

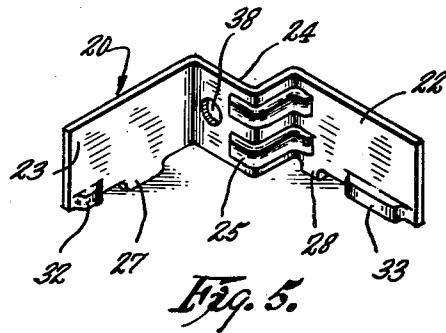
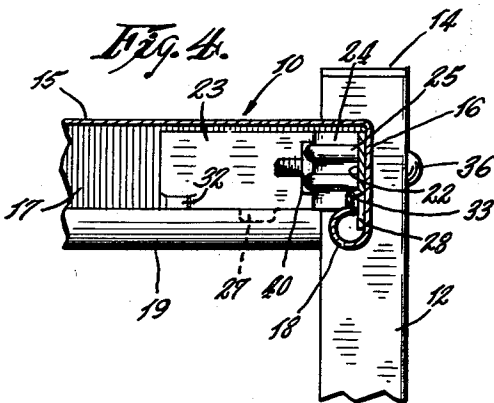
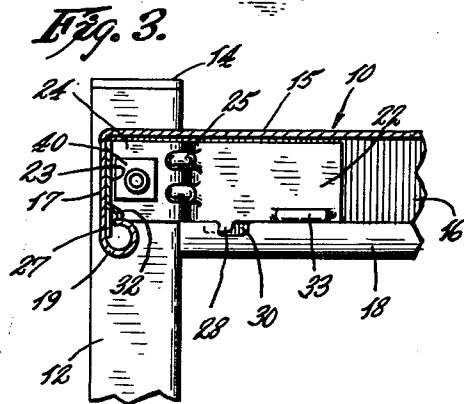
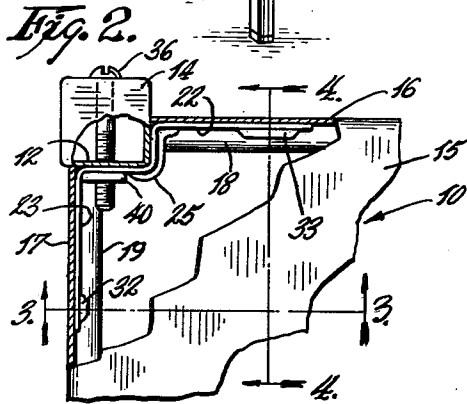
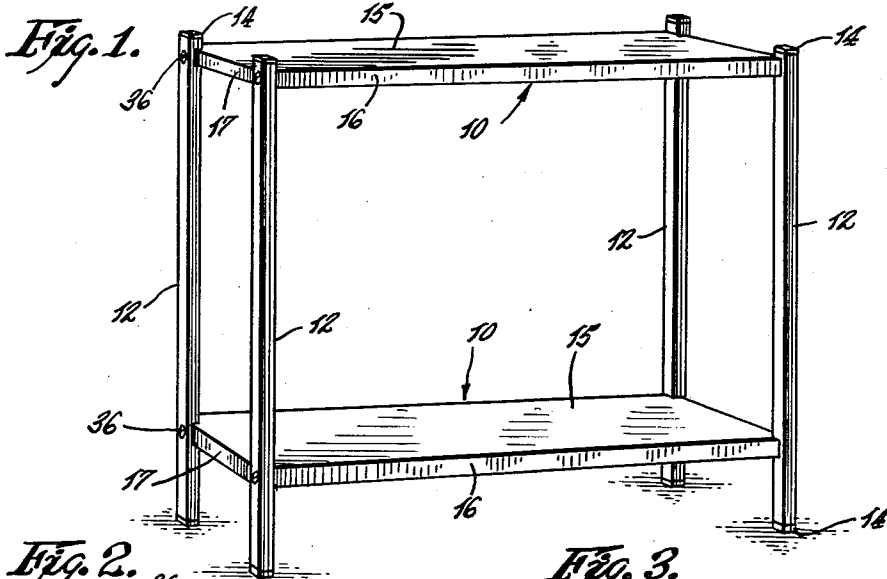
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E. F. HAMILTON ETAL

3,187,693

ARTICLE OF FURNITURE

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3,187,693

## ARTICLE OF FURNITURE

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4 Claims. (Cl. 108—153)

This invention relates to an article of furniture, and more particularly to a leg mounting for a shelf or the like for an article of furniture.

It is an object of this invention to provide such a leg mounting which can be economically manufactured largely from sheet-metal components, which will provide a rigid interconnection between a leg and a shelf or the like, and which can be easily and quickly assembled thereby lending itself to storage and shipment in a compact knocked-down position.

In accordance with the preferred form of the invention as it is embodied in a shelf structure, there is provided a shelf having angularly disposed edges forming the shelf corners at their junctures. The edges of the shelf are bordered by skirts normal to the plane of the shelf and provided with inwardly rolled beads along their lower edges. The shelf and skirts are offset inwardly at each shelf corner to form a recessed mounting seat for a ground-engaging leg.

A bracket is provided at each mounting seat and comprises a pair of angularly disposed arms received against the inner face of the skirt stretches extending along a pair of adjacent shelf edges. The bracket arms have means engageable with the skirt beads for releasably mounting the bracket on the shelf at the mounting seat. Fastening means extend through aligned openings in the bracket and leg for rigidly mounting the leg on the shelf and rigidly interconnecting said bracket to the shelf.

Other objects and features of the invention will become apparent from the more detailed description which follows and from the accompanying drawing, in which:

FIG. 1 is a perspective view of a shelf structure embodying the invention;

FIG. 2 is an enlarged fragmentary plan view of the shelf structure shown in FIG. 1 with portions thereof being broken away;

FIG. 3 is a vertical section taken on the line 3—3 of FIG. 2;

FIG. 4 is a vertical section taken on the line 4—4 of FIG. 2; and

FIG. 5 is an isometric view of the mounting bracket shown in FIG. 2.

The invention is illustrated in the drawings as embodied in a shelf structure comprising a pair of shelves 10 mounted in vertically spaced relationship on a plurality of ground-engaging legs 12 conveniently formed from lengths of metal-tubing and having their ends closed by end caps 14. Conveniently, each of the shelves is formed from sheet-metal and comprises an upper supporting surface 15 terminating at the shelf edges in skirts 16 and 17 extending substantially continuously around the shelf. The lower ends of the skirts 16 and 17 are rolled inwardly to form beads 18 and 19 whose edges are spaced from their respective skirts. As shown in FIG. 2, the shelf edges are angularly oriented with respect to each other to thus define the shelf corners at their junctures where the legs 12 are mounted.

The shelf 10 is offset inwardly at its corners to provide recessed mounting seats for connection to the legs 12. To this end, a section of surface 15 is removed and the skirts terminate inwardly from the shelf corners. A mounting bracket 20 is provided at each shelf corner and comprises a pair of arms 22 and 23 which are angularly disposed to each other for engagement with the inner

faces of the skirts 16 and 17 adjacent the shelf corner. At their adjacent ends, the bracket arms 22 and 23 are bent inwardly at right angles to each other, as at 24, so that when said bracket is mounted in one of the shelf corners, the arm portion 24 lies in the vertical plane of the inwardly offset edge of the shelf supporting surface 15 to abut a pair of adjacent walls on the leg 12 in face-to-face contact. Conveniently, a pair of bosses 25 are formed on the portion 24 to strengthen the bracket 20.

In order to releasably mount the bracket 20 on the shelf 10, downwardly projecting fingers 27 and 28 are formed on the bracket arms 23 and 22, respectively. Thus, to mount the bracket 20 on the shelf 10, the finger 27 is inserted in the space between the bead 19 and skirt 17 along one side of the shelf, and the skirt 17 is stressed inwardly to dispose the bracket finger 28 in alignment with a notch 30 cut in the bead 18 on the skirt 16. When such a stressing force is released, the skirt 17 will again spring outwardly due to its inherent resiliency to dispose the bracket finger 28 out of alignment with the notch 30 to thus releasably retain the finger 28 between the skirt 16 and the bead 18 for releasably retaining the bracket on the shelf. A pair of lugs 32 and 33 project out of the general plane of the bracket arms 23 and 22, respectively, and engage the upper faces of the beads 19 and 18. The distance between the lower faces of the lugs 32 and 33 and the upper edges of the bracket arms 22 and 23 is smaller than the distance between the upper edges of the bracket arms and the lower edges of the fingers 27 and 28 to thus prevent the fingers 27 and 28 from pulling out of the beads 18 and 19.

The leg 12 is mounted on the shelf by disposing a pair of its adjacent wall surfaces in the mounting seat formed in the shelf against the bracket arm portion 24. A bolt 36 is then inserted through aligned openings in the leg 12 and an opening 38 in the bracket 20 disposed in alignment with the leg openings. The bolt 36 projects through the bracket opening 38 for the reception of a nut 40. As shown in FIG. 2, upon tightening of the nut 40 on the bolt 36, said nut will bear against the bracket 20 to cause the bracket arms 22 and 23 to bear against the inner faces of the skirts 16 and 17, respectively, and further cause the leg 12 to be bindingly retained against the bracket arm portion 24 and the inwardly offset edges of the shelf surface 15 and the ends of the beads 18 and 19.

While the invention is illustrated in association with a shelf having a generally rectangular configuration wherein the adjacent shelf edges are normal to each other, it is to be understood, of course, that the invention may be employed with other shelves or the like having angularly disposed edges and connected to legs at their corners.

We claim:

1. In an article of furniture, a leg mounting for a shelf or the like, comprising
  - (a) a shelf having at least one pair of edges disposed at an angle to each other and forming a shelf corner at their juncture,
  - (b) a pair of skirts extending along said pair of edges and normal to the plane of the shelf,
  - (c) an inwardly rolled bead along the edge of each skirt remote from the shelf,
  - (d) said skirts and shelf having offsets formed therein at said corner forming a mounting seat for said leg,
  - (e) a bracket having a pair of angularly disposed arms abutting the inner faces of said skirts,
  - (f) a pair of fingers on said arms interposed between the skirts and beads along said pair of shelf edges for retaining said bracket in said corner, and
  - (g) fastening means extending through aligned openings in said bracket and leg for mounting said leg on said shelf.

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2. In an article of furniture, a leg mounting for a shelf or the like, comprising

- (a) a shelf having a supporting surface and at least one pair of edges disposed at an angle to each other and forming a shelf corner at their juncture, 5
- (b) a pair of skirts extending along said pair of edges and normal to the plane of the shelf, 5
- (c) an inwardly rolled bead along the edge of each skirt remote from the shelf, 10
- (d) said skirts and shelf having offsets formed therein at said corner forming a mounting seat for said leg, 10
- (e) a bracket having a pair of angularly disposed arms abutting the inner faces of said skirts, 15
- (f) a pair of fingers on said arms interposed between the skirts and beads along said pair of shelf edges, 15
- (g) a pair of lugs on said arms engaging the bead faces adjacent said shelf supporting surface and acting in combination with said fingers for retaining said bracket in said corner, 15
- (h) the adjacent ends of said arms having an inwardly offset portion in substantial vertical alignment with the offset in said shelf, and 20
- (i) fastening means extending through aligned openings in said leg and offset portion of said bracket arms for mounting said leg on said shelf in face-to-face contact with said offset portion of the bracket arms. 25

3. The invention as set forth in claim 2 in which

- (a) the distance between said lugs and edge of the bracket adjacent the shelf is substantially equal to 30 the distance between said shelf supporting surface

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and the beads for vertically positioning said bracket on said skirts.

4. The invention as set forth in claim 2 in which

- (a) the bead along one shelf edge has a notch formed therein, and
- (b) said skirts may be stressed inwardly whereby upon positioning one finger between the skirt and bead along the other shelf edge, the skirt along said other shelf edge may be stressed inwardly to dispose the other finger in alignment with said notch for inserting said other finger between the skirt and bead along said one shelf edge, said other finger and notch being disposed out of alignment with each other upon release of the inward stress on the skirt along said other shelf edge.

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FRANK B. SHERRY, *Primary Examiner.*