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BRACKET

Original Filed Aug. 27, 1929

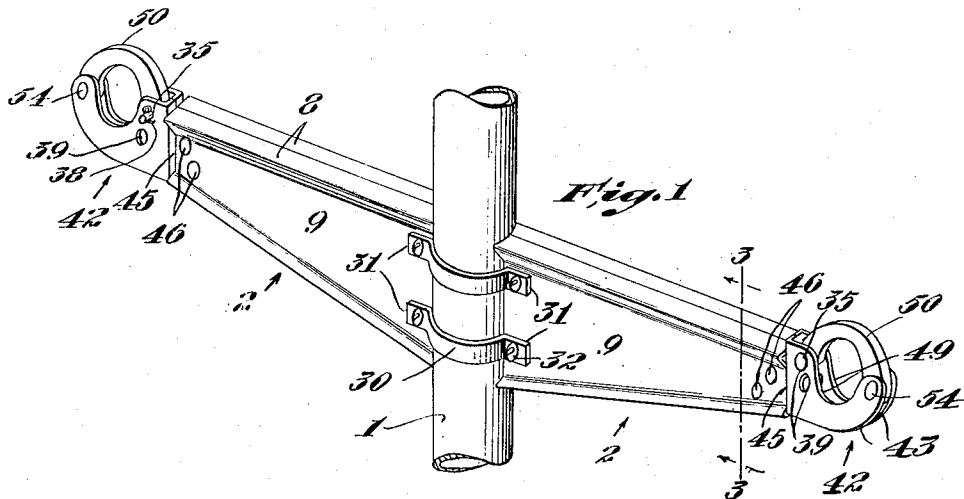
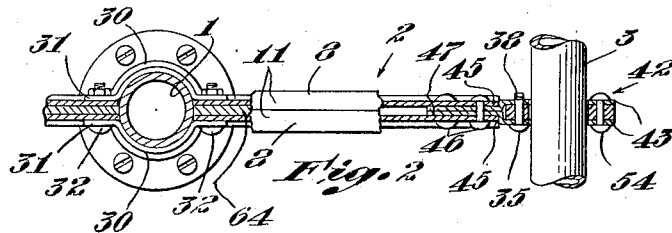
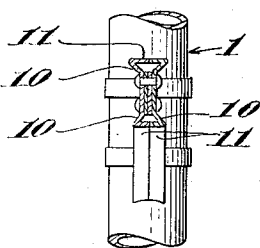
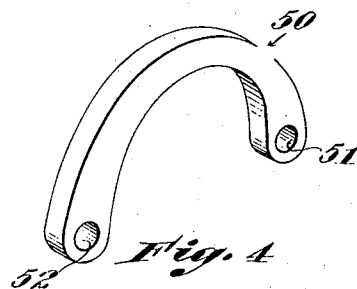


Fig. 3

Fig. 4

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BRACKET

Original application filed August 27, 1929, Serial No. 388,762. Divided and this application filed February 19, 1930. Serial No. 429,612.

This invention relates to supporting racks or brackets, and more particularly to brackets of the cantilever type which are provided with holders at their ends to receive horizontal bars or pipes. For example, structure of this character is particularly adapted to receive garment hangers for the storage of furs or the like. This application is a division of my application Serial No. 388,762, filed August 27, 1929.

In accordance with this invention, a cantilever bracket may be formed of main sheet metal members which may be similar, and which may have their marginal portions arranged to stiffen and reinforce the adjoining metal. The ends of brackets of this character may be provided with holders which cooperate with the main sheet metal members and which may include sheet metal parts which cooperate with a retainer in providing means for receiving and positively holding a horizontal element such as a pipe or bar in place. The holder preferably may be provided with extensions that are disposed between the main sheet metal members and cooperate in forming a spacer between the ends of the latter, these sheet metal parts of the holder having shoulders adjoining the ends of the main cantilever bracket and having notched body portions in spaced parallelism which receive a retainer therebetween. Preferably suitable connecting means, such as pins, may secure opposite ends of the retainer to the sheet metal parts of the holder. Preferably the retainer is curved to cooperate with the notches in the sheet metal parts in providing a substantially circular opening to receive the horizontal pipe, bar or the like. If desired, one end of the retainer may be permanently connected to the sheet metal parts by a pintle or a pivot pin, while the other end may be provided with an opening which is adapted to register with a plurality of pairs of opposed openings in the sheet metal parts so that a removable pin may be disposed in the registering openings to permit the retainer to be moved to a plurality of adjusted positions so that the holder is adapted more effectively to receive horizontal bars of different diameters.

In the accompanying drawings:

Fig. 1 is a perspective view of a typical embodiment of the invention;

Fig. 2 is a view of the bracket and related parts partly in plan and partly in section;

Fig. 3 is a section indicated by line 2—2 of Fig. 1; and

Fig. 4 is a perspective view of a retainer.

A bracket of the character disclosed herein may be secured to a vertical wall or in any desired position, but more particularly is intended for use in conjunction with a column or upright supporting standard which may generally be in the form of a cylindrical post, such as is designated by the numeral 1 in the accompanying drawings. Ordinarily the cantilever brackets 2 may be arranged in pairs at opposite sides of a post 1 and may be arranged in a row so that their outer ends form a plurality of aligned supports for elongate horizontal bars, one of which is shown in Fig. 2 and is designated by numeral 3.

Each cantilever bracket preferably includes main sheet metal members which may be advantageously shaped effectively to receive the imposed strains. Thus each bracket may comprise a pair of sheet metal members 8 having body portions 9 of substantially trapezoidal form with a short vertical edge at their outer ends and a longer vertical edge at their inner ends. Preferably the upper edge of each member 8 may be substantially horizontal and its lower edge may be inclined, and these upper and lower edges are provided with outwardly and inwardly directed flange portions 10 and 11 respectively which are arranged to have their free edges in juxtaposition with each other, (Fig. 3). Accordingly the bracket may be hollow and may be substantially I-shaped in section, while increasing in depth toward the post 1. Preferably a suitable sheet metal spacing plate 64 is disposed between the trapezoidal body portions 9 of the members 8 at the inner end of the bracket being welded or otherwise secured thereto, (Fig. 2). The inner end of the cantilever bracket may be secured to the upright or post 1 in any suitable manner, but I prefer to employ a plurality of substantially semi-circular sheet metal elements

30 with oppositely disposed ears 31 which receive bolts or other elements 32, passing through openings provided in the cantilever brackets. The bolts may be tightened to clamp the semi-circular members 30 firmly against the post holding the inner ends of the bracket in place. If desired but a single bracket may be secured to the upright post by the employment of the members 30; with this arrangement the ears 32 upon one side of the post are directly connected to each other by suitable fastening means such as bolts without the interposition of a second cantilever bracket. A suitable holder 42 may be provided at the outer end of each cantilever bracket, such a holder being arranged to receive and positively retain horizontal bars of different sizes, if desired. The holder 42 may comprise similar opposite sheet metal parts 43; the inner ends of which are disposed in juxtaposed parallelism to provide extensions 47 which form a spacer between the outer ends of the sheet metal parts 8. Preferably suitable fastening means such as rivets 46 connect these extensions to the ends of the trapezoidal sheet metal elements. The sheet metal parts are provided with outwardly bent portions affording shoulders 45 engaging the outer end of the bracket 8 and they have their outstanding body portions in spaced parallelism. Preferably the parts 43 are notched as designated by numeral 49 to provide substantially semi-circular recesses.

A substantially semi-circular or hooklike retainer 50 may have openings 51 and 52 at its opposite ends, the opening 51 registering with corresponding openings at the outer ends of the members 43 and receiving a pivot pin 54 in the form of a rivet or the like. The portions of the parts 43 adjoining their shoulders may be provided with a plurality of openings 39 which are adapted to register with the opening 52 of the retainer and a removable pin 35 may be disposed in these openings to lock the retainer in place. A cotter pin 38 may pass through a diametric opening in the end of locking pin 35 in order to hold the latter in place. It is evident that the locking pin 35 may be selectively engaged with any one of the pairs of openings 39 to vary the effective size of the opening provided by the holder 42, so that the latter may readily yet positively retain bars of different sizes. From the foregoing it will be evident that I have provided a simple supporting structure largely made up of sheet metal parts and rivets which is adapted firmly to support horizontal pipes, bars, or the like, which may be employed for holding garment hangers or the like in place.

I claim:

1. A cantilever supporting bracket, provided with a holding element at its outer end, formed of a pair of trapezoidally shaped sheet metal members with web portions in

juxtaposed parallelism, a spacer between the ends of the trapezoidal members having a greater height, and a holding element having an extension formed of juxtaposed sheet metal parts extending between the opposite ends of the sheet metal members and secured thereto to form a spacer for the same, said sheet metal parts extending outwardly to provide hook-like supporting elements, and a hook-like retaining member pivotally connected to the outer ends of said elements and having an opening to receive a retaining pin, the portions of said elements adjoining the sheet metal members having a plurality of aligned openings adapted to register with the opening in the retaining element and to cooperate therewith in receiving the pin, whereby the supporting elements and retaining element cooperate in providing an opening of adjustable size positively to retain a horizontal bar or the like.

2. A cantilever supporting bracket having a slot at its outer end, and a holding member secured to the outer end of said bracket, said holding member comprising similar sheet metal parts with juxtaposed extensions disposed in the slot at the outer end of said bracket, said parts having parallel body portions spaced from each other and notched to provide a recess for a horizontal bar or the like, and a retainer disposed between said parts and adapted to cooperate with the recess in providing an enclosed opening for the horizontal bar or the like, one end of said retainer being pivotally connected to said parts and the other end having adjustable connections therewith whereby the effective size of said opening may be varied to accommodate bars of different sizes.

3. A cantilever supporting bracket having a slot at its outer end, and a holding member secured to the outer end of said bracket, said holding member comprising similar sheet metal parts with juxtaposed extensions disposed in the slot at the outer end of said bracket, and said parts having parallel body portions spaced from each other and providing shoulders adjoining the outer end of said bracket, said parts being notched between the shoulders and their ends, a hook-like retainer disposed between said parts and cooperating with the notched portions in providing a substantially circular opening in said holding member, and connections between said parts and the retainer; one of said connections being removable, and the other permitting the swinging movement of the retainer.

Signed by me at Boston, Massachusetts, this 22nd day of January, 1930.

LOUIS I. BECKWITH.