

April 18, 1961

E. J. DE RIDDER

2,979,842

STRUCTURE FOR DETACHABLY MOUNTING ARTICLES TO BE EXHIBITED

Filed Oct. 29, 1959

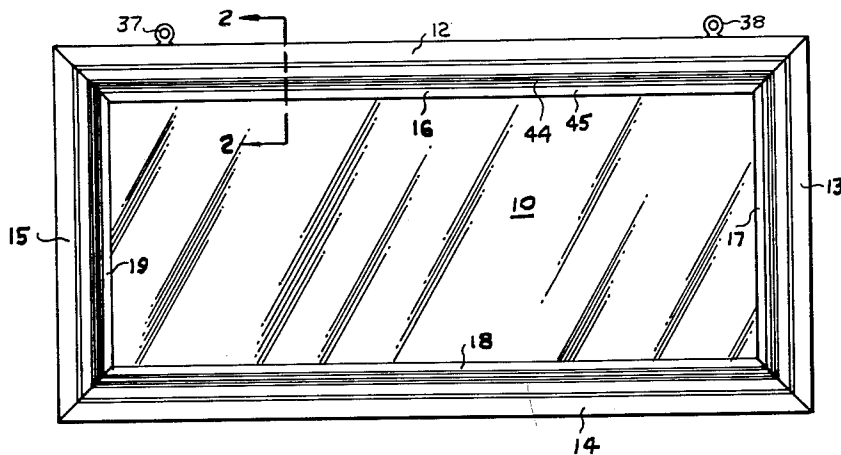


FIG. 1

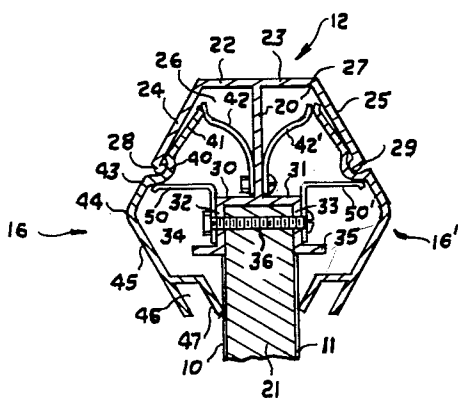


FIG. 2

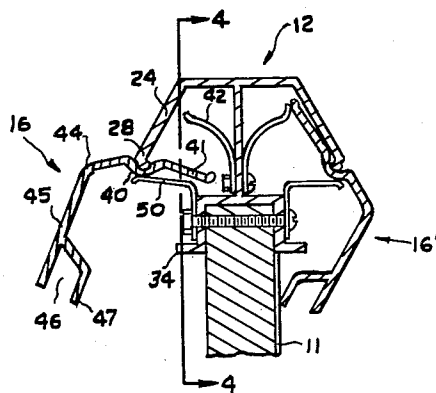


FIG. 3

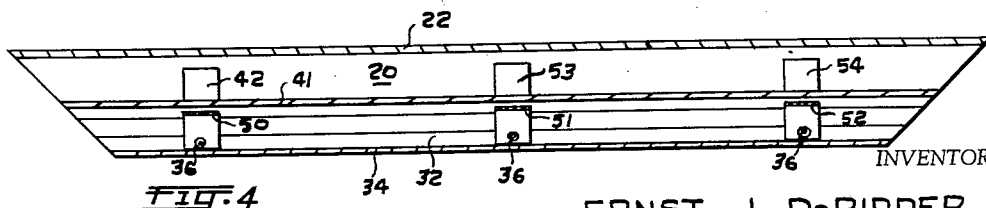


FIG. 4

ERNST J. DeRIDDER

BY *Glenn & Jackson*
ATTORNEYS

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Ernst J. De Ridder, Henrico County, Va., assignor to Reynolds Metals Company, Richmond, Va., a corporation of Delaware

Filed Oct. 29, 1959, Ser. No. 849,517

5 Claims. (Cl. 40—156)

This invention relates to a structure for detachably and securely holding articles to be exhibited, such as changeable posters or the like. Although the invention comprehends the use of such a structure with small articles which may be exhibited indoors, it is particularly well suited for use with articles of appreciable size and which frequently are exhibited out of doors.

An object of the invention is to provide an improved structure for exhibiting posters or the like.

Another object is to provide an improved structure for exhibiting two posters simultaneously.

Another object is to provide an improved structure for exhibiting posters or the like and which is characterized by its pleasing ornamental appearance; by the uniform clamping action exerted upon the poster edges; and by the ease with which changes in the articles being exhibited may be performed without requiring the use of separate tools or the like.

Other objects and advantages will become apparent as the description proceeds and when considered in conjunction with the accompanying drawings in which:

Fig. 1 is an elevation view of the structure embodying the invention.

Fig. 2 is a detail view to a larger scale, partly in section, and taken on line 2—2 of Fig. 1 and showing the clamp members in article engaging position.

Fig. 3 is a view similar to Fig. 2 and showing one clamp member in article-releasing position, and

Fig. 4 is a view taken on line 4—4 of Fig. 3 and showing the entire length of one frame member.

In accordance with the invention a flat mounting board, preferably adapted for exhibiting a poster on each face thereof, has a plurality of frame members attached at the periphery of the board, each such frame member having interior clamp manipulating spaces which are hidden from view. A plurality of pairs of clamp members, corresponding in number to the frame members, are pivotally mounted upon those frame members and have one edge portion which is engageable with the poster being exhibited on the board. On another edge portion, hidden from view, each clamp member is engageable with a resilient detent in its clamp manipulating space. In addition, each clamp member is provided with means adapted to be engaged by the fingers for moving the clamp member against the action of the detent in order to release the poster from clamped position on the board.

Referring now to Fig. 1, a structure embodying the invention and exhibiting a poster 10 on one face thereof is shown, it being understood that this same structure also exhibits a second poster 11 on its opposite face. As indicated, the structure comprises a plurality of frame members here seen at 12, 13, 14, and 15 and serving to form a rectangular shaped exhibit. Cooperating with these frame members in the manner later to be described is an equal number of independently movable clamp members 16, 17, 18, and 19. As will further

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be understood, the construction of the exhibit, due to the flexibility of the design permitted by the nature of these frame and clamp members, may take the form of any polygonal shape having three or more sides and is in no way limited to the rectangular shape herein shown.

As a feature of the invention, I prefer to form both the clamp and frame members of a material which has a uniform cross section throughout its length, the cross section of each frame member being identical with the cross section of the other frame member and the cross section of each clamp member being identical with the cross section of the other clamp members. Various such materials may be employed, but extruded aluminum is particularly well suited for use with the invention.

Referring now to Fig. 2, a typical frame member 12 may comprise a central web section 20 which is generally parallel with a flat mounting board 21 formed of any suitable material and against which the posters 10 and 11 are held. At its outermost edge the web is joined by a plate portion having one section 22 extending transversely of the web in one direction and another section 23 extending transversely of the web in the other direction. Each of these plate sections is joined at its edge by sloping reentrant skirt portions 24 and 25, respectively, and which are spaced sufficiently far from the web to provide the elongated clamp manipulating spaces 26 and 27. At their distal edges the skirt portions are provided with arcuate inner facing beads 28 and 29 forming a fulcrum for the clamp members. Each frame member, moreover, is suitably beveled at its ends to coincide with adjacent frame members and to form a closed frame about the mounting board.

Extending inwardly of the web section is a bifurcated foot portion of the frame member which, as shown, may include a second plate having one section 30 extending transversely of the web in one direction and another section 31 extending transversely of the web in the other direction. Joined to the respective edges of these sections are board-engaging legs 32 and 33 spaced from each other to form a groove into which the edge of the board may fit snugly. Projecting outwardly from these legs a short distance at the lower edge of the same are poster-aligning shoulders 34 and 35. Suitable fastening means such as a bolt 36 extending through the board-engaging legs and the board, may be employed to fasten the frame members to the board and to provide a rigid structure while at the same time being hidden from view by the clamp members. The assembled board may, of course, be equipped with any suitable means for supporting the same during its exhibiting usage, as, for example, hooks 37 and 38 tapped into the top plate portion of a frame member.

For cooperation with the thus-described elongated frame member 12 there is provided an improved elongated clamp member 16, having a central portion with an arcuate recess 40 therein engageable with the fulcrum bead on the skirt portion of the corresponding frame member. Extending in one direction from this central portion is a detent-engaging portion 41 engageable in space 26, as seen in Fig. 2, with a resilient detent 42 fastened to the web portion of the frame. Extending in the other direction from the recess 40 and generally in prolongation of portion 41 is an intermediate portion 43 having a convex outer edge 44 assisting in the ornamental appearance of the frame molding. From this convex edge a clamp skirt 45 then extends inwardly along an incline toward the face of the mounting board. This skirt at its lowermost edge is spaced from the face of the mounting board, however, to form an open space 46 suitable for engagement by the fingers for turning the clamp about its fulcrum. Projecting inwardly from the skirt of

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the clamp is a poster-engaging rib 47, the lowermost edge of which engages the poster.

For the purpose of holding the fulcrum portion of the clamp securely against bead 28 on the frame member, a plurality of leaf springs here shown at 50, 51, and 52 may be employed. These springs are suitably spaced lengthwise of the structure, as are the detents 42, 53, and 54. The springs may conveniently be mounted upon the bolts 36 which hold the frame members to the board and the outer ends of such springs bear upon the central portion of the clamp at all times. The springs, as well as the detents are hidden from view by the clamp members.

Having described the cooperation of the clamp and frame member for use in exhibiting poster 10 on one side of the mounting board, it will be understood that a similar plant member 16¹ may be used on the opposite side of the same board and employing a similar detent 42¹ and a similar leaf spring 50¹ for mounting a similar poster 11.

The operation of the structure will now be apparent. When it is desired to replace the poster 10 shown in Fig. 2, the user merely engages his fingers in recess 46 and turns the clamp member outwardly about its fulcrum and into the position shown in Fig. 3. Then the remaining clamps on the same side of the board are similarly turned, after which poster 10 is removed. A new poster may then be put in place with the edges of the same abutting against the inner periphery of the respective shoulders 34 of the frame members in order properly to center the poster. Thereafter, each of the clamps on that side of the board are pushed downwardly into the clamping position shown in Fig. 2. Due to the uniformity of the cross sections of the clamp when extrusions are used, and with a flat surface board being employed, the clamping rib 47 thus may bear against the poster with a substantially uniform clamping action along its entire length and this holds true of each of the clamps so employed. A secure clamping, which is particularly desirable when the poster is exhibited out of doors and subject to weather conditions, then is assured. The companion clamps for holding poster 11 are operable in the same fashion.

The structure as thus described, moreover, has the advantage of providing an attractive three-dimensional framing appearance for the poster and with all springs, detents and bolts hidden from view.

Having thus described the invention, it will be understood that various modifications may be made in the form and arrangement of elements employed on the embodiment illustrated, without departing from the spirit of the invention and as comprehended by the appended claims.

I claim:

1. A structure for detachably holding an article to be exhibited and comprising in combination, a flat mounting board, a plurality of elongated frame members each having a uniform cross section lengthwise of the same and including a central web section generally parallel to the plane of said board, a plate portion extending transversely of said web and having a reentrant skirt portion extending from the edge of said plate portion and spaced from said web section to form a clamp-manipulating space, and a foot portion; means attaching the foot portion of said frame members to said board; a plurality of independently movable elongated clamps each being movable between a first article-engaging position and a second article releasing position, each of said clamps having a uniform cross section lengthwise of the same and including a detent-engaging portion along a first edge, an article-engaging portion along a second edge, and a

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central fulcrum portion pivotally engageable with said skirt portion of said frame member, and a resilient detent mounted on said frame member and engaging said clamp within said space whereby upon moving said clamp to said second position against the action of said detent the article-engaging portion of said clamp may be released from said article and upon moving said article-engaging portion of said clamp is effective to hold said article against said board with a substantially uniform clamping action along the entire length of said clamp.

2. A structure as defined in claim 1 including means mounted upon said frame member and supporting the central fulcrum portion of said clamp in contact at all times with the skirt portion of said frame member.

3. A structure as defined in claim 1 wherein the lower edge of said skirt portion includes an inwardly facing bead and the central fulcrum portion of said clamp includes a concave recess in contact with said bead.

4. A structure for detachably holding a pair of articles to be exhibited and comprising in combination a flat mounting board having a first and a second mounting surface, a plurality of elongated frame members each having a uniform cross section lengthwise of the same and including a central web section generally parallel to the plane of said board, a plate portion extending transversely on both sides of said web and having reentrant skirt portions extending from the respective edges of said plate portion and spaced from said web section to form clamp-manipulating spaces, and a foot portion; means attaching the foot portion of said frame members to said board; a plurality of pairs of independently movable clamps, corresponding in number of pairs to said frame members and with each clamp of each pair being movable between a first article-engaging position and second article-releasing position, each of said clamps having a uniform cross-section lengthwise of the same and including a detent-engaging portion along a first edge, an article-engaging portion along a second edge, and a central fulcrum portion pivotally engageable with the corresponding skirt portion of said frame member, and a pair of resilient detents mounted on said frame member and engaging the respective clamps within the respective spaces whereby upon moving either of said clamps independently to said second position against the action of its respective detent the article-engaging portion of that clamp may be released from the article held against one surface of said board and without disturbing the holding of the other article against the other side of the board by the companion clamp of the pair and upon moving the same clamp to said first position under action of its detent, said article-engaging portion of that clamp is effective to hold the article against said board with a substantially uniform clamping action along the entire length of that clamp.

5. A structure as defined in claim 4, wherein said foot portion of said frame member is bifurcated and includes legs enclosing the periphery of said board and said means for attaching said frame members to said board includes a fastening passing through said legs and said board and hidden from sight by the corresponding clamp members.

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