

PATENT SPECIFICATION

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(54) INSECT SCREENS

(71) We, MEYERS TAYLOR PTY. LTD., of 840 Sandgate Road, Virginia, Brisbane, Queensland 4013, Australia, a corporation registered under the laws of the State of Queensland, Commonwealth of Australia, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to insect screens for windows and frames from which these screens are assembled.

The invention provides a frame for application to mesh sheet material, including first and second complementary frame members each having a face adapted to lie face-to-face with each other across the said mesh sheet material and enclose an area of the latter when lying on respective surfaces of the latter, holes and pins spaced along the faces of each of said frame members, each pin being engageable with a hole on the opposed face and being a push fit therein.

Where windows have to be opened and shut, the normal insect screen has to be at least partially removed to get at the window and then replaced.

It is clearly not satisfactory merely to cut a hole in the screen mesh. Such a hole is unsightly and the edges are subject to damage. More importantly, these edges cannot be made to seal effectively to the edges from which they have been cut. Some sort of edging for the hole is therefore necessary.

Furthermore, owing to the variety of adjusting mechanisms in use and their varying relation to the window, it is a considerable advantage to be able to locate a hinge or removable area with its frame at any chosen position on the screen.

A preferred form of the invention comprises an insect screen with first frame as defined above, a second such frame lying within the first, and the second defining a hinged or removable area of the screen,

through which a window may be adjusted.

The inner frame may be hinged to allow a hand to be inserted through to reach the window bar or other adjusting mechanisms, or the area may be removable to allow the adjusting mechanism to project through where the removed area was and be sealed to the frame.

An embodiment will be described in relation to the accompanying drawings, in which:—

FIG. 1 is a plan view of a frame for an insect screen,

FIG. 2 is a section on line 2—2 of Fig. 1 to enlarged scale, and

FIG. 3 is an elevation, also to enlarged scale, of part of Fig. 1.

The mesh screen material 10, a small part of which is shown in the Figures, is preferably of flexible plastics material.

The hinged area to be defined in screen 10 is bounded by an outer surround or frame 11 and an inner surround 12 of similar shape and fitting closely within frame 11.

Frame 11 consists of two co-operating frame members 11A and 11B (Figs. 2 and 3) to lie on respective faces of the mesh. Similarly surround 12 consists of two frame members 12A and 12B (Fig. 2). The members 11A and 12A are an assembly made as an integral moulding of suitable plastics such as glass-filled nylon, 11A and 12A being joined by thin ties 13 at spaced points around their peripheries and by hinge pieces 14 along one side. Members 11B and 12B are similar.

The assembly 11A, 12A lies on one side of the mesh 10 and assembly 11B, 12B on the other. The two assemblies are held together by fine pins 15 in each engaging with a push fit in correspondingly-located holes 16 in the other. Pins 15 and holes 16 alternate at regular spacings round the peripheries of each of the members 11A, 11B, 12A, 12B, a pin 15 always occurring opposite a hole 16. Fig. 3 shows part of half members 11A and 11B separated to show the spacing of pins 15 and holes 16.

[Price 25p]

A rotatable catch 17 is mounted on an enlargement 18 on surround 12 on the side opposite that having hinge pieces 14.

5 In use, assemblies 11A, 12A and 11B, 12B are placed in register on opposite sides of mesh 10 in any position desired. The assemblies are pressed together to engage pins 15 and holes 16 mutually between the members 11A and B, 12A and B respectively, pins 15
10 being small enough to pass through a hole of mesh 10.

A sharp knife or other cutter is now passed around between surround 12 and frame 11 to cut mesh 10 and ties 13, but not
15 hinges 14. Surround 12 with the contained mesh then forms a flap area free to hinge (on hinge pieces 14) out of the plane of frame 11 and mesh 10. Catch 17 may hold this flap against opening.

20 It will be realized that 11 and 12 each provide a neat support to the edge portions of the cut mesh and that the frame as a whole may be located at any chosen position on mesh 10.

25 While a hinge arrangement has been described, it is clear that a modified frame may allow a removable panel area to be made in similar manner by severing mesh 10 and ties such as 13 all the way round between 11 and 12.

30 When applied to removal of part of mesh 10 to allow a window adjustment mechanism or handle to pass through the plane of the screen, a frame closely fitting around the mechanism or handle is applied
35 to the mesh at desired position, this frame being of two opposed frame members similar to 11A, 11B or 12A, 12B above. The mesh within the frame is then cut away and the adjustment mechanism or handle may
40 pass through.

WHAT WE CLAIM IS:—

45 1. A frame for application to mesh sheet material, including first and second complementary frame members each having a face adapted to lie face-to-face with each other across the said mesh sheet material and enclose an area of the latter when lying

on respective surfaces of the latter, holes and pins spaced along the faces of each of said frame members, each pin being engageable with a hole on the opposed face and being a push fit therein.

2. A frame for application to mesh sheet material, including an inner frame and an outer frame each being as claimed in Claim 1, frame members of the outer frame respectively enclosing a larger area than the frame members of the inner frame and lying outside the latter, the frame members of the inner and outer frames adapted to lie on the same respective surfaces of the mesh sheet material being connected by severable ties.

3. A frame according to Claim 2 wherein the inner and outer frame members and their ties are respective one-piece assemblies.

4. A hinged flap insect screen in mesh material including a frame as claimed in Claim 2 or Claim 3 having hinge pieces connecting said inner and outer frames along one side only, sheet mesh material being sandwiched between respective inner and outer frame members whereby said inner frame constitutes a border for a hinged flap and said outer frame can constitute a frame for said flap when the ties and sheet material between the frames are severed.

5. A flap as claimed in Claim 4, in which a rotatable catch is mounted on said inner frame to engage said outer frame in one position.

6. A hinged flap insect screen according to Claim 4 substantially as described with reference to the accompanying drawings.

7. A frame for application to mesh sheet material substantially as herein described with reference to the accompanying drawings.

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