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[54] **METHOD OF SCREENING**
4 Claims, 15 Drawing Figs.

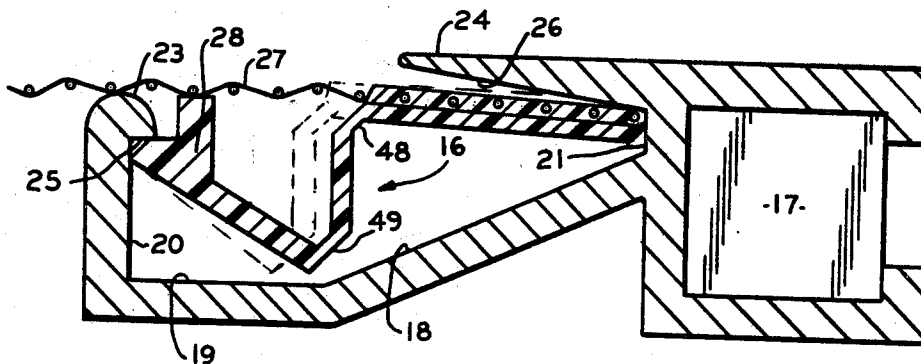
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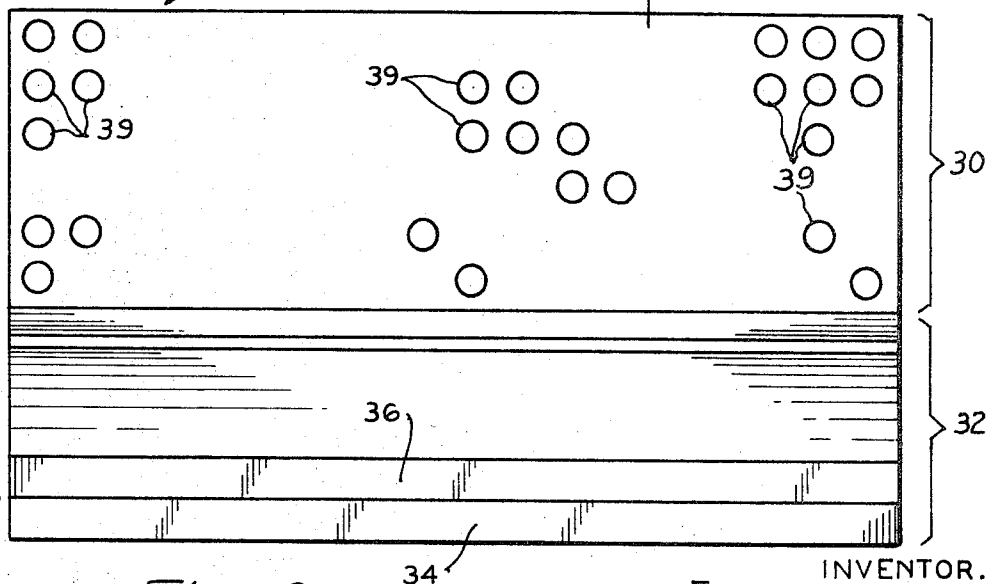
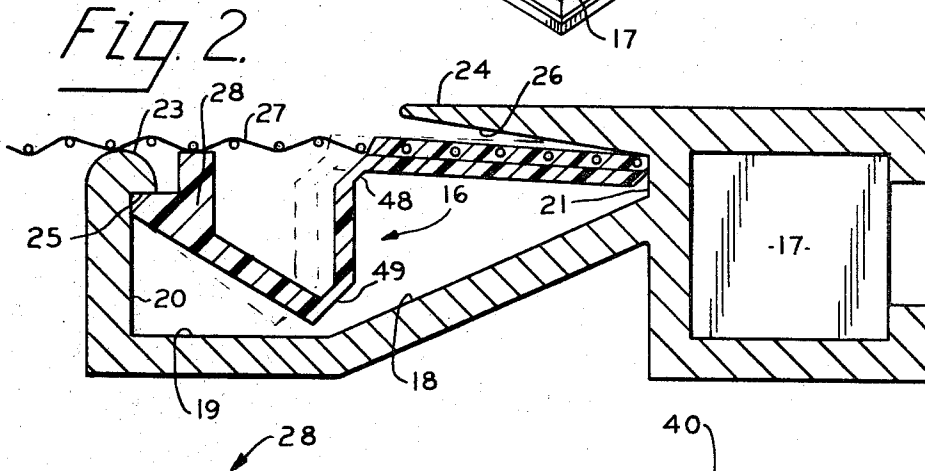
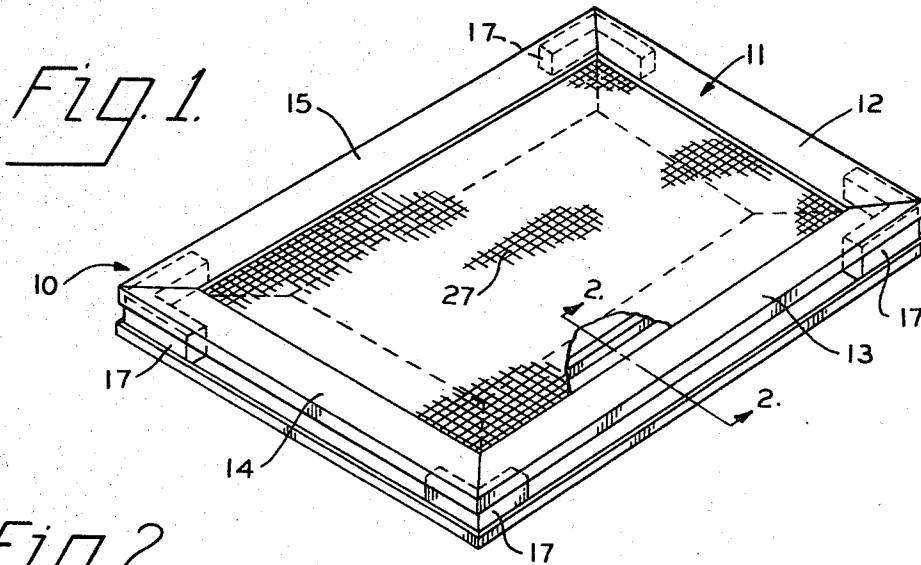
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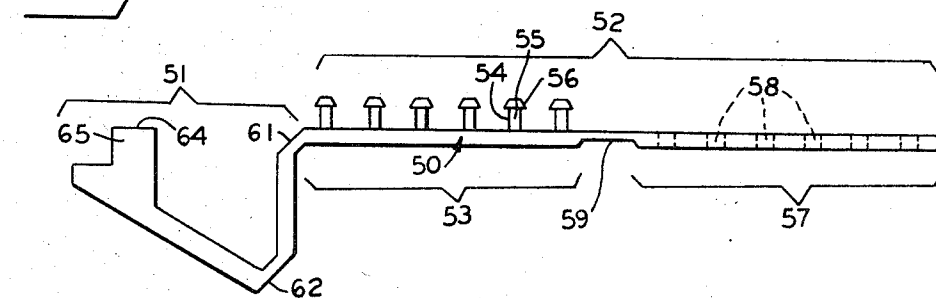
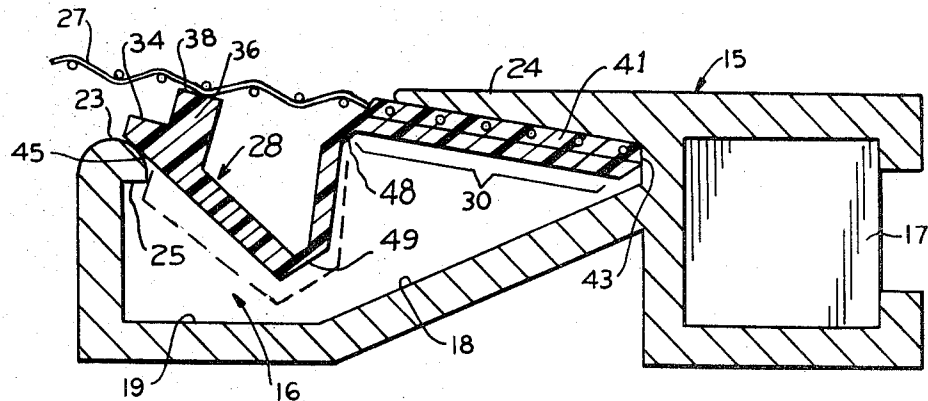
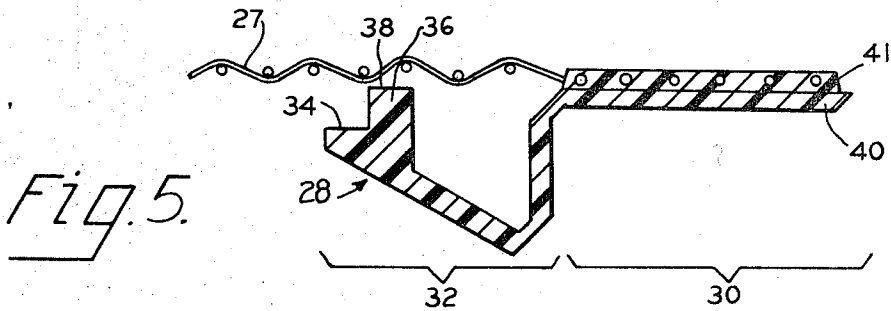
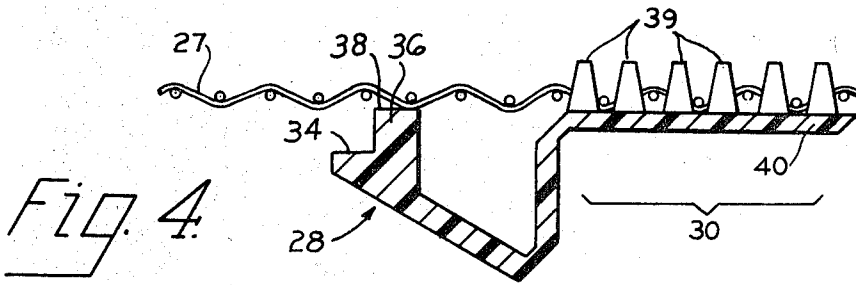
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ABSTRACT: An improved screen assembly and method of making same employing a frame having an elongated channel or slot extending around the periphery of the opening to be screened. Clips are attached to the screening material and snapped into the longitudinal channel to retain the screening material in the frame. Preferably, the screening material is formed of plastic coated fiberglass or other inextensible, flexible material and preferably the clips are formed of a plastic material having substantial resilience, such as nylon, a polyamide resin sold by E. I. Dupont Company. The clips are provided with integral spring and screening material-engaging portions. Each of these portions provides a part of a means for fastening the clip to the frame. The spring portion resiliently engages the inner surface of the channel (i.e., the surface facing away from the area inclosed by the frame) and thus provides the assembled screen with sufficient resilience to protect the material from destructive forces normal to the screen. The screening material engaging portion of the clip slideably contacts the inner surface of an inwardly projecting lip. This inner surface is substantially parallel to the plane of the screening material, allowing the material-engaging portion of the clip to slide transversely in said channel while retaining the clip in said channel.





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Fig. 8

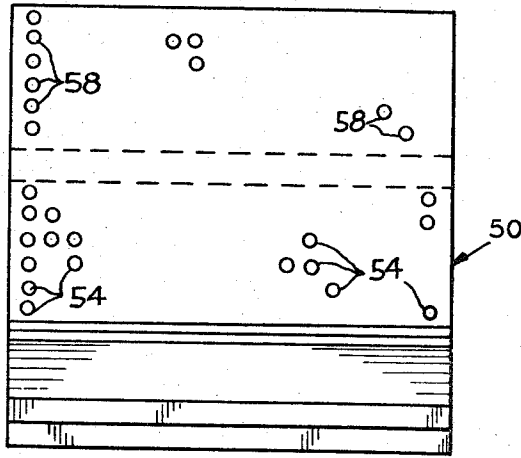


Fig. 9

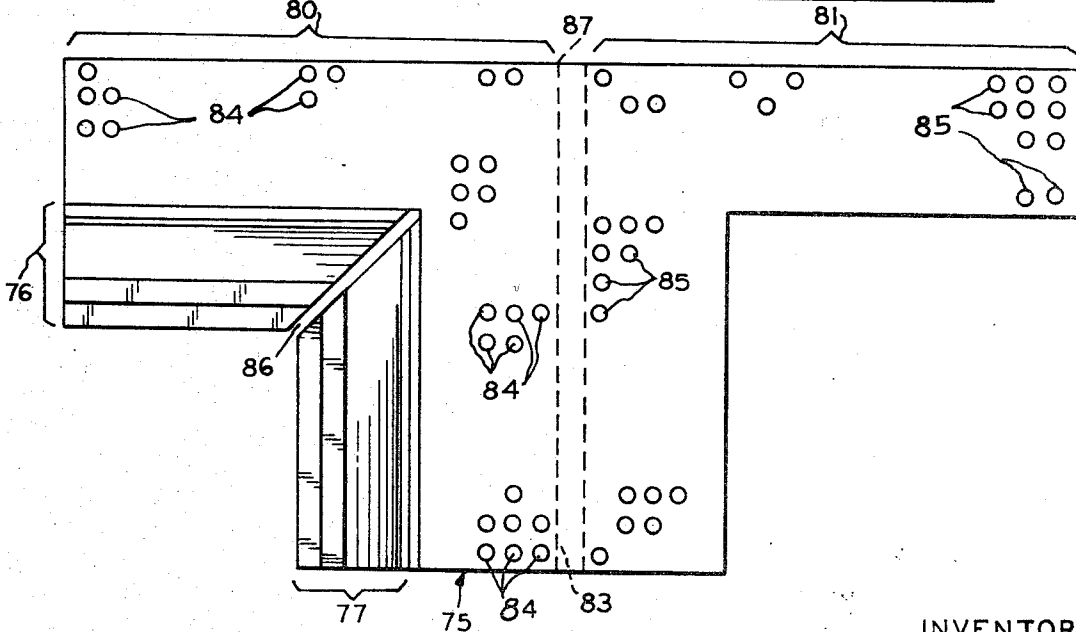
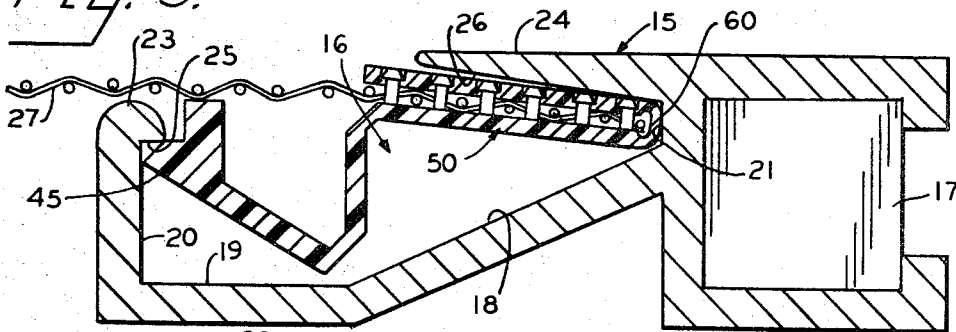
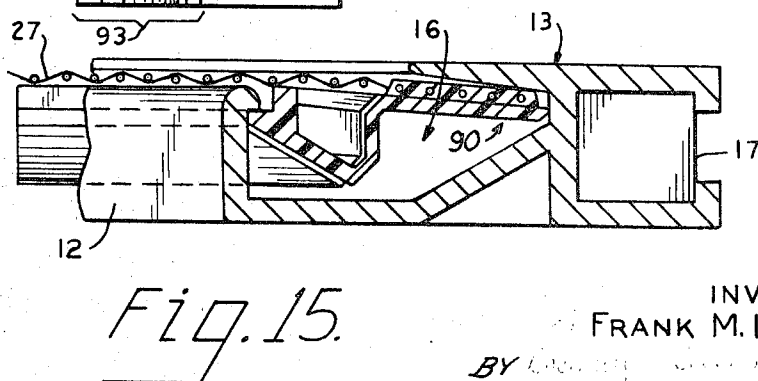
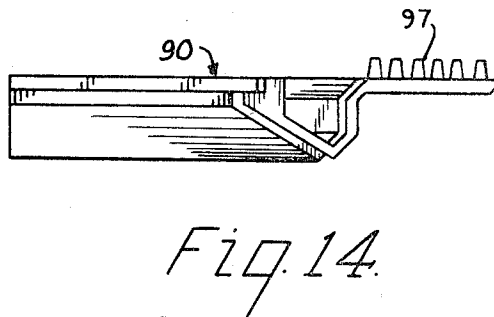
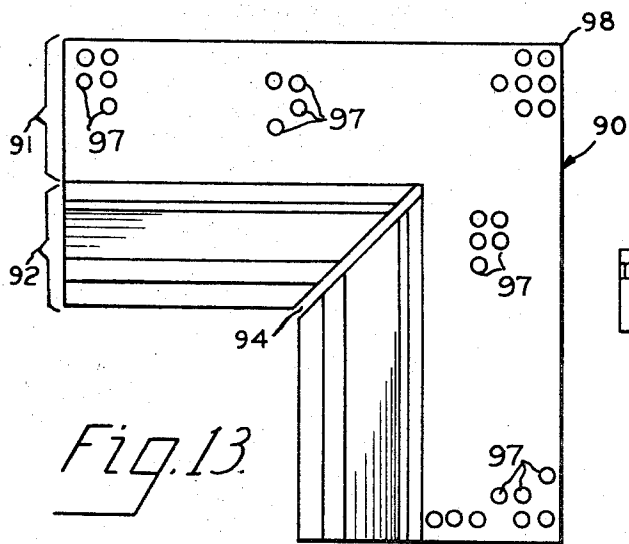
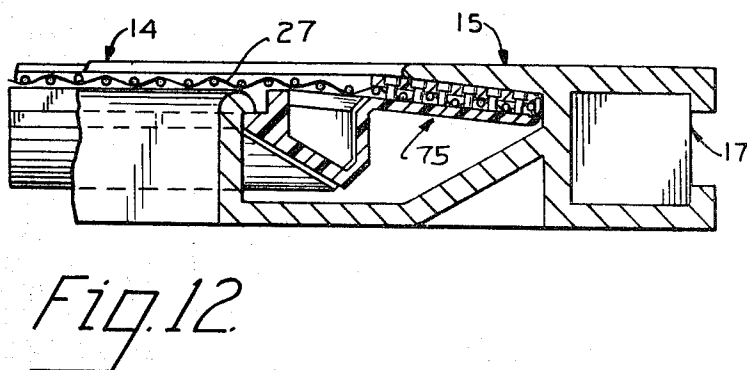
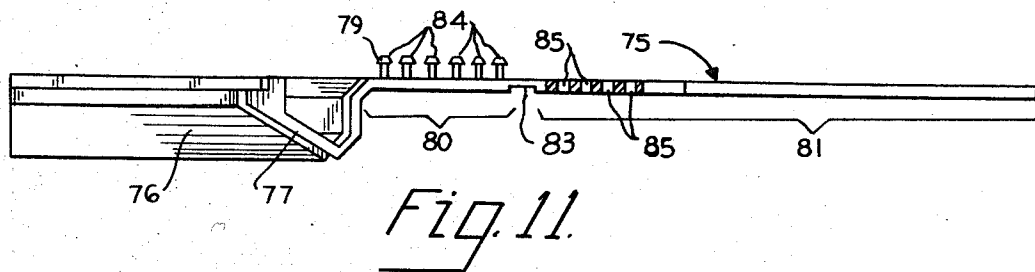


Fig. 10.

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METHOD OF SCREENING

This invention relates to a screen assembly and method of making same and more particularly to a method of screening particularly adapted to screening with plastic-coated fiberglass screening material.

It is known in the art to employ plastic-coated fiberglass screening material on a frame to screen an inclosure. When plastic-coated fiberglass screening material is employed in conventional screen frames, a spline is applied to the screening material and pressed into a substantially U-shaped channel in the frame. The spline retains the screening material in the frame channel. Because plastic-coated fiberglass screening material has substantially no elongation as compared to aluminum or other metal screening material, pressure applied in a direction normal to the screen can pull the plastic spline from the channel. Also, substantial pressure must be exerted by the frame to keep the screening material in taut condition in the frame. When the plastic spline is employed with aluminum screening material and pressure is applied in a direction normal to the screen, the aluminum wires will elongate rather than pull the spline from the channel. Also, except in the instance of elongated or stretched wires, the frame does not have to exert pressure to keep the aluminum screening material in a taut condition, because of the material's characteristic rigidity.

For these reasons, it is preferable in the industry to employ aluminum screening material rather than plastic-coated fiberglass screening material. Plastic-coated fiberglass screening material, however, exhibits numerous advantages not possessed by aluminum or metal screening material. For example, plastic-coated fiberglass screening material can be readily rolled or folded and then opened out and used to screen an inclosure. If aluminum or metal screening material is folded or even kinked, it cannot be straightened to make a screen for an inclosure which is pleasing to the eye. The kink will remain and in fact in most cases will weaken the area of the screening material containing the kink. Further, a high degree of skill is required to install aluminum screening material without damaging the material or distorting the mesh.

An object of this invention is to provide an improved screen assembly and method of screening particularly adapted to the use of plastic-coated fiberglass screening material.

An object of this invention is to provide a method of screening which can be quickly and easily practiced by one unskilled in the art.

Another object of this invention is to provide a manual method of screening without the use of hand tools in which a high quality installation may be achieved.

Yet another object of this invention is to provide a screen assembly in which the screening material exhibits elasticity even though the screening material itself is relatively inelastic.

Yet another object of this invention is to provide a method of screening in which the screening material is fastened to the frame by clips connected to the screening material only at spaced intervals, and, because of the relative inelasticity of plastic-coated fiberglass screening material, remain concealed beneath an overlapping ledge or cover lip of the frame; however, because of the resiliency of the clips, the installed screening material is resiliently supported.

Still another object of this invention is to provide in a screen assembly a frame member which is simple in construction and which cooperates with a clip to retain the screening material on the frame.

Still a further object of this invention is to provide a screen frame member with a cross section which can be readily extruded and which cross section assists a clip attached to the screening material in assuming a position in which the outer edge of the screening material is concealed and in which the clip spring portion exerts a force in a direction to oppose forces normal to the screen.

Briefly, in accordance with aspects of this invention, the screening material is supported by a polygonal frame having a channel extending around the area to be screened. The en-

trance to the channel is defined by a pair of opposed, longitudinal lips. The lip nearer the inner edge of the frame, or the inner lip, includes an outwardly projecting portion having an arcuate-bearing surface against which the screening material bears or rests when the screen is assembled.

The inner lip-bearing surface also performs the function of providing a camming surface for the spring portion of the clip to cause the spring portion to compress as the clip is forced against the camming surface and as the clip is being inserted into the longitudinal channel. A still further function performed by the inner lip is that of retaining the clip in the channel after the spring portion has moved beyond the inner lip and regains its unstressed or uncompressed dimension. The outer lip, which extends toward the area inclosed by the screen frame, performs at least three functions. It retains the outer edge of the clip within the channel, acts as a bearing surface for the screening material-engaging portion of the clip and also conceals the outer edge of the screening material. The channel includes a pair of angularly disposed internal surfaces which assist the clips in gliding or sliding to a final or assembled position. These angularly disposed surfaces are the inner surface of the outer lip and the adjacent portion of the bottom of the channel which is inclined toward and positioned beneath the inwardly projecting lip. These two inclined surfaces extend toward each other and terminate in an outer wall of the channel, which outer wall faces toward the area inclosed by the screen frame. Preferably, this outer wall closely approximates and is slightly larger than the dimension of the outer edge of the clips after the clips have been attached to the edge of the screening material. Also, the outer wall extends to a plane slightly above the bearing surface of the inner lip, as viewed in elevation and in section with the frame lying on one side, such that, in its assembled form, the screening material will lie substantially in a single plane throughout the portion which extends over the frame and that portion which incloses the screened area within the frame.

One method of producing a screen assembly will now be described.

The screening material is first cut to an area equal to or slightly less than the area within the outer wall of the channel. Clips are then attached at spaced intervals along the edge of the screening material. These clips are preferably of suitable resilient plastic material such as nylon. The clips are then snapped into the channel.

The clips include two major portions, a spring portion and a screening material-engaging portion. The latter is a substantially flat portion having integral projections formed in rows and columns and extending perpendicularly from the flat portion. The spacing of these projections conforms to the mesh of the screening material. These projections are inserted in the mesh immediately adjacent the edge of the screening material and the clip is secured to the screening material by one of several convenient methods. The projections may be simultaneously heated and compressed to cause material in these projections to flow over or encapsulate the screening material.

Alternatively, the clips may be provided with segmented screening material-engaging portions including a base and a flap. The base is a flat portion with projections having enlarged terminal portions. The flap portion has projection receiving apertures arranged in columns and rows to correspond to those of the projections. The flap portion is connected to the base portion by a hinge portion, preferably of reduced cross section. The flap portion is folded over and snapped onto the projections after the projections have been passed through the mesh of the screening material to effectively "sandwich" the screening material between those two portions of the clip.

Each embodiment of the clip is preferably provided with at least one spring portion, one edge of which snaps beneath the inner lip of the channel after the outer edge of the clip has been inserted beneath the outer lip to thus retain the clip in the channel. The clips are also provided with a ridge adjacent the inner edge of the clip. This ridge provides a surface against

which pressure may be applied to force the spring portion of the clip against the cam surfaced lip until the spring portion compresses and moves beneath the outwardly projecting lip. The resiliency of the clip causes it to snap into place beneath the inner lip.

These and various other objects, features and advantages will be more clearly understood from a reading of the detailed description of the invention in conjunction with the drawing in which:

FIG. 1 is a view in perspective of a screen assembly according to this invention;

FIG. 2 is an enlarged view in section taken along the lines 2-2 of FIG. 1 and looking in the direction of the arrows;

FIG. 3 is a plan view of a clip of the type shown in FIG. 2, prior to being attached to the screening material to the same scale as FIG. 2;

FIG. 4 is a view in elevation, partly in section, showing the clip of FIG. 3 after its projections have been positioned within the mesh of the screening material at the edge of the screening material;

FIG. 5 is a view similar to FIG. 4 after the projections engaging the screening material have been melted and compressed to encapsulate a small area at the edge of the screening material;

FIG. 6 is a view in elevation, partly in section, showing the clip of FIG. 5 partially inserted in the channel of the screen frame;

FIG. 7 is an edge view in elevation, to the same scale as FIGS. 2-6, of an alternative embodiment of screen clip;

FIG. 8 is a plan view of the clip of FIG. 7;

FIG. 9 is a view in elevation, partly in section, showing the clip of FIGS. 7 and 8 engaging the screening material and with the clip assembled in the frame;

FIG. 10 is a plan view of still another embodiment of screen clip which may be employed in this invention to the same scale as FIGS. 2-9;

FIG. 11 is an end view of the clip of FIG. 10;

FIG. 12 is a view in elevation, partly in section, showing the clip of FIGS. 10 and 11 engaging the screening material and with the clip positioned in the frame channel;

FIG. 13 is a plan view of still another alternative embodiment of screen clip, to the same scale as FIGS. 2-12;

FIG. 14 is an end view of the clip of FIG. 13; and

FIG. 15 is a view in elevation, partly in section, showing the clip of FIGS. 13 and 14 engaging the screening material and with the clip positioned in the frame channel.

Referring now to the drawing, one embodiment of screen assembly 10 is shown in FIGS. 1 and 2 in which a frame 11 includes a plurality of frame elements 12, 13, 14 and 15, each having a longitudinal channel 16. The frame elements are connected together to form a polygon by any convenient means, such as by a plurality of conventional corner keys 17. As viewed in FIG. 2, channel 16 is bounded (in part) by an inclined surface 18, a bottom 19, opposed inner and outer walls 20, 21, respectively, an inner and an outer lip 23, 24, having inner surfaces 25, 26, respectively. A screening material 27, which is preferably, but not necessarily, of plastic-coated fiberglass, is mounted on the frame 11 by means of a plurality of clips 28 which are secured to the screening material at spaced intervals and snapped into channel 16 in respective ones of the frame members 12, 13, 14 and 15.

The details of the engagement of the clips 28 with the frame members is shown in detail in FIG. 2, which is a view in section taken along the lines 2-2 of FIG. 1, to an enlarged scale. Each screen clip 28 includes a screening material-engaging portion 30 and an integral spring portion 32. In this particular instance, the screening material-engaging portion 30 encapsulates the screening material 27. Encapsulation is produced by melting and pressing a plurality of projections of the screening material-engaging portion over screening material 27 in a manner which will be subsequently described. The resiliency of spring portion 32 causes clip 28 to snap beneath lips 23, 24 during assembly and after assembly, applies a pressure in a

horizontal direction against wall 20 and away from the screened opening, as viewed in FIG. 2, to maintain tension on screening material 27. Spring portion 32 reduces or even prevents damage to the screening material 27 after assembly by absorbing forces applied to the screen in a manner which will be subsequently described. The clip includes an upper, inner edge 34, as viewed in FIG. 2, which engages the inner surface 25 of the inner lip 23 to retain the clip 28 within the channel 16. In this particular instance, the clips 28 are preferably formed of plastic material such as nylon, which is a trademark of the E.I. DuPont Company for polyamide resins. Clip 28 also includes a longitudinal ridge 36 which includes an upwardly or outwardly facing flat surface 38 to which pressure may be applied in snapping the clip 28 into the longitudinal channel 16 after the screen clips 28 are secured to the screening material 27.

When a force is applied to screening material 27 after assembly, the material tends to move to the left, as viewed in FIG. 2, and spring portion 32 tends to compress, i.e., to assume a position indicated in dotted outline in FIG. 2. Thus the cooperation of screening material 27, clip 28 and frame 11 is such that the material 27 exhibits resilience, whereas the material 27, particularly if formed of plastic coated fiberglass or other similar inelastic material, is no resilient.

Clip 28 is shown in plan and end views prior to its being fastened to the screening material in FIGS. 3 and 4, respectively. Prior to being heated and compressed to encapsulate the screening material 27, the screening material-engaging portion includes a plurality of perpendicular projections 39 which have round bases integrally formed with a relatively flat base portion 40 and which taper to smaller round points or tips. It is to be noted that the size of the bases of these projections are smaller than the area of the mesh of the screening material 27 to permit the individual "wires" or plastic-coated yarn to lie between these projections 39 and rest upon the relatively flat surface of base portion 40. In fastening the clip 28 to the screening material 27 after the projections 39 are inserted into the mesh of the screening material 27 adjacent the edge of the screening material, a suitable heated tool is pressed upon the ends of the projections 39 to cause them to fuse, effectively encapsulating the screening material by forming a layer 41 of plastic material upon the base portion 40, layers 40, 41 defining the screening material-engaging portion 30 shown in FIGS. 2 and 5.

After the clips are attached to the edges of the screening material, preferably at points, suitably spaced to permit individual manipulation, they are inserted, one at a time, into the channel 16. In this process, the outer edge 43 is first inserted between lips 23, 24 and pushed into engagement with inclined surface 18. Edge 43 slides along surface 18 until it engages the inwardly facing outer wall 21 (see FIG. 6). At this point, an inclined undersurface 45 of the spring portion 32 engages the arcuate or camming surface of the inner lip 23, causing the spring portion 32 to begin to compress. Compression of the spring portion 32 continues until the inner edge 34 snaps beneath the lower surface 25 of lip 23 (FIG. 2) in this position, spring portion 32 resists pull on the screening material to the left, as viewed in FIG. 2, or toward the screened opening.

The spring effect of the clips is due, in part, to the resilience of the material. The spring effect may be modified by varying the thickness of the material, particularly at the corners of the spring portion, such as corners 48, 49 which are of reduced thickness as compared to the rest of the clip. Reducing this dimension reduces the force required to compress the spring portion.

A second embodiment of clip is shown in FIGS. 7 through 9. FIG. 7 is a side view in elevation of a clip 50, which may also be employed to secure the screening material 27 into a frame 11 of the type shown in FIGS. 1, 2 and 6. This particular embodiment includes a spring portion 51 and a screening material-engaging portion 52, which latter portion includes a rectangular first or base portion 53, having a plurality of spaced pro-

jections 54 equally spaced in rows and columns to define a rectangular pattern, as best seen in FIG. 8 (only a few of the projections 54 are shown), and a second, rectangular flap or cap portion 57. Portions 53 and 57 are connected by a hinge portion 59. Each of the projections 54 has a relatively cylindrical body portion 55, formed integrally with base portion 53 and terminating in an enlarged tapered or frustoconical portion 56. Flap portion 57 has a plurality of holes 58 therein, equal in spacing and number to the projections 54 for receiving same in snapping engagement. Flexible hinge portion 59 is preferably of diminished cross section.

In assembling, one edge portion of screening material 27 is placed over projections 54, preferably so the outermost plastic-coated yarn or "wire" is to the right of right hand projection 54, as viewed in FIG. 7. Flap portion 57 is then rotated by bending hinge portion 59 in a counterclockwise direction until the holes 58 pass over the enlarged terminal portions 56. Holes 58 are of a diameter intermediate those of the bases and the tips of frustoconical portions 56. Thus, after portions 56 pass through holes 58, they quickly regain their original size and "snap" to retain portions 53, 57 in a sandwich with the screening material between them, as best seen in FIG. 9. After clips 50 are attached at spaced intervals to the edges of screening material 27, the clips are manually inserted, seriatim, in the channel 16 of a frame 11 in a manner similar to that previously described with respect to clip 28. The clip has an outer edge 60 which is first inserted into channel 16 to engage and slide along inclined surface 18 until it engages wall 21. The spring portion 51 is resilient or elastic both due to the resilience of the material and particularly because of a pair of corner portions 61, 62 of reduced cross section in comparison to the rest of the clip. Clip 50 snaps into a retaining position, shown in FIG. 9, which corresponds to the position of the clip 28 in FIG. 2. Spring portion 51 also includes a pressure area 64, positioned along a ridge 65 for the purpose of inserting the clip into the frame 11, which area and ridge correspond to the parts 38 and 36, respectively of clip 28.

Although the engagement of projections 54 and flap portion 57 is described as a "snap" engagement, a heat-seal engagement could be employed. For example, round projections similar to projections 39 could be employed to project through and beyond holes round in cross section in flap 57. After flap 57 is folded over those round projections, the ends of the projections are heated and compressed to retain the screening material between flap 57 and base portion 53.

Another embodiment of screen clip, 75, which, in this particular form, is preferably employed at the corners of the screening material, is shown in FIGS. 10 through 12. Clip 75, as viewed in FIG. 10, includes a pair of perpendicularly disposed spring portions 76, 77, each of which engages an inner wall 20 of a separate corner element, such as the elements 14, 15 of FIG. 1. Clip 75 also includes an integrally formed pair of right angled screening material engaging portions 80, 81 connected by a hinge portion 83. Portion 80 includes a plurality of integrally formed projections 84, uniformly spaced in rows and columns (only a few of which are shown). Each projection terminates in an enlarged frustoconical portion 79, corresponding in profile to the projections of clip 50. Spring portions 76, 77 are preferably separated by a slot 86 so portions 76, 77 can be independently compressed during assembly so they can compress independently of each other in absorbing forces on the screening material 27. Portion 81 includes a plurality of holes 85, corresponding in number and spacing to projections 84. The profile and diameters of the respective parts of projections 84 corresponds to that of projections 54 (FIGS. 7 through 9) and holes 85 have the same diameter as holes 58 in clip 50.

In attaching clip 75 to screening material 27, the corner of screening material 27 is placed to coincide with the corner 87 at the upper right hand end of portion 80, as viewed in FIG. 10, preferably with outer "wires" or plastic-coated yarn engaging the outer surfaces of the outer rows of projections 84. After the screening material 27 is positioned as described,

portion 81 is folded at hinge portion 83 until the enlarged terminal portions of projections 84 snap through holes 85. After the portion 81 is snapped onto the projections of the portion 80 of each corner clip 75, clips 75 are inserted at the corners of the frame until they snap into position, as shown in FIG. 12. In reaching this position, the point of clip 75 is first inserted in slot 16 at the apex of the angle defined by the corner elements and spring portions 76, 77 may be simultaneously or sequentially compressed by camming against respective surfaces 23 of frame members 14, 15.

Still another embodiment of corner clip, 90, is shown in FIGS. 13 through 15. Corner clip 90 includes a general right angled configuration of screening material-engaging portion 91 and a pair of perpendicularly disposed spring portions 92, 93, separated by a slot 94, all as seen in FIG. 13. The embodiment of FIGS. 13 through 15 is similar in its engagement with the screening material to the embodiment shown in FIGS. 2 through 6. Clip 90 includes a plurality of round projections 97, aligned in rows and columns to cover an angularly disposed area, as best seen in FIG. 13, in which only a portion of each row or column is shown. After the corner of the screening material 27 is positioned at corner 98, the projections 97 are melted and compressed to effectively encapsulate the screening material 27, as best seen in FIG. 15. The clips 90 are then snapped into channel 16 at the corners of the frame 11 in the position shown in FIG. 15.

Preferably, the width of the channel 16 is slightly less than the transverse dimension of the clips measured without compressional forces on the spring portion so that the clips are maintained under partial compression after they are snapped into position. Also, the width of the inwardly projecting outer lip is preferably equal to, or greater than two-thirds of, the width of the screening material-engaging portion. More important, however, the width of the outer lip 24 is equal to and preferably greater than the reduction of width of the spring portion produced when the clip is at maximum compression. The width of the inwardly projecting lip defines the amount of overlap for the edge of the screening material such that the edge of the screening material cannot readily be pulled out of the slot 16 in the region between adjacent clips. The width of surface 26 beneath outer lip 24 is preferably several times that of the surface 25 beneath lip 23 (in this example, about 5½ times). Preferably, the clip 28 has a width of approximately one-half inch and, in one specific embodiment, this dimension was five-hundred thirty thousandths of an inch. The thickness of the reduced corner portion of the spring portion of the clip is of the order of ten thousandths of an inch, while the screening material engaging portion may have a thickness of the order of twenty thousandths of an inch exclusive of the points that are .060 inch high, prior to any melting operation. The upwardly facing ledge portion 34 which engages the downwardly facing surface 25 of the outwardly projecting lip 23 is of the order of forty-five thousandths of an inch wide.

The preferred embodiment of screening material to be used in this invention is one in which the mesh of the screening material is square, so that the same clips may be readily attached to any of the edges of the screening material. Preferably, the screening material employed is plastic coated fiberglass or other suitable material which does not elongate readily, as compared to aluminum screening material. If the screening material or one of the clips becomes damaged and must be removed, the screen clips may be cut along the spring portion of reduced cross section (section 49 in FIG. 2), allowing removal. It is also possible to remove the screening material by positioning a sharp pointed tool adjacent the outwardly projecting inner lip and the pressure ridge and compressing the spring portion by advancing the tool toward the outer edge of the frame.

The screen assembly, according to this invention, has numerous advantages. For example, in the assembly of the clips into the frame, after a few of the clips have been inserted they can slide along channel 16 to finally position the screening material. Also, while corner clips and edge clips have been

described as alternative embodiments, they may be employed in combination. For example, on screen assemblies of substantial width, such as greater than 1 foot, corner clips may be employed and edge clips may be employed midway between each of the corner clips. For larger screen assemblies, a larger number of edge clips will be required between corners. If corner clips are not employed, then edge clips may be employed in close proximity to the corners of the frame and spaced at intervals along the sides of the frame. While the screening assembly of this invention has been described in conjunction with a rectangular frame, it is understood that a polygonal frame of as many sides as are required by the opening to be screened, may be employed. Such a modification would require the corner clips 17 to have an appropriate angle greater than 90°, and would also dictate that the edge clips, such as shown in FIGS. 2 through 6, be employed, or would require modification of the corner clips such that the spring portions were disposed at angles corresponding to the angles defined by the junctions of the frame members. It is also understood that different configurations of clip may be employed and, for example, different width of U-shaped channels in the spring portions may be employed depending on the particular thickness and resilience of the material. In the specific example of clips disclosed in this application, the U-shaped channel of the spring portion of the clips is one-hundred twenty thousandths, and the width of the screening material engaging portion is of the order of three-hundred twenty thousandths in the embodiment shown in FIGS. 2 through 6.

One of the specific advantages of this arrangement is that all the screening material, including that portion engaged by the clips, lies substantially within a single plane in that there are no 90° bends in said material, and a uniform tension is maintained on the screening material throughout the screen assembly without bowing the frame. The reference to a single plane in this specific example is a plane in which the screening material lies within a boundary of plus or minus fifteen-thousandths of an inch for screening material having eleven-thousandths of an inch in diameter wires. The screening material in this new type of assembly is not as taut when installed as newly splined screening material installed in accordance with the prior art methods, and yet it exhibits no subsequent flap or reduction in tension, because there is a spring effect on the screening material produced by the screen clips, which do not have a tendency to reduce their spring effect. Further, the arcuate surface of the inner lip provides a smooth surface against which the screening material glides when forces are applied to the screen, thereby obviating

damage to the screening material.

While several illustrative embodiments of the invention have been shown and described in detail, it is understood that other embodiments may be employed without departing from the spirit and scope of this invention. For example, the frame may be formed of a single piece of rolled metal, it may be formed of one piece of molded metal or plastic, or it may be of circular shape. Also, the frame may be the main door or window frame rather than an auxiliary frame to be attached to the main frame.

I claim:

1. A screening assembly comprising:

A frame inclosing an area to be screened, said frame having a longitudinal slot therein, the opening of said slot being defined by inwardly and outwardly projecting lips relative to said area, said inwardly projecting lip being wider than said outwardly projecting lip; and

a screening material having dimensions greater than the distance between opposite edges of opposed inwardly projecting lips whereby the outer edges of said material can be concealed beneath said inwardly projecting lip; and a plurality of clip means fastened at spaced intervals to marginal areas of said screening material and positioned within said slot to retain the edges of said screening material beneath said inwardly projecting lip, said clip means including a surface for engaging said screening material, and spring means for compressively holding said clip means within said longitudinal slot, said screening material-engaging surface (defines) defining the outer portion of said clip relative to said area, and wherein said spring portion defines the inner portion relative to said area, whereby said spring portion compresses in response to pressure on said screening material and imparts resilience to said screening material.

2. The assembly according to claim 1, wherein said screening material-engaging surface includes a plurality of projections, each having a cross-sectional area less than the area of one of the mesh of said screening material.

3. The assembly according to claim 1 wherein said screening material-engaging surface includes areas for engaging opposite surfaces of said screening material, said areas being connected by a hinge portion whereby said screening material-engaging areas can be pivoted relative to each other to engage opposite surfaces of said screening material.

4. The assembly according to claim 1 wherein said spring portion is divided into two angularly positioned segments whereby said clip may be inserted at a corner of said frame.