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(54) Squarer for frames

(57) The present invention relates to a squarer for frames, comprised of a square or triangle, made of metal plate and presenting corresponding extensions from the external rim of the cathetus, oriented in the same direction. Said extensions being formed by folding the corresponding side edge at right angles to the plane of the square or triangle, and being provided with passing holes for screws fixing on the frame. The sides of the square or triangle are similarly extended from the internal and external edges at right angles by lappets oriented respectively in opposite directions; and pressed-on for forming longitudinal flutes, acting as stiffening and reinforcing members. The vertex of the right angle of the square or triangle is externally cut or beveled at 45°.

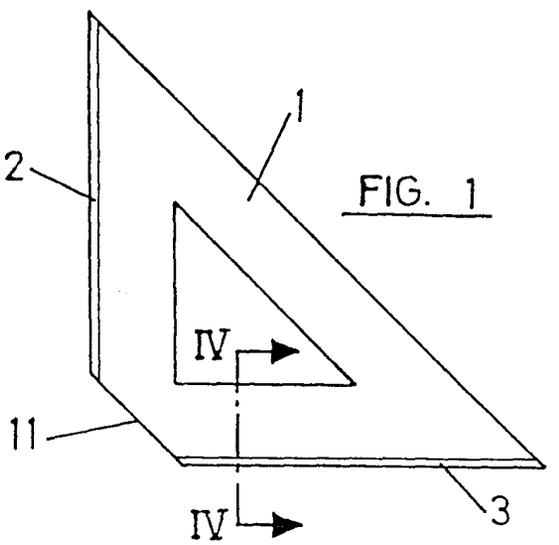

FIG. 1

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Description

[0001] The present description relates to a squarer for frames, comprised of a square or triangle with a planar structure and intended for internal mounting at the angles of the frames of windows and doors in order to ensure the correct placement of said frames.

[0002] The frame is the member to be mounted into the windows and doors hollows for outlining of windows and doors. Once the construction is finished the boxing or the decorative brick mould is fitted onto the frame, making up the external visible surface, covering and keeping the frame out of sight.

[0003] The frame is the member which provides the hollow characteristics, therefore, it requires a precise placing, both in sense of the position and dimensions, as well as assuring the edges being at right, 90° angles to each other.

[0004] The object of the present invention is a squarer assuring the above-mentioned purpose, avoiding the frame edge angles shifting in regard to each other, and definitively preventing any frame deformation.

[0005] The squarer of the present invention is intended for mounting inside the angles of the frames of windows and doors, and it is formed in order to make easy and fast the mounting and dismounting operations, without having any effect on edge placement or altering their corresponding 90° angles.

[0006] The squarer of the present invention is of a low cost and, further more, can be re-used for various frames at successive works and mountings.

[0007] The squarer of the present invention comprises of a square or triangle, characterized in that said square or triangle presents at least the corresponding extensions from the external rim of the cathetus, oriented in the same direction; and being said extensions positioned at right angles to the plane of said square or triangle, and presenting said extensions an outer planar surface which is coplanar with the corresponding edge rim. Furthermore, said extensions are provided with passing holes for screw fixing, located on both frame sides.

[0008] The square or triangle is, preferably, provided with a planar configuration and made, for instance, of a metal plate. Folding at a right angle the corresponding side edge forms the side extensions of the square or triangle.

[0009] Each side of the square or triangle can present the same type of extensions from their external and internal edges, preferably, being the internal edge extensions oriented in the opposite direction to that one of the external edge extensions.

[0010] In the case the squarer being made from metal plate, the sides of the square or triangle can be pressed-on forming a longitudinal flute, which confers to the square the necessary strength and stiffness.

[0011] In order to secure a precise placing of the squarer, the vertex of its straight angle can be cut or beveled at 45°.

[0012] All of the hereinbefore-mentioned features of the invention will be better understood by the following description of a non-limiting embodiment made in reference with the attached drawings.

[0013] The following figures are shown, where:

Figure 1 is a front elevation of a squarer of the present invention.

Figure 2 is a side right elevation of a squarer of the figure 1.

Figure 3 is a plan-view of the same squarer of the figure 1.

Figure 4 is a cross sectional view at a higher scale, according to the line IV-IV of the figure 1.

Figure 5 shows a perspective view of one performance alternative.

Figure 6 is a cross sectional view at a higher scale according to the line VI-VI of the figure 5.

Figure 7 is a partial front elevation of a frame including the square of the present invention.

Figure 8 is a cross vertical view at a higher scale of the frame according to the line VIII-VIII of the figure 7.

Figure 9 is a cross vertical view similar to that of the figure 8 showing another frame position.

[0014] On figures 1-3 is shown a squarer comprised of a planar square (1) extending from the external rim of the cathetus by corresponding extensions or lappet (2) y (3) oriented in the same direction at straight angle to the square plane. The external rim of the cathetus and the extemal surface of the extensions (2) and (3) are in the same plane, as is better clarified in the figure 4.

[0015] The extensions (2) and (3) are provided with holes (4) for passage of fixing frame screws, as it will described further.

[0016] On figure 5 is presented a performance alternative in which the squarer is also comprised of a square (1) with a planar configuration, formed by a metal plate and extending from all its sides. Said extensions of the extemal edges constitute the lappets (5), oriented to the same direction; and extensions of the internal edges constitute the lappets (6), oriented to the opposite direction. Furthermore, the square (1) sections present longitudinal pressed-on flutes (7) acting as reinforcing and stiffening members, all of the above-mentioned features are better-clarified on figure 6. Being the extensions of lapped (5) also provided with the corresponding holes (4).

[0017] The above described squarer is placed by that manner as it is represented in figure 7, so the lappets (2) and (3) of figure 1, are attached to the internal surfaces of sides (8) and (9) of the frame. The frame fixing screws (10) are introduced through passing holes (4) of said lappets.

[0018] The squarers are placed on the required frame angles in order to prevent any movement of each edge in relation to the others edges of the frame, being so maintained the required frame geometry and the edge right angles.

[0019] The squarer is provided with a beveled vertex (11), see figures 1, 5 and 7, thus avoiding any defect as could be a rib or rough edge at the frame angles.

[0020] The squarer can be placed on the frame angles in coincidence with one of the side surfaces of the frame (see figure 8j. The squarer can also be placed just on the center position in relation to both frame sides (see figure 9).

[0021] The above-described squarer is placed on the frame at the workshop after the frame mounting. The squarers will maintain the required edge right angles at shipping and during the mounting at construction works.

[0022] Although the squarer has been represented at the figures with a square shape, it also could adopt the form of a triangle.

Claims

1. Squarer for frames comprising of a square or triangle, characterized in that said square or triangle presents at least the corresponding extensions from the external rim of the cathetus, oriented in the same direction; and being said extensions positioned at right angles to the plane of said square or triangle, and presenting said extensions an outer planar surface which is coplanar with the corresponding edge rim, and said extensions are provided with passing holes for screw fixing on the frame.

2. The squarer of the claim 1, characterized in that the square or triangle is made of a metal plate, being formed said extensions by folding at a right angle the corresponding side edge.

3. The squarer of the claim 2, characterized in that the sides of the square or triangle are similarly extended from the internal and external edges at right angles by lappets oriented, respectively, to opposite directions.

4. The squarer of the claim 2, characterized in that the sides of the square or triangle are pressed-on forming longitudinal flutes, acting as stiffening and reinforcing members.

5. The squarer of claims 1-4, characterized in that the vertex of the right angle of said square or triangle is externally cut or beveled, within a short length, at a 45° angle.

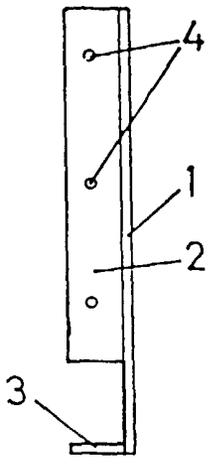


FIG. 2

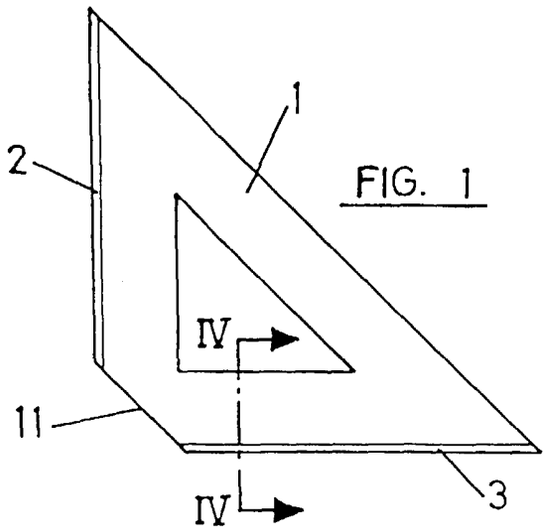


FIG. 1

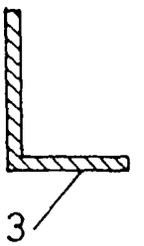
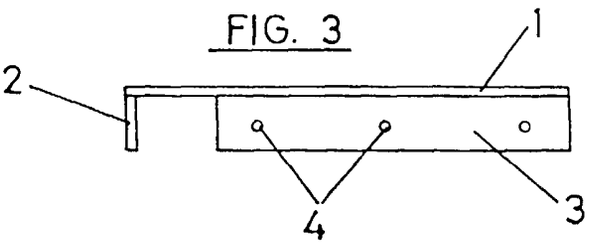


FIG. 4

FIG. 3



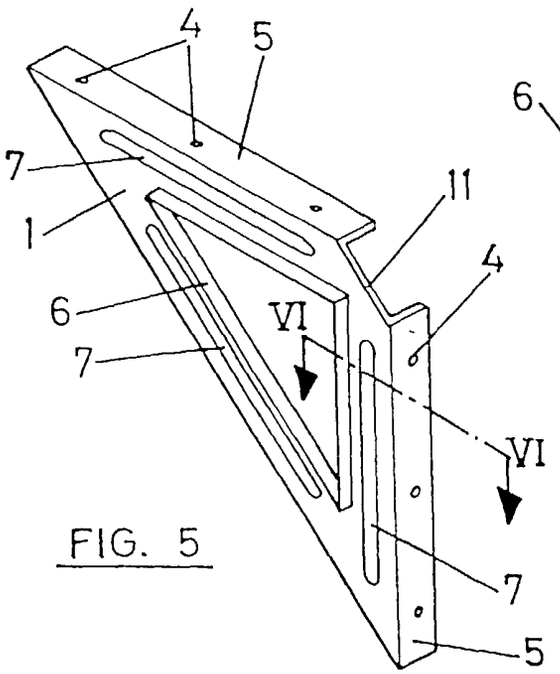


FIG. 5

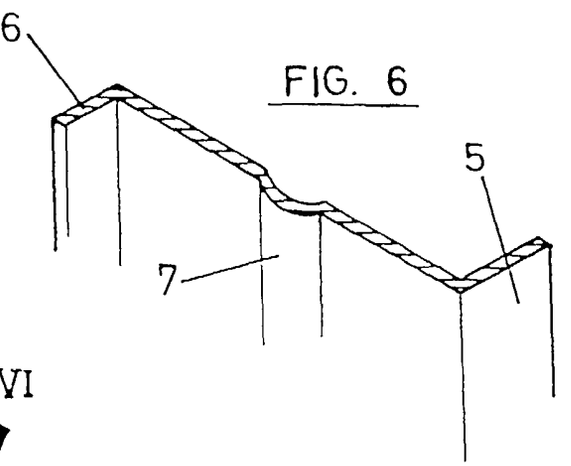


FIG. 6

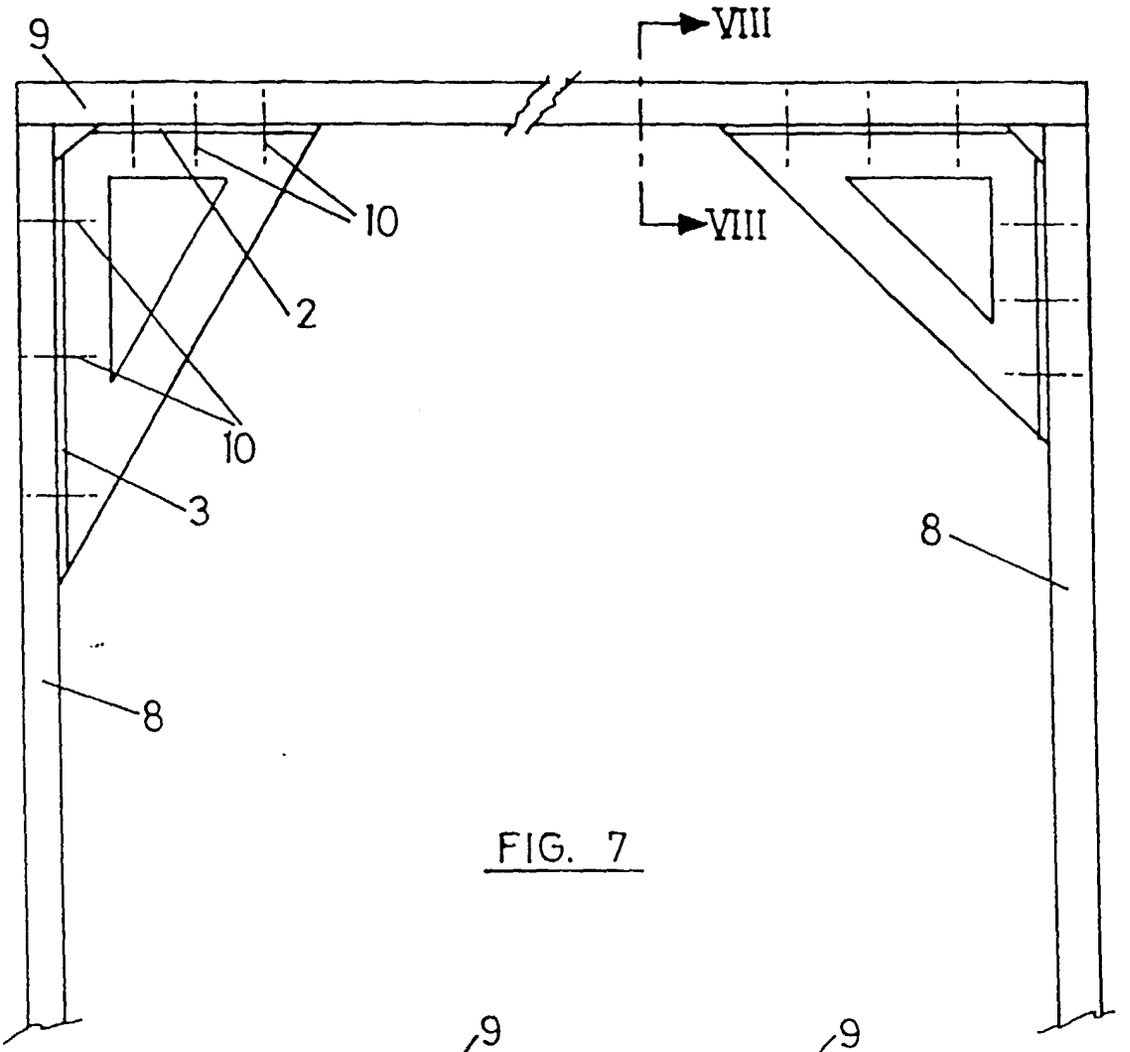


FIG. 7

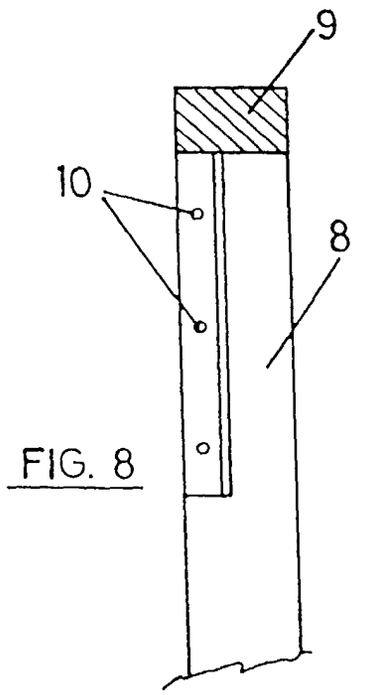


FIG. 8

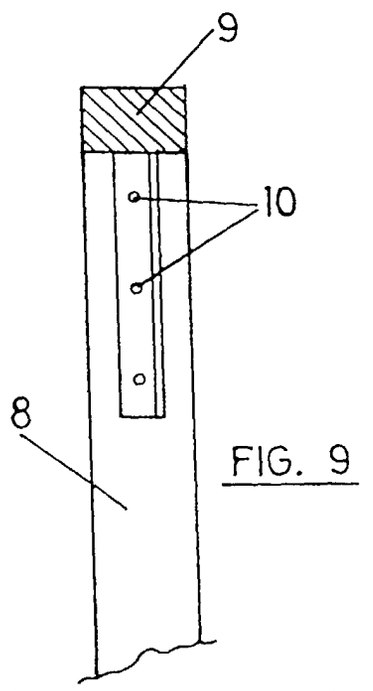


FIG. 9