

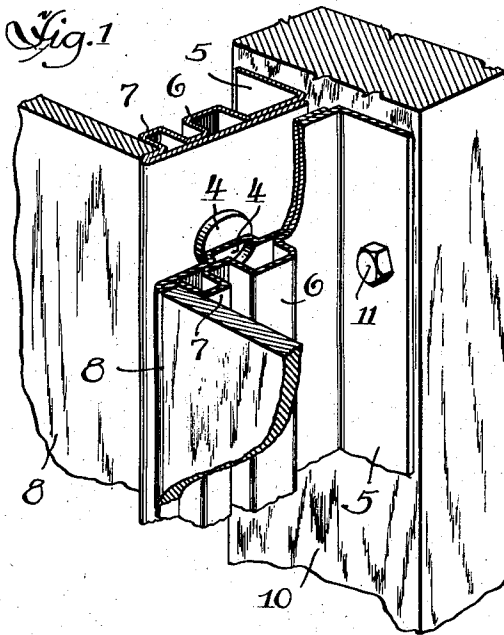
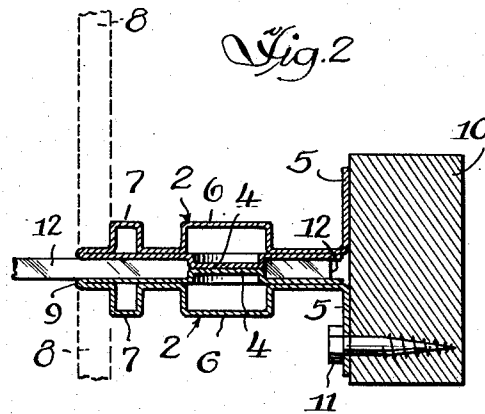
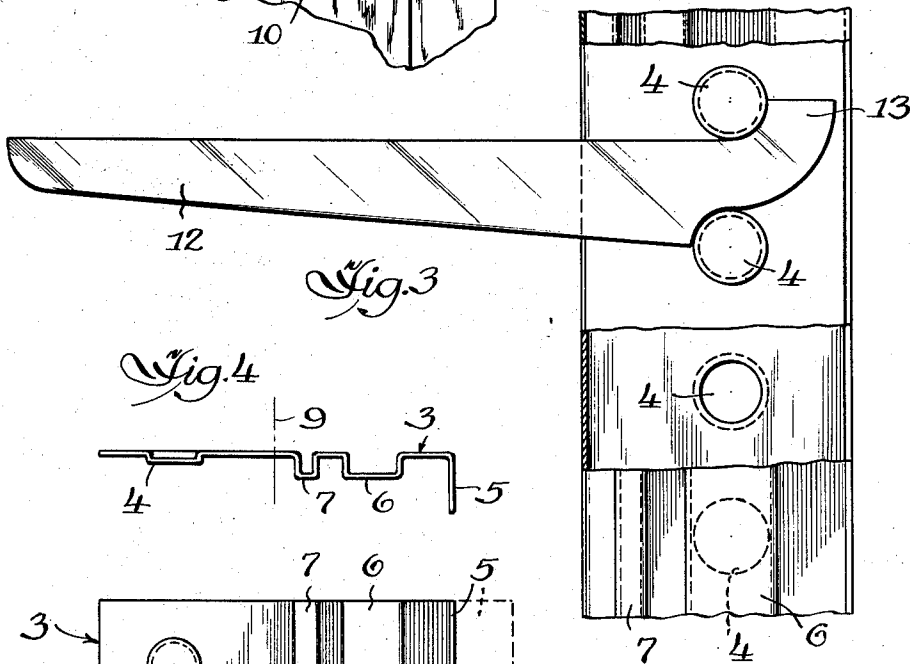
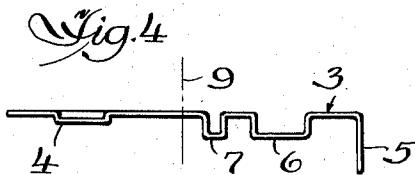
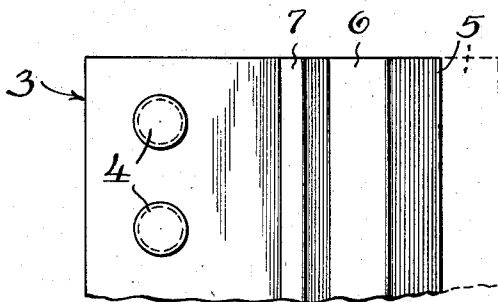
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J. McLEAN
BRACKET MOUNTING

2,909,353

Filed May 12, 1955

2 Sheets-Sheet 1



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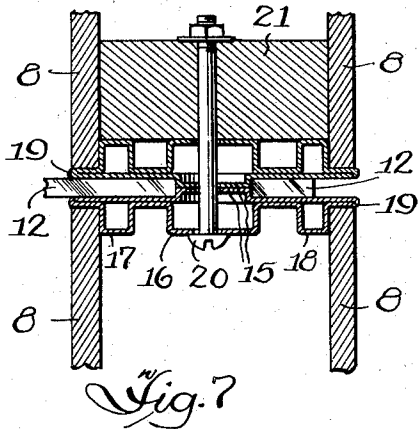
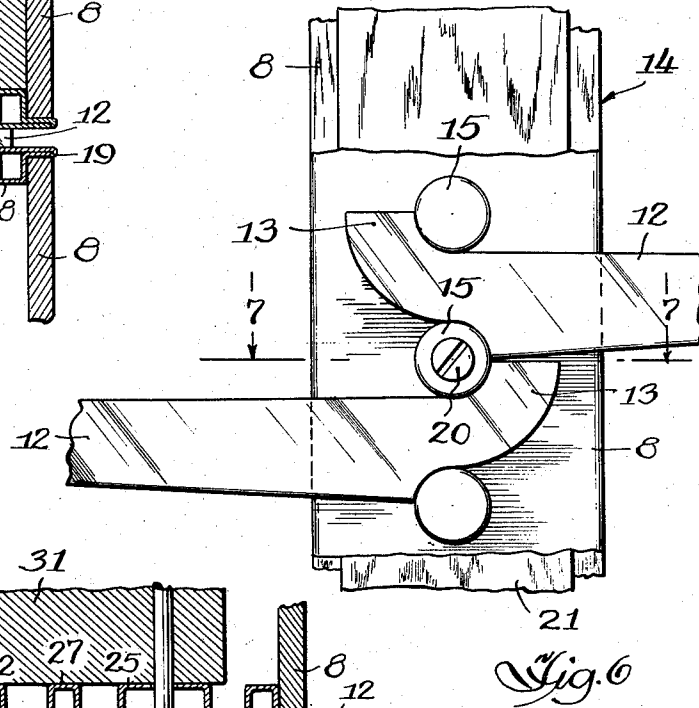
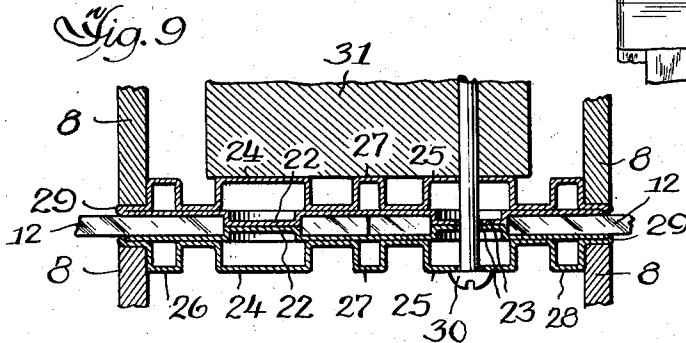
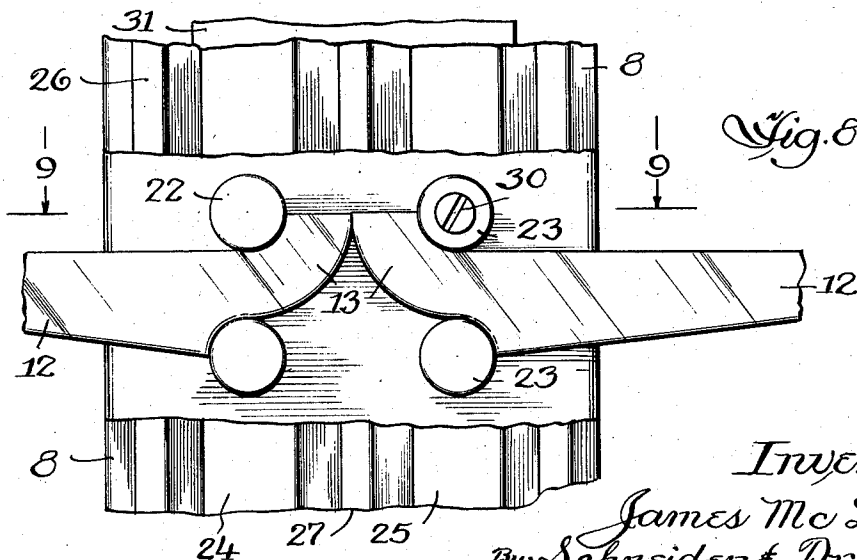
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2 Sheets-Sheet 2



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BRACKET MOUNTING

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4 Claims. (Cl. 248—243)

This invention relates to a bracket mounting for supporting brackets projecting forwardly from panels spaced in edge to edge relationship with the width of gaps between adjacent panels kept as small as possible.

The panels may be parallel to an adjacent wall, or may be arranged in the center of a room so that brackets may project from both faces of the panel structure. The mounting comprises a pair of thin metal sheets each having formed therein a plurality of vertically spaced embossments adapted to cooperate with the embossments of the other to provide supporting surfaces for the top and bottom edges of brackets shaped to fit therebetween. Both metal sheets are ribbed to impart rigidity to the mounting, and the outer edges of the metal sheets, through which the brackets are adapted to project, are spaced apart a distance equal to the thickness of one of said brackets. The metal sheets abut opposite sides of brackets positioned in mounting to provide lateral support therefor. Panels are mounted with their vertical edges flush against the outer edge of the mounting through which the brackets are adapted to project, thereby making the gaps between adjacent panels substantially inconspicuous to enhance the appearance of the structure.

The embossments jointly traverse the space between each pair of oppositely disposed thin metal sheets so that the upper and lower edges of any bracket inserted into the gap between adjacent panels abut the peripheral surface of two adjacent pairs of embossments. The embossments are preferably spaced vertically at regular intervals, and each bracket has a hook-shaped rear end which may be readily fitted between any two vertically spaced embossments. The curvature of the hook-shaped portion of the bracket coincides with the curvature of the supporting peripheral surfaces of the embossments so that the brackets are firmly held in place.

Preferably the upper and lower edges of the hook-shaped rear end of the bracket terminate in the horizontal plane of the center of the adjacent embossments. This arrangement permits brackets extending in opposite directions to be inserted in adjacent vertical spaces between the vertically spaced embossments when the bracket mounting has openings at both edges. In other words, one embossment may support the lower edge of one bracket and the upper edge of another bracket. Bracket mountings having openings at both edges may be supported by a suitable upright positioned adjacent one of the metal sheets. Fastening elements, such as bolts or screws, may extend through apertures in both metal sheets and into or through the upright. The uprights are concealed from view by the panels which are mounted at each edge of the bracket mounting.

A modified embodiment of the invention provides a double row of embossments to permit mounting of brackets extending in opposite directions at the same levels. In this embodiment the brackets are designed so that the portion of the hook-shaped rear end extending rearwardly of the embossments against which it abuts terminates at

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the mid-point between the two embossments at the same horizontal level.

The structure by which the above mentioned and other advantages of the invention are attained will be described in the following specification, taken in conjunction with the accompanying drawings, showing a preferred illustrative embodiment of the invention, in which:

Figure 1 is a fragmentary perspective view of a bracket mounting embodying the invention;

Fig. 2 is a cross sectional view of the bracket mounting of Fig. 1 with a bracket supported therein;

Fig. 3 is a side elevational view with portions of the bracket mounting broken away to facilitate illustration of different interior sections of the structure;

Fig. 4 is a cross sectional view of one half of the bracket mounting before the final folding operation;

Fig. 5 is a fragmentary side elevational view of the blank of the structure shown in Fig. 4;

Fig. 6 is a fragmentary side elevational view of one half of the bracket mounting, showing another embodiment having brackets extending outwardly from both edges of the mounting;

Fig. 7 is a cross sectional view, taken generally along the line 7—7 of Fig. 6, but showing both halves of the bracket mounting;

Fig. 8 is a view, similar to Fig. 6, showing another embodiment having brackets projecting outwardly from both edges of the mounting at the same level; and

Fig. 9 is a cross sectional view, taken generally along the line 9—9 of Fig. 8, but showing both halves of the bracket mounting.

In the drawings, the reference numeral 2 indicates a metal member constituting one half of a bracket mounting. Member 2 is adapted to cooperate with a duplicate member which is inverted to form a bracket mounting. As shown in Figs. 3 and 4, a metal sheet 3 is formed to provide a series of embossments 4 uniformly spaced longitudinally of the metal sheet. Sheet 3 is then bent along longitudinally extending lines to form a right-angled flange 5, and ribs 6 and 7. Ribs 6 and 7 extend outwardly in the same direction as embossments 4, and both cooperate to reinforce the metal sheet. The exact cross sectional shape of rib 6 is not of critical importance, but the side of rib 7 closest to embossments 4 is bent at right angles to sheet 3 to provide suitable support for one edge of a panel 8 when the bracket mounting is assembled, as shown in Fig. 2.

After embossments 4, flange 5, and ribs 6 and 7 are formed, sheet 3 is folded about the longitudinal line indicated at 9 to bring the flat portions of the sheet into juxtaposition, with the series of embossments 4 opposite rib 6. Rib 6 is preferably slightly wider than the diameter of embossments 4 so that the side walls of rib 6, which extend substantially perpendicularly to the flat portions of sheet 3, provide a maximum of reinforcement immediately beyond the outer edges of embossments 4.

The formed metal sheet 3, folded along line 9, is secured to a wall or suitable upright 10 by screws 11 which extend through apertures in flange 5 and are screwed into member 10. A duplicate metal sheet 3 is turned end for end and secured to member 10 with its flange 5 extending in the opposite direction from the first mentioned flange, and with the outer surface of its embossments 4 abutting the corresponding surfaces of the first metal sheet 3 to form a bracket mounting. Each of the embossments 4 has a depth equal to one-half the thickness of a bracket 12 for which the mounting is designed, so that the space between the adjacent surfaces of sheets 3, which defines the gap between panels 8, is equal to the thickness of bracket 12.

Bracket 12 is formed from a flat sheet of metal and

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has a hook-shaped rear end 13 shaped to fit between adjacent vertically spaced embossments 4 with its upper edge curved to engage the lower portion of the peripheral surface of one pair of abutting embossments and with lower surface curved to engage the upper portion of the peripheral surface of the pair of abutting embossments spaced below said first mentioned pair of embossments. Preferably the extreme upper edge of bracket 12 terminates in the horizontal plane extending through the center of the embossment engaged by it, and the lower edge of the bracket lies in the horizontal plane extending through the center of the embossment engaged by it. The reason for such arrangement will be clear upon referring to the embodiment of the invention disclosed in Figs. 6 and 7.

In Figs. 6 and 7 a metal sheet 14 is formed to provide embossments 15 similar to embossments 4. The sheet is then folded to provide a longitudinal reinforcing rib 16, similar to rib 6, and a pair of ribs 17 and 18. The sheet is then folded along a line 19 so that the ribs 16, 17 and 18 are all positioned on one side of the member, and embossment 15 extends in the opposite direction from the other side of the member. In order to form a bracket mounting two duplicate members are arranged with their embossments 15 abutting each other, by turning one of them 180° around a vertical axis so that the fold line 19 on one member is at one edge of the mounting and the other fold line is at the opposite edge, as shown in Fig. 7.

In the embodiment of Figs. 6 and 7 the structure is designed to be positioned centrally in a room with panels 8 on opposite faces, and gaps defined by opposite edges of the bracket mounting on each side of the structure. Panels 8 are supported at their vertical edges by one side wall of either rib 17 or 18 and the adjacent outer edge of sheet 14. Two sheets 14 are arranged with embossments 15 abutting, as shown in Fig. 7, and are rigidly secured in this position by bolts 20 which extend through apertures provided in ribs 16, embossments 15, and an upright 21 which is positioned adjacent one of the sheet members 14. The uprights are concealed between panels 8 which also conceal substantially the entire bracket mounting. As shown in Fig. 6, one bracket 12 may extend outwardly from one edge of the bracket mounting, and another bracket may extend in the opposite direction with one pair of embossments 15 engaging the lower edge of the upper bracket and the upper edge of the lower bracket.

The embodiment of Figs. 8 and 9 is similar to that of Figs. 6 and 7 except that provision is made for having brackets extend in opposite directions from the mounting at the same level.

In Figs. 8 and 9 a sheet metal blank is formed to provide two longitudinal rows of embossments 22 and 23, similar to embossments 4 and 15, spaced uniformly along the length of the blank. The blank is then folded along longitudinal lines to form a plurality of transversely spaced reinforcing ribs 24, 25, 26, 27 and 28. The blank is then folded along a longitudinal line 29 to bring embossments 22 in registration with rib 24 and embossments 23 in registration with rib 25. As in the previous embodiments, ribs 26 and 28 each has its outer side wall at right angles to the plane of the body portion of the blank to form a support for one vertical edge of one of the panels 8. Bolts 30 extend through apertures provided in embossments 22 or 23 reinforcing ribs 24 or 25 and an upright 31, similar to upright 21, to secure two of the sheet metal members together. The embossments 22 and 23 of one sheet metal member abut corresponding abutments of the other sheet metal member, which is rotated through an angle of 180° about a vertical axis, to space the sheet metal members a distance equal to the thickness of bracket 12. Panels 8 conceal the uprights and substantially the entire bracket mounting as in the embodiment of Figs. 6 and 7.

The lateral spacing between embossments 22 and 23

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permits the rear ends 13 of two brackets 12 to be positioned therebetween, as shown in Fig. 8. The curvature of the ends 13 causes them to engage the lower peripheral surface of one embossment 22 or 23 and the upper peripheral surface of the adjacent embossment positioned directly below the first embossment. The curved shape also permits either bracket 12 to be removed without disturbing the stability of a bracket positioned at the same level and extending in the opposite direction.

While I have described several preferred embodiments of my invention in considerable detail, it will be understood that the description thereof is intended to be illustrative, rather than restrictive, as many details of the structure may be modified or changed without departing from the spirit or scope of the invention. Accordingly, I do not desire to be restricted to the exact construction described.

I claim:

1. In combination, a bracket mounting comprising a pair of sheet metal members each provided with a row of integral embossments, said sheet metal members being secured together with corresponding embossments of each row abutting to space said sheet metal members a distance equal to twice the height of said embossments, corresponding embossments of each of said rows cooperating with each other to provide peripheral surfaces, and a flat bracket having a rear end interposed between said sheet metal members, edge portions of said rear end being shaped to conform to the curvature of said peripheral surfaces, said edge portions engaging the peripheral surfaces of two adjacent vertically spaced pairs of embossments, to support said bracket against straight line movement in any direction.

2. A bracket mounting comprising a pair of sheet metal members each having juxtaposed inner and outer walls, each of said inner walls being provided with a row of vertically spaced integral embossments and each of said outer walls having a plurality of vertically disposed integral reinforcing ribs, corresponding embossments of each row abutting each other in face to face relationship to provide peripheral surfaces adapted to support rear edge portions of a horizontally disposed flat bracket positioned between said sheet metal members, said rear edge portions being shaped to conform to the curvature of said peripheral surfaces, and an edge portion of each outer wall cooperating with a side wall of one of its reinforcing ribs to support one edge of a panel disposed at right angles to said sheet metal member.

3. A bracket mounting comprising a pair of sheet metal members each having juxtaposed inner and outer walls, each of said inner walls having a row of oppositely disposed integral embossments spaced vertically at uniform intervals, each embossment abutting an embossment projecting from the inner wall of the opposite sheet metal member and cooperating therewith to provide peripheral surfaces adapted to engage rear edge portions of a horizontally disposed flat bracket having its rear end interposed between said sheet metal members to support it with its forward end extending outwardly from said sheet metal members, said rear edge portions being shaped to conform to the curvature of said peripheral surfaces, and a vertically disposed reinforcing rib integral with each outer wall of said sheet metal members, both of said reinforcing ribs being aligned vertically with said embossments, said reinforcing ribs and some of said embossments having transversely aligned apertures to facilitate securement of said bracket support to an upright.

4. A bracket mounting comprising a pair of sheet metal members each having a row of oppositely disposed integral embossments spaced vertically at uniform intervals, each embossment abutting an embossment projecting from the opposite sheet metal member and cooperating therewith to provide peripheral surfaces adapted to engage rear edge portions of a horizontally disposed flat

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bracket having its rear end interposed between said sheet metal members to support it with its forward end extending outwardly from said sheet metal members, said rear edge portions being shaped to conform to the curvature of said peripheral surfaces, a vertically disposed reinforcing rib integral with each of said sheet metal members, both of said reinforcing ribs being aligned vertically with said embossments and extending outwardly relative thereto, said reinforcing ribs and some of said embossments having transversely aligned apertures to facilitate securement of said bracket support to an upright positioned adjacent one of said sheet metal members, a

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second vertically disposed reinforcing rib integral with each of said sheet metal members, said second reinforcing ribs each having one side wall cooperating with an outer edge portion of its sheet metal member to form a two-sided support against which one edge of a panel may be positioned.

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