F. W. NASS.

WINDOW SCREEN.

APPLICATION FILED OCT. 3, 1921.

1,438,777.

Patented Dec. 12, 1922.

Fig. 1.

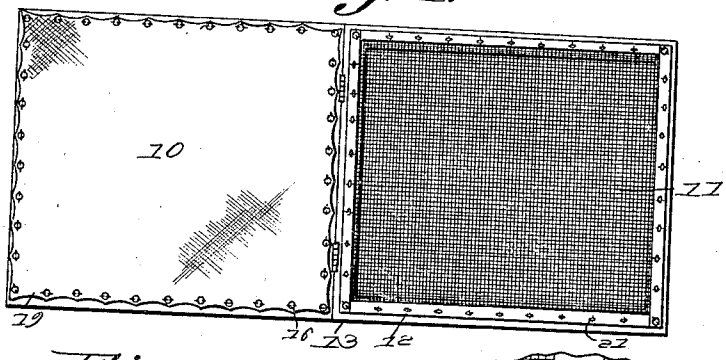
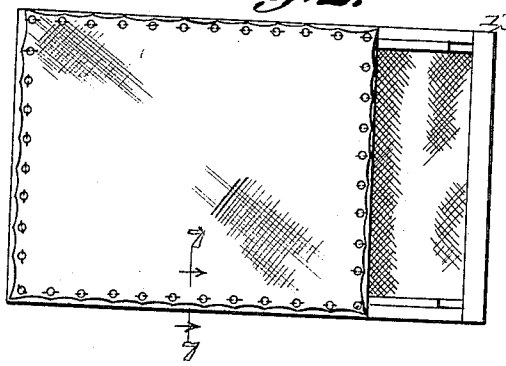


Fig. 2.



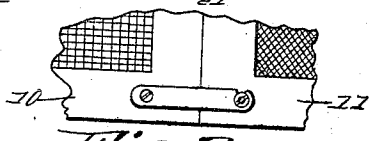


Fig. 3.

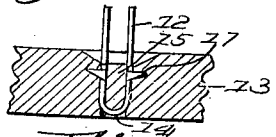


Fig. 4.

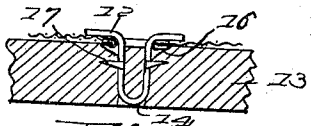


Fig. 5.

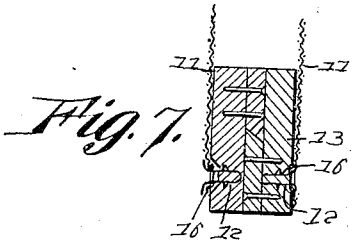


Fig. 7.

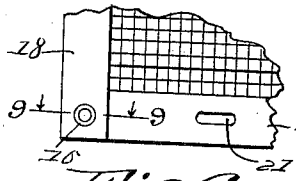


Fig. 8.

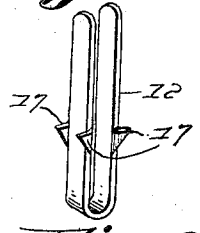


Fig. 6.

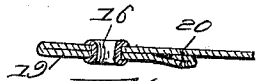


Fig. 9.

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UNITED STATES PATENT OFFICE.

FRED W. NASS, OF CHICAGO, ILLINOIS.

WINDOW SCREEN.

Application filed October 3, 1921. Serial No. 505,028.

To all whom it may concern:

Be it known that FRED W. NASS, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, has invented new and useful Improvements in Window Screens, of which the following is a specification.

The object of the invention is to provide a window screen whereby a regulation in the ventilation of the room or apartment in connection with which it may be used may be effected by the interchanging or substitution of fillers or webbings of different degrees of porosity, and therefore more particularly to provide a window screen construction whereby the interchange or substitution of the webbing or filler may be effected with facility to also afford convenience in the removal of the filler, when of fabric to permit of laundering or of treatment with disinfectant when, for example, the device is used in connection with windows of sickrooms and the like; and with these objects in view the invention consists in a construction and combination of parts of which a preferred embodiment is shown in the accompanying drawings, wherein:—

Figure 1 is a view in elevation of a screen of foldable type wherein the sections or members are respectively provided with fillers or webs of different types or having different meshes.

Figure 2 is a view of a screen also embodying the invention wherein the sections or members are slidably connected.

Figure 3 is a detail view showing a means for holding a folding screen of the type shown in Figure 1 in its extended condition.

Figures 4 and 5 are detail sectional views showing the means whereby the filler or webbing is secured to the frame of the screen.

Figure 6 is a detail in perspective of one of the clips used for securing the filler or webbing.

Figure 7 is a detail sectional view on the plane indicated by the line 7—7 of Figure 2.

Figure 8 is a detail view of a corner section or portion of a metallic screen filler or webbing.

Figure 9 is a detail sectional view of the marginal portion of a fabric filler or webbing, taken on the plane indicated by the line 9—9 of Figure 8.

The screen frame is preferably of a folding type adapted for ready application to and removal from the window opening, but may be either of the hinged type shown in Figure 1 or the sliding or extension type shown in Figure 2, the same, in either case, consisting of relatively movable sections or members adapted to receive and carry fillers or webbing units which in Figure 1 are shown at 10 and 11 and which for illustrative purposes are respectively of fabric such as cheese cloth and of wire gauze, or other materials adaptable to the purpose, having meshes of such a size as to serve the desired purpose. In some instances it is only necessary to provide for the exclusion of insects such as flies in which event the wire gauze is ordinarily found sufficient, especially when a gauze of relatively thin mesh is selected, but such a type of webbing affords but slight obstacle to the circulation of the air, and therefore in practice it frequently occurs that it is desirable to employ a webbing or screening material which while admitting light will modify the circulation of air or reduce the same to a greater or less extent and at the same time will exclude even smaller insects than those which can be barred by the ordinary wire gauze, and to this end it is desirable, as contemplated by the present invention, to provide for interchanging or substituting the filler or webbing to suit the requirements and enable the operator to change the same without inconvenience or loss of time so that the same frame may be used for a variety of different purposes or under different conditions, and in this connection to provide means whereby a webbing or filler of fabric may be disposed in such a relation to a window opening as to serve as a distributing agent for an antiseptic for deodorizing or like agency as for example in connection with hospital wards, sick rooms and the like. Therefore the frame of the screen, as more particularly illustrated in Figures 4, 5 and 6 is provided with clips 12 of U-shaped, hair pin or looped form embedded in the frame bars 13 which may be provided with suitable openings 14 for that purpose and secured by means of plugs 15 driven into the frame between the arms of the clip with the extremities of the latter extended as shown in Figure 4 and adapted to be passed through eyelets 16 or openings in the webbing or filler and then folded into parallelism with the frame as shown in Figure 5. As a further security or means

of maintaining the clips in proper relation with the elements of the frame the arms thereof may be provided as shown with barbs 17 adapted to be embedded in the material of the frame by driving home the plugs 15, as clearly illustrated in Figure 6.

The webbing or filler whether of fabric such as shown at 10 or of metal screening as at 11 should be marginally reinforced to afford the requisite strength and to guard against distortion in applying and removing the same and such reinforcement may be provided with reference to a metallic filler or webbing as shown in Figures 1 and 8 by metallic strips 18 having the edges of the webbing interposed therebetween and connected by the eyelets as a means of holding the same in place, whereas with a fabric filler or webbing such as of cheese cloth or the like the edges may be folded as shown in Figure 9 at 19 and stitched as shown at 20 with the eyelet extending through the doubled portion as illustrated. Also as shown at 21 the eyelets in the reinforced marginal portion of a metallic screen forming the webbing or filler may be elongated to compensate or allow for any variation in the spacing of the clips.

Having described the invention, what is claimed as new and useful is:—

1. A window screen having its frame provided with pliable clips, and a filler or webbing having marginal eyelets for engagement by said clips to permit of interchanging the filler or webbing, the clips being of looped or hair pin construction with the looped portions thereof embedded in and secured to the frame and with the extremities thereof extended for bending into engaging relation with the eyelets of the filler or webbing.

2. A window screen having its frame provided with pliable clips, and a filler or webbing having marginal eyelets for engagement by said clips to permit of interchanging the filler or webbing, said clips being of looped or hair pin construction with the looped portions thereof embedded in the frame and provided with lateral spurs for engaging the material thereof.

3. A window screen having its frame provided with pliable clips, and a filler or webbing having marginal eyelets for engagement by said clips to permit of interchanging the filler or webbing, said clips being of looped or hair pin construction and having the looped portions embedded in openings in the frame, the arms of the clips being provided with lateral spurs engaging in the side walls of the openings, and plugs driven into the openings between the arms of the clips to maintain the spurs in such engagement.

In testimony whereof he affixes his signature.

FRED W. NASS.