indicates a window frame and 2 a screen frame. My improved attachment consists of two hinge members 3 and 4 each of which is preferably stamped from sheet metal. Member 3 is secured to the screen frame by screws or otherwise and member 4 is likewise secured to the window frame. Member 3 is provided with an eye 5 adapted to loosely take over a hook 6 extending from the body of member 4. Substantially above the heel of hook 6, the body of member 4 is pressed outwardly to form a hump 7, preferably in the form of a segment of a sphere. The part 8 of member 3 above eye 5 is substantially equal in length to the distance between the heel of the hook and the hump, and the space between the upwardly extending arm of hook 6 and the apex of hump 7 is less than the length of part 8. This permits member 3 to be swung in the space below the hump to the position shown in full lines or that shown in dotted lines in Figure 3, that is to a position at substantially right angles to its normal position,

without danger of accidental displacement.

In order to detach the screen frame, member 3 must be swung to the position shown in Figure 4, that is, into such position that part 8 will be presented to the passage between the hook and the hump at an angle which will permit it to clear the hump, eye 5 being sufficiently loose to permit the hinge member to be presented at such an angle. The screen frame may then be detached by lifting it bodily in a substantially vertical direction.

The screen frame may be attached by placing the eye of its hinged member over the free end of the hook and then permitting the frame to swing downwardly.

While I have described my invention as taking a particular form, it will be understood that the various parts may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A detachable suspension hinge comprising an upper member having a flat body adapted to be secured to a fixed frame, a hook formed on the lower edge of the body, and a hump formed in the body above the heel of the hook and projecting into the space between the body and the upwardly extending part of the hook; and a lower member having a flat body adapted to be secured to the frame to be suspended, an extension on the lower member having an eye near its upper end adapted to register with the hook on the upper member, the portion of the extension above the eye being greater than the distance between the hump and the upwardly extending part of the hook, whereby the hinge cannot be separated until the suspended frame is swung to a certain angle relative to the fixed frame.

2. A detachable suspension hinge comprising an upper member having a flat body adapted to be secured to a fixed frame, a hook formed on the lower edge of the body, and a hump formed in the body above the heel of the hook and projecting into the space between the body and the upwardly extending part of the hook; and a lower member having a flat body adapted to be secured to the frame to be suspended, an ex-

tension on the lower member having an eye near its upper end adapted to register with the hook on the upper member, the portion of the extension above the eye being greater than the distance between the hump and the upwardly extending part of the hook, whereby the hinge cannot be separated until the suspended frame is swung to a certain angle relative to the fixed frame, and the extension being off-set from the body of the lower member whereby the fixed and suspended frames may be brought into alignment. 10

In testimony whereof I have signed my name to this specification.

WILLIAM C. CANFIELD.