

March 28, 1939.

H. B. CRANSHAW

2,152,584

FRAME FOR FIRE SCREENS, ETC

Filed Dec. 15, 1937

Fig. 1

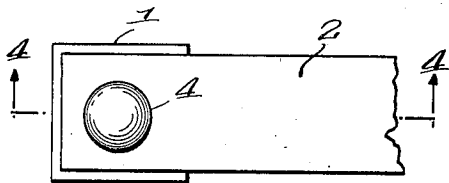


Fig. 3

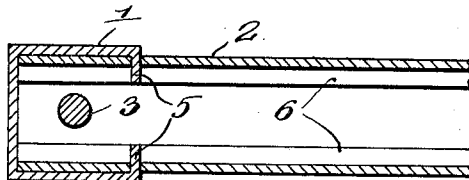


Fig. 2

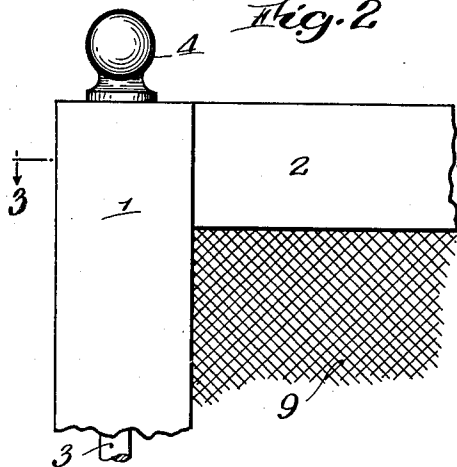


Fig. 4

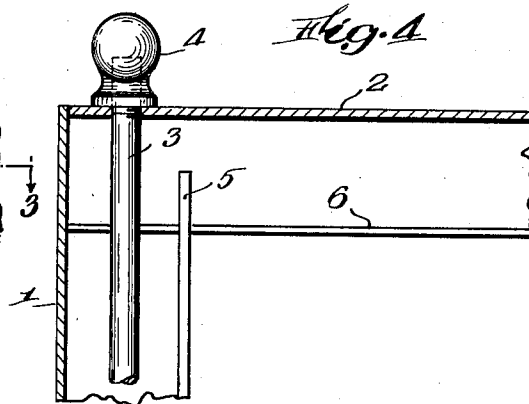


Fig. 5

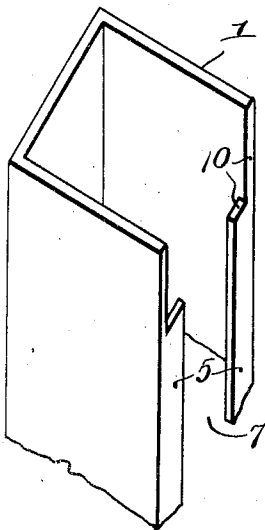
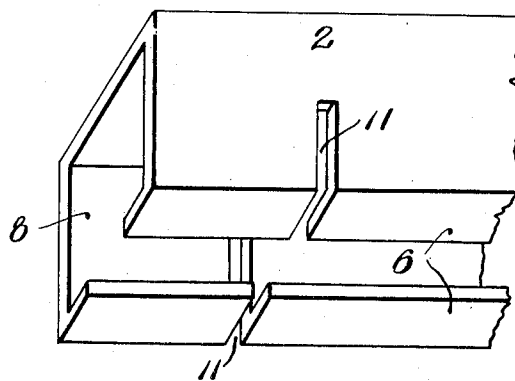


Fig. 6



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UNITED STATES PATENT OFFICE

2,152,584

FRAME FOR FIRE SCREENS, ETC.

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bridge, Mass., a corporation of Massachusetts

Application December 15, 1937, Serial No. 179,937

6 Claims. (Cl. 189—36)

This invention relates to frames for fire screens, license plates, mirrors and other articles of the type comprising longitudinal and transverse members interconnected to form a rectangular frame with slots in their opposing faces to receive the fire screen or other article to be mounted therein.

Objects of the invention are to provide a frame which is rigid and durable in construction, which can be readily assembled and disassembled, which is neat and attractive in appearance, and generally to improve frames of the type to which the present invention relates.

Other objects of the invention will be evident from the following description and accompanying illustration of the preferred embodiment of the invention in which,

Fig. 1 is a top plan view of one corner of the frame;

Fig. 2 is a side elevation of one corner of the frame;

Fig. 3 is a section on line 3—3 of Fig. 2;

Fig. 4 is a section on line 4—4 of Fig. 1;

Fig. 5 is a perspective view of one of the vertical frame members; and

Fig. 6 is a perspective view of one end of one of the horizontal frame members.

The particular embodiment of the invention chosen for the purpose of illustration comprises vertical frame members 1, horizontal frame members 2, rods 3 and nuts 4 threaded on the ends of rods 3. The members 1 and 2 are channel-shaped in cross-section, having on their inner sides intumed flanges 5 and 6 with slots 7 and 8 therebetween to receive the margins of a section of fire screen 9 or other article to be mounted in the frame.

At each end of the vertical frame members 1 the flanges 5 are interrupted as indicated at 10 in Fig. 5 to provide on the inner side of the member openings extending crosswise of the member throughout the entire width of the member and extending lengthwise of the member approximately half the depth of the horizontal members 2. The external width of the horizontal members 2 is substantially equal to the internal width of the vertical members 1 so that the ends of the horizontal members fit snugly into the ends of the vertical members. As shown in Fig. 6 the horizontal members are provided with slits 11 adapted to fit snugly over the ends of the flanges 5, the slits extending throughout approximately half the depth of the horizontal members, from the inner side along the front and rear sides

toward the outer side of each horizontal member. The distance of the slits 11 from the ends of the horizontal members is approximately equal to the depth of the vertical channel members so that, when the ends of the horizontal members are telescoped into the ends of the vertical members in right-angle relationship, the ends of the horizontal members extend substantially to the inner faces of the outer web sides of the vertical members.

To assemble the frame two vertical members are fitted over the vertical edges of the article to be mounted in the frame, the horizontal members 2 are then moved into place lengthwise of the vertical members and the rods 3 and nuts 4 are then applied. With the parts thus assembled relative movement of the parts is strongly resisted. Angular movement of the horizontal members relative to the vertical members in horizontal planes is resisted by the interlocking relationship of the outer sides of the horizontal members with the inner sides of the vertical members, the ends of the horizontal members with the outer or web sides of the vertical members and the edges of the slit 11 with the ends of the flanges 5. Angular movement of the horizontal members relative to the vertical members in the vertical plane of the frame is resisted by interengagement of the ends of the horizontal members with the outer or web sides of the vertical members, by interengagement of the flanges 5 with the edges of the slits 11 and by the rods 3 and nuts 4.

It should be understood that the present disclosure is for the purpose of illustration only and that this invention includes all modifications and equivalents which fall within the scope of the appended claims.

I claim:

1. A frame comprising an elongate channel member having on its inner side intumed flanges with a slot therebetween, said flanges being interrupted to form an opening, and another elongate member extending transversely of said member into said opening, the latter member being wider than the slot and having, in its front and rear walls, transverse slits to receive said flanges thereby to restrain longitudinal movement of the second member relatively to the first member.

2. A frame comprising an elongate channel member having on its inner side intumed flanges with a slot therebetween, said flanges being interrupted to form an opening throughout the full width of the member, and another elongate member extending transversely of said member

into said opening substantially to the web side of the channel member, the second member being substantially as wide as the interior width of the channel member and having, in its front and rear walls, transverse slits to receive said flanges thereby to restrain longitudinal movement of the second member relatively to the channel member.

3. A frame comprising a hollow rectangular member having a longitudinal slot in its inner wall and opposed flanges on opposite sides of the slot, and an elongate rectangular member extending transversely of said hollow member into the hollow member, the outside width of the elongate member approximating the inside width of the hollow member and the elongate member having transverse slits in its front and rear walls to receive said flanges thereby to interlock the two members together.

4. A frame comprising a hollow rectangular member having a slot in its inner wall and opposed flanges on opposite sides of the slot, and an elongate rectangular member extending transversely of said hollow member into the hollow member, the outside width of the elongate member approximating the inside width of the hollow member, the elongate member having transverse slits extending from its inner side along its front and rear sides part way toward its outer side, and said flanges extending into said slits and seating against the closed ends of the slits.

5. A frame comprising two hollow rectangular frame members each having a slot in its inner wall and opposed flanges on opposite sides of the slot, the slots being approximately equal in width,

the inside width of the first member approximating the outside width of the second member and the flanges of the first member being interrupted so that the end of the second member fits snugly into the first member, the second member having transverse slits extending from its inner side through its flanges and thence along its front and rear sides part way toward its outer side, and said flanges of the first member extending into said slits and seating against the closed ends of the slits.

6. A frame comprising an elongate hollow member having an opening in the inner side of the member and a slot extending from said opening longitudinally of said side, said opening being wider than the slot, and a second elongate hollow member having a slot extending longitudinally of its inner side, the outside width of the second member approximating the width of said opening so that the end of the second member may be fitted into said opening with the second member extending transversely to the first member, and said second member having a transverse slit extending through its inner side and thence into an adjacent side to receive said inner side of the first member so that the two members may be interlocked together by movement of the second member lengthwise of the first member until the inner side of the first member extends into said slit, said slots lying in the same plane when the members are fitted together as aforesaid.

HAROLD B. CRANSHAW.

CERTIFICATE OF CORRECTION.

Patent No. 2,152,584.

March 28, 1939.

HAROLD B. CRANSHAW.

It is hereby certified that the name of the assignee in the above numbered patent was erroneously written and printed as "Cutler Manufacturing Company" whereas said name should have been written and printed as Cutter Manufacturing Company, of Cambridge, Massachusetts, a corporation of Massachusetts, as shown by the record of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 9th day of May, A. D. 1939.

Henry Van Arsdale

Acting Commissioner of Patents.

(Seal)