Sept. 11, 1951 R. M. STAFFORD ET AL 2,567,743

HOLDER FOR SCREEN OR OTHER FABRICS

Filed May 19, 1948

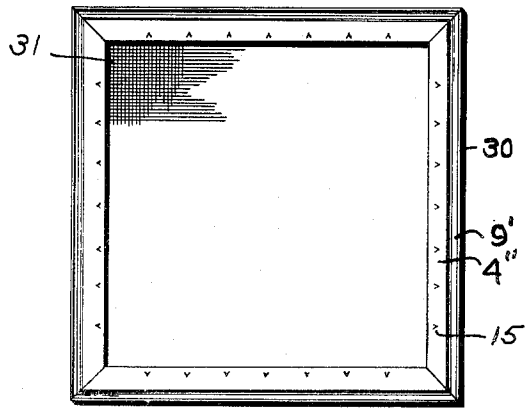


Fig. 2

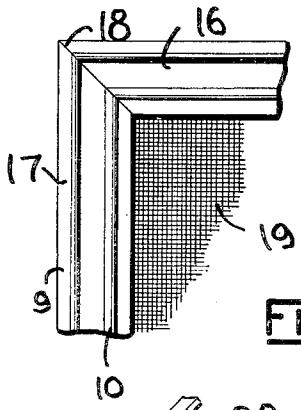


Fig. 1

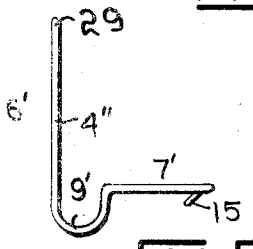


Fig. 5

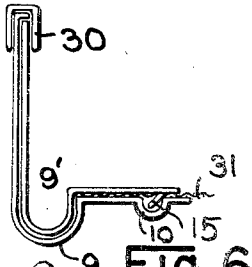


Fig. 6

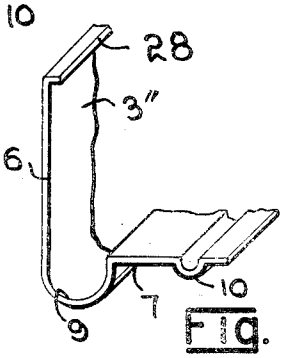


Fig. 7

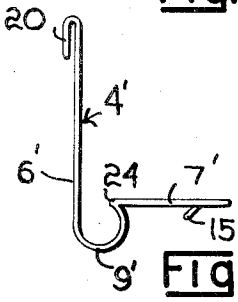


Fig. 8

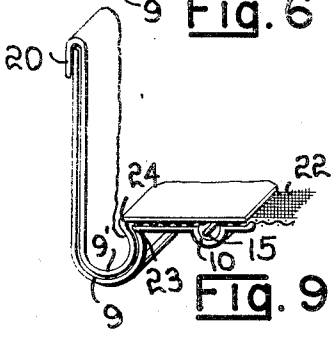


Fig. 9

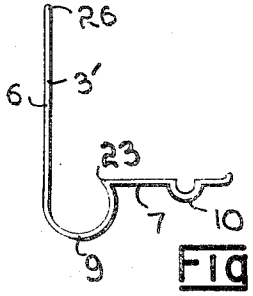


Fig. 10

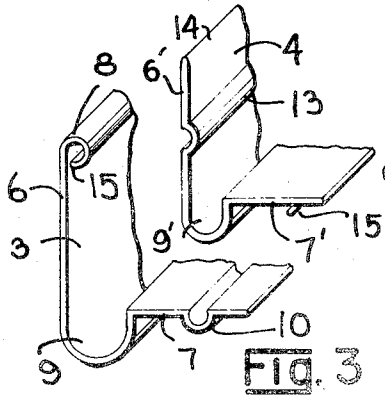


Fig. 3

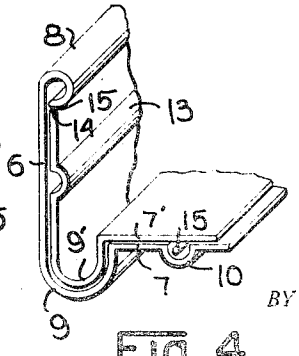


Fig. 4

Charles J. Doyle
Roy M. Stafford
INVENTORS

BY Lester B. Clark
& Ray L. Smith
ATTORNEYS

Patented Sept. 11, 1951

2,567,743

UNITED STATES PATENT OFFICE

2,567,743

HOLDER FOR SCREEN OR OTHER FABRICS

Roy M. Stafford and Charles J. Doyle, Houston, Tex.; said Stafford assignor to said Doyle

Application May 19, 1948, Serial No. 27,994

4 Claims. (Cl. 160—380)

1

This invention relates to a holder for a sheet of foraminous material such as fabric, wire screen, perforated sheets and the like.

While the description hereafter refers specifically to screen or fabric, it is to be understood that the invention comprehends a holder for any of various types of sheet material such as those just indicated.

An object of the present invention is to provide a holder for screen or fabric, which holder comprises a frame and a clamping member fixed in interlocking relation on opposite sides of the screen or fabric.

An object of the present invention is to provide a holder for screen or fabric, which holder comprises a frame and a clamping member fixed in interlocking relation on opposite sides of the screen or fabric, which holder permits of ready assembly and can be easily removed from the frame without substantial damage to the screen or fabric.

Another object of the invention is to provide a holder for screen or fabric, which holder comprises a frame and a clamping member fixed in interlocking relation on opposite sides of the screen, which holder is simple in design and can be easily manufactured.

Another object of the invention is to provide a holder for screen or fabric, and the like, which includes a frame and a clamping member, each having complementary arch portions thereon to engage in interlocking position, and prongs on the clamping member to engage the screen or fabric, there being a displaced portion in the frame to receive the prongs engaged through the screen or fabric.

Other objects and advantages will become more readily apparent from a consideration of the following description and drawing, wherein:

Fig. 1 is a partial front elevational view of the embodiment of the invention shown in greater detail in Figs. 3 and 4;

Fig. 2 is a rear view showing one form of the invention;

Fig. 3 is a fragmentary exploded view showing an embodiment of the invention;

Fig. 4 illustrates the embodiment shown in Fig. 3 in assembled position;

Fig. 5 illustrates a form of the clamping member;

Fig. 6 shows an embodiment of the holder with the clamping member and frame in interlocking relation and a retainer strip positioned thereover to removably lock the two together;

2

Fig. 7 is a perspective view of the frame member illustrated in Fig. 6;

Fig. 8 shows an alternate embodiment of the clamping member;

Fig. 9 illustrates this form of the clamping member in engagement with the frame of Fig. 8 to form a holder, and;

Fig. 10 is an end view of the frame member shown in Fig. 9.

The embodiment of the invention shown in Figs. 3 and 4 comprises a frame 3 with a clamping member 4 arranged to engage therewith. The frame 3 comprises the legs 6 and 7, of which the former terminates in the recurve or bead 8 adjacent the upper edge thereof. An arcuate channel 9 is arranged at the point of juncture of the legs 6 and 7 in the frame 3. Adjacent the arcuate channel 9, and substantially parallel therewith is the second arcuate channel 10, or displaced portion arranged in the surface of the leg 7. The clamping member 4 is also formed by legs 6' and 7' having a channeled portion 9' at the point of juncture such elements being complemental to elements having the same unprimed numbers in the frame 3. A rib 13 arranged in the leg 6' provides resiliency in the clamping member, whereby after the channels 9 and 9' have been fitted together, the end 14 can be removably locked against the nether portion 15 of the recurve 8 by bending the clamping member along the bead 13, and snapping it into position adjacent the portion 15. A plurality of prongs 15 are arranged in the leg 7', which prongs are adjacent the arcuate channel or displaced portion 10 of the leg 7 of the frame 3.

In order to engage screen or other foraminous sheet in the holder, the prongs 15 are passed through the fabric and the clamping member 4 is then positioned in interlocking relation with the frame 3, which had been previously positioned on the opposite side of the sheet. The prongs 15 pass into the arcuate channel, or displaced portion 10, and the complementary channels 9 and 9' are fitted together. The leg 6' of the clamping member 4 is then bent along the bead 13, so that its upper end 14 engages the recurve 8 along its portion 15, whereby the clamping member 4 and frame 3 are removably retained in locking relation, as better illustrated in Fig. 4.

In Fig. 1, a section of the holder, is illustrated as comprising two elements 16 and 17, which are joined together along their point of contact at 18. Screen or fabric 19 is positioned on the clamping member 4, which member is then engaged in interlocking relation with the frame 3,

as previously described. The holder may be of any suitable shape or configuration, and as practical matter it has been found that the usual form will be rectangular, which is the shape of the ordinary window used for construction purposes today.

Figs. 8, 9 and 10 illustrate an alternate embodiment of the invention, wherein the clamping member 4' is shown as having its upper end 20 redoubled. Prongs 15 are arranged on the leg 7', there being an arcuate channel 9' adjacent the point of juncture of the leg 7' with the leg 6'. The frame 3' is best seen in Fig. 10 as comprising the legs 6 and 7 with the arcuate channel 9 adjacent their point of juncture. A displaced portion or arcuate channel 10 is arranged in the leg 7 adjacent the arcuate channel 9 to receive the prongs 15 when the frame and clamping member are in interlocking relation, as best seen in Fig. 9.

A portion of the screen fabric 22 is engaged by the prongs 15, which fit in the displaced portion 10. It is to be noted that the complementary arcuate channels 9 and 9' extend for more than half a circle, so that the lip 23 is formed at the point of juncture of the arcuate channel 9 and the leg 7.

A similarly shaped lip 24 is formed at the point of juncture of the arcuate channel 9' with the leg 7'. In order to retain the screen fabric in position on the holder in this embodiment after the prongs 15 have been passed through such screen, the upper end 26 of the leg 6 is engaged in the recurve portion 20 of the clamping member 3, and the complementary channels 9 and 9' are then snapped in interlocking relation, which channels remain in interlocking relation due to the configuration of the lips 23 and 24.

A third form of the invention is illustrated in Figs. 5, 6 and 7, wherein the clamping member 4'' comprises the legs 6' and 7', having an arcuate channel 9', along their point of juncture. Prongs 15 are arranged in the leg 7 of such clamping member. Fig. 7 shows the configuration of the frame member 3'', which has intersecting legs 6 and 7, with the arcuate channel 9 formed along their point of juncture. The upper edge of the leg 6 is inwardly flanged to form a shoulder or abutment 28. The leg 7 is provided with an arcuate channel or displaced portion 10, to fit adjacent the prongs 15 when the frame and clamping member are in interlocking relationship, as best seen in Fig. 6. The upper end 29 of the clamping member fits immediately below the abutment or shoulder 28, after the prongs 15 have been engaged with screen fabric or the like, and the channels 9 and 9' assembled in interlocking relation. In order to remain the frame 3'' and clamping member 4'' in such relationship on opposite sides of the screen, a retainer strip 30 is provided to fit over the upper end of the frame and clamping adjacent the abutment or shoulder 28.

Fig. 2 illustrates a holder formed in accordance with the embodiment illustrated in Figs. 5, 6 and 7, wherein the screen fabric 31 is shown engaged by the clamping member 4''.

Several distinct advantages reside in the construction disclosed and claimed herein. The manufacture of the component parts is simple, and the cost thereof is relatively low. Additionally, the frame and clamping member can readily be positioned on opposite sides of the screen in order to form a holder therefor. The manufacture of the holder is readily facilitated,

and it is to be noted that little or substantially no damage will be incurred by the screen fabric, which has been mounted in the holder over a period of time.

A holder, in accordance with the present invention, can be formed of any suitable material, such as plastic, metal or the like, and will be substantially permanent throughout the lifetime of the screen fabric, which it holds.

Broadly, the invention contemplates a holder for a sheet of foraminous material such as screen fabric and the like, and in particular, to an improved construction of holder for window screen.

What is claimed is:

1. A holder for sheet material such as screen fabric or the like comprising, a frame, including two intersecting legs, one of said legs having a longitudinal outwardly displaced portion and a channel adjacent the point of juncture with said other leg, the other of said legs having its edge flanged, a clamping member to fit in said frame, including two intersecting legs, one of said legs having prongs therein to engage the screen fabric and a channel adjacent the point of juncture with said other leg, said prongs on said leg of the clamping member being arranged to fit in said displaced portion of said leg of the frame, and said channel on said clamping member being arranged to fit in said channel of said frame whereby the screen fabric engaged by said clamping member will be positioned between said clamping member and said frame and the edge of the clamping member underlies said flanged edge.

2. A holder for fabric including nestable frame and clamping members for enclosing the edge of the fabric, said frame and clamping member having complementary channels, adapted to interfit, there being a bead along the edge of said frame facing said channel and a rib in said clamping member extending longitudinally thereof to provide resiliency therein, said frame having a dent therein adjacent said complementary channel and extending longitudinally of said frame, said clamping member having prongs disposed to fit in said dent, said frame and clamping member adapted for application to opposite sides of the fabric by fitting said prongs of said member therethrough and into said dent in the frame and snapping the channel of said clamping member into the channel of said frame by resiliently bending said clamping member along said rib and fitting its upper end adjacent said bead.

3. A holder for sheet material including a frame and a clamping member nestable and adapted to secure the sheet material therebetween, said frame and member having complementary channels, prongs in said clamping member to engage the screen, there being an adjacent displaced portion in said frame to receive said prongs, a flange on the edge of said frame, said frame and clamping member adapted for application to opposite sides of the screen by passing said prongs therethrough and into said displaced portion and fitting said complementary channels together, and a retaining strip substantially U-shaped engaging and locking said frame and member together.

4. A holder for screen which can be readily mounted and removed therefrom without substantial damage to the screen including a frame and clamping member arranged to interlock on opposite sides of the screen, said frame and clamping member each having intersecting legs at substantially right angles to each other, and complementary arched channels, prongs on said

clamping member to pass through the engaged screen and there being an adjacent portion on said frame to receive said prongs, a flange on an edge of said frame, and a rib in said clamping member extending longitudinally thereof to provide a resilience therein, said frame member being slightly larger than said clamping member, said frame and clamping member adapted to interlock on opposite sides of the screen by fitting said complementary channels together, and bending said clamping member along said rib whereby it engages and locks with said flange of said frame.

ROY M. STAFFORD.
CHARLES J. DOYLE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
584,148	Robinson	June 8, 1897
903,500	Pinkham	Nov. 10, 1908
1,379,001	Diven	May 24, 1921
2,042,726	Mueller	June 2, 1936