

Sept. 4, 1928.

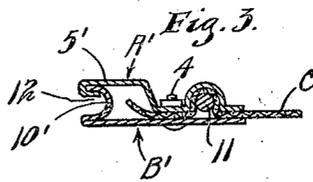
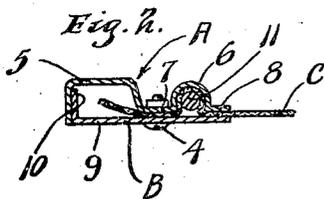
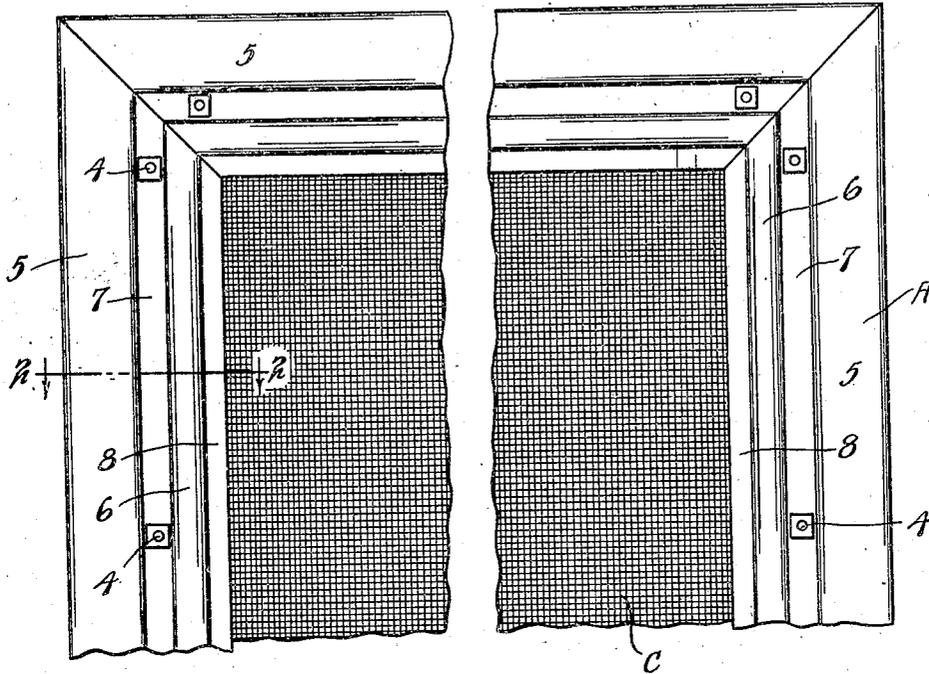
1,683,421

J. E. SODERGREN.

SCREEN FRAME

Filed April 3, 1925

Fig. 1.



INVENTOR.  
JOHN E. SODERGREN.  
BY HIS ATTORNEYS.

*Williamson Reiff Williamson*

# UNITED STATES PATENT OFFICE.

JOHN E. SODERGREN, OF MINNEAPOLIS, MINNESOTA.

## SCREEN FRAME.

Application filed April 3, 1925. Serial No. 20,387.

This invention has for its main object to provide an extremely simple but highly efficient screen frame for doors, windows, etc., compact and durable in structure and presenting an ornamental appearance.

It is a further object to provide a screen frame having sides, each formed of a pair of plates between which the screen is clamped, and provide clamping means for said screen which will firmly secure the screen and stretch the same when said frame is assembled and which will, moreover, protect the screen from tearing.

It is a more specific object of the invention to provide a screen frame having sides composed of a pair of preferably metallic plates, between which the screen is secured, one of said plates having a longitudinal groove therein which is adapted to receive said screen, and a rod adapted to be seated in said groove to clamp the screen therein.

A still further object is to provide elongated lips at the inner sides of said frame between which the screen is also clamped.

These and other objects of the invention will be apparent from the description made in connection with the accompanying drawings, wherein like notations refer to similar parts throughout the several views, and in which

Fig. 1 is a fragmentary front elevation of the preferred form of the invention;

Fig. 2 is a horizontal cross section of one of the sides of the frame taken on the line 2—2 of Fig. 1; and

Fig. 3 is a similar cross section of the modified form of the invention.

The screen frame comprises a plurality of sides which are welded together, or otherwise secured, at their ends. Each of said sides is formed of a pair of plates designated as entireties by the letters A and B respectively, between which the screen C is clamped, said plates being secured together by bolts 4 or any other suitable means. The plate A has a relatively large longitudinal channel portion 5 forming the body of the frame, a longitudinal groove 6, slightly greater than a semi-circle in cross section and extending parallel with the channel portion 5, the flat portion 7, between channel 5 and groove 6 and the flat inner side portion or lip 8. Plate B comprises the flat body portion 9 having the upturned side portion 10 adapted to snugly fit within the

outer side of the channel portion 5 to form the closed outer edge of the frame.

The edge of the screen extends between the plates A and B and is clamped within the groove 6 by means of a rod 11 adapted to be tightly seated therein. The flat portions 7 and 8 of plate A extend in the same plane and co-operate with the body portion 9 of plate B to further clamp the screen, portions 8 and 9 of said plate forming longitudinal lips at the inside edges of the frame.

In the modified form shown in Fig. 3, the plate A' is, in every respect, similar to the plate A of the preferred form, except that the outside edge of the channel portion 5' is inturned to receive the semi-cylindrical inturned outer edge 10' of the plate B'. This construction forms a groove 12 in the edge of the frame permitting the frame to be slidably seated on a bead or strip mounted on the sides of the window.

It will be seen that in securing the screen within the frame the screen is stretched when the rod 11 is forced into the groove 6. The plates A and B are preferably constructed of pressed sheet metal, thereby providing sufficient resiliency in the groove 6 to permit rod 11 to be inserted and firmly secured therein.

From the above description, it will be seen that applicant has provided a simple but highly efficient decorative screen frame capable of being manufactured at little expense and adapted to securely clamp the screen therein without injuring or tearing the same.

Extensive actual usage of the device has proven the same to be highly successful for the purposes intended.

It will, of course, be understood that various changes may be made in the form, details, proportions and arrangement of parts without departing from the scope of this invention.

What is claimed is:

1. A screen comprising a frame member having an open groove formed therein the side walls of said groove adjacent its edges being resilient, and having relatively wide flat supporting surfaces on each side of said groove, a screen fabric extending across said flat surfaces and into said groove, a rod held in said groove by said resilient edges to secure said screen under tension to said frame member, a second frame member co-

extensive with said first member and having flat surfaces opposite the flat surfaces on said first member, and fasteners extending through said members and clamping said screen fabric between said flat surfaces.

2. A screen comprising a frame member formed to provide a reinforced edge, an open groove with side walls having resilient edges slightly overhanging said groove, and a flat surface between said edge and groove, a screen fabric extending into said groove and across said flat surface, a rod held in said channel by said resilient edges to secure said screen under tension to said frame member, and a second frame member including an edge reinforcement cooperating with the reinforcement on said first named member to constitute a reinforced frame and a flat surface designed to lie opposite the flat surface on said first named member and fastening elements securing said members together with the screen fabric clamped between said flat surfaces.

3. A screen comprising a frame member formed to provide a reinforced edge, an open groove, a flat surface outward of said groove between said edge and said groove, and a flat surface inward from said groove and disposed in substantially the same plane as said first mentioned flat surface, a screen fabric extending into said groove and across said flat surfaces, a rod held in said groove

to clamp said screen fabric between the same and said groove, and a second frame member including a reinforced edge co-operating with the reinforced edge of said first mentioned frame member, and a flat surface designed to oppose the flat surfaces of said first mentioned member to clamp portions of said screen fabric therebetween and fastening elements securing said members together.

4. A screen comprising a frame member formed to provide a reinforced edge, an open groove with side walls having resilient edges slightly overhanging said groove, a flat surface between said edge and one side of said groove, and a flat surface between the other side of said groove and the other edge of said frame member, a screen fabric extending into said groove and across said flat surfaces, a rod held in said groove by said resilient edges to secure said screen under tension to said frame member, and a second frame member including an edge reinforcement co-operating with the reinforcement on said first named member to constitute a reinforced frame and a flat surface designed to lie opposite the flat surfaces on said first named member and fastening elements securing said members together with the screen fabric clamped between the opposing flat surfaces.

In testimony whereof I affix my signature.  
JOHN E. SODERGREN.