United States Patent [19]

Gutner

[11] **3,854,268**

[45] **Dec. 17, 1974**

[54] **CORNER BRACKET FOR FURNITURE CASE**

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[22] Filed: **Dec. 13, 1972**

[21] Appl. No.: **314,711**

[52] **U.S. Cl.** ..... **52/753 D,** 52/758 H, 248/222

[51] **Int. Cl.** **A47b 96/06**

[58] **Field of Search** ..... 312/283; 248/222, 300; 52/285, 657, 751, 753 R, 753 C, 753 D, 753 Y, 753 L, 758 H; 217/69, 70

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[57] **ABSTRACT**

A corner bracket for a furniture case consisting of a unitary, substantially rigid member having a flat intermediate portion and upstanding integral end portions so related as to act as a diagonal brace between a horizontal parting rail and a vertical frame member.

1 Claim, 7 Drawing Figures

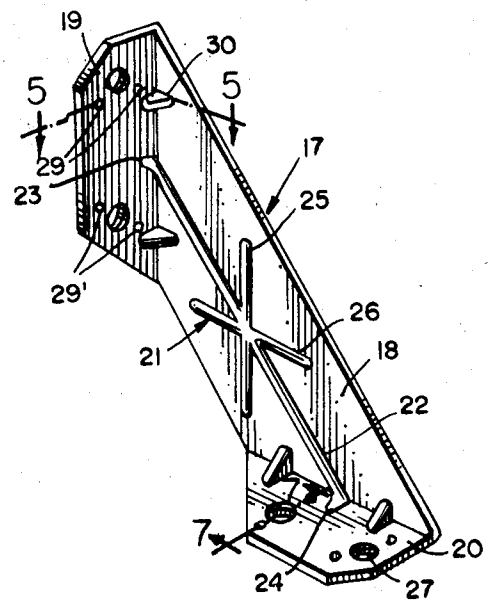


FIG. 1

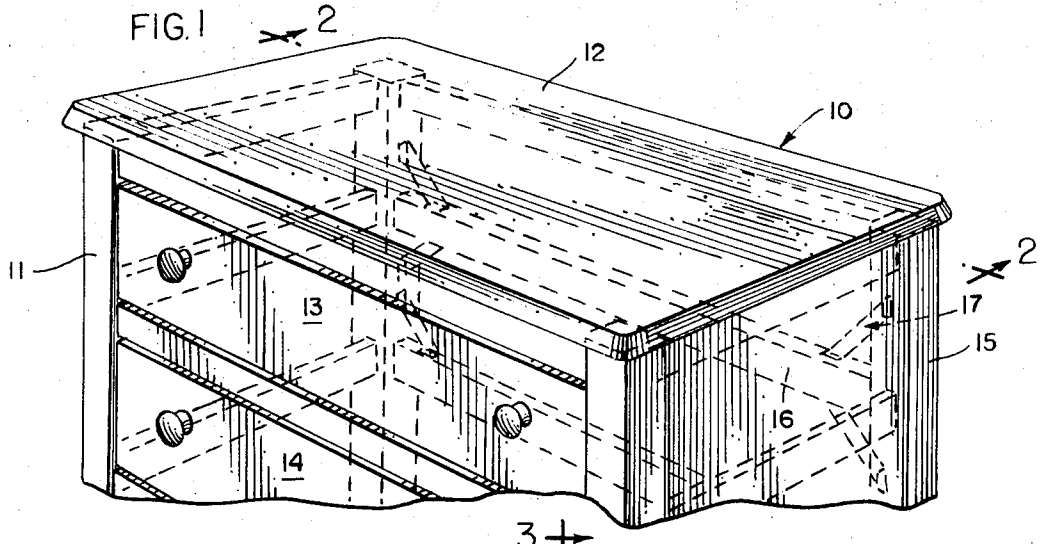


FIG. 2

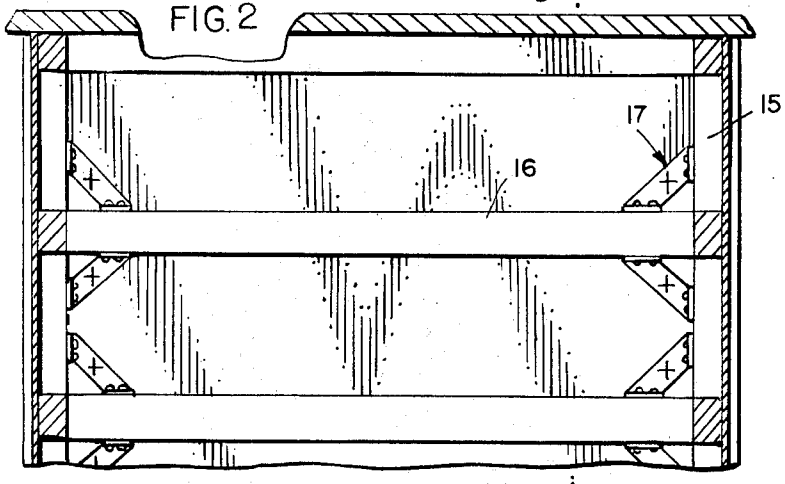
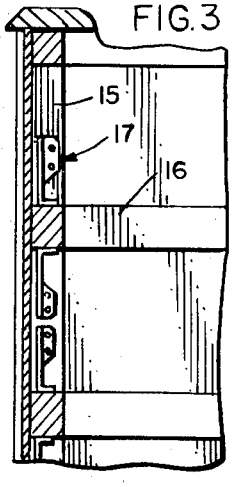


FIG. 3



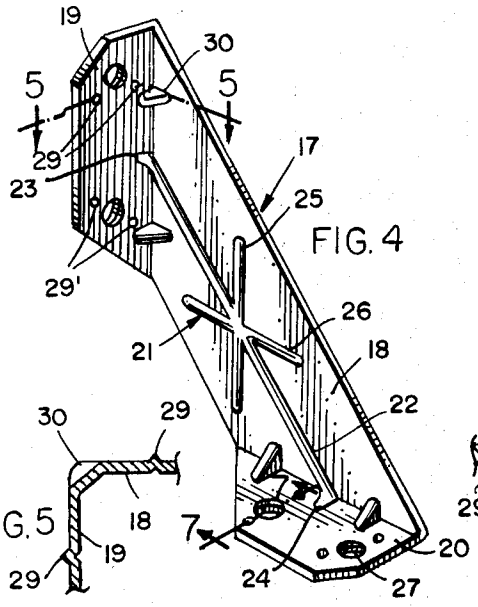


FIG. 4

FIG. 5

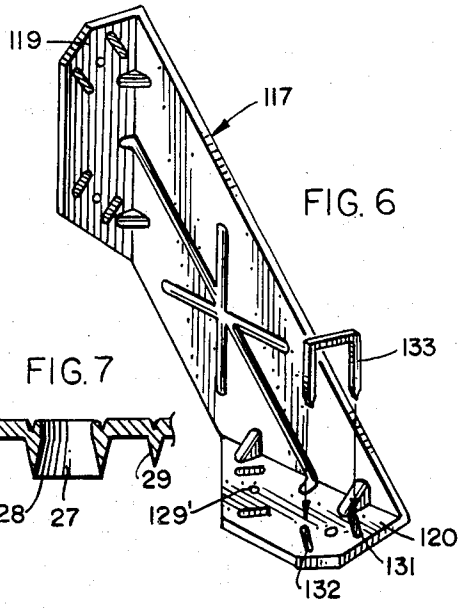


FIG. 6

FIG. 7

CORNER BRACKET FOR FURNITURE CASE

BACKGROUND AND SUMMARY OF INVENTION

In the past, corner braces for the interior parts of furniture have consisted of triangular blocks. Normally, these were made up of a chip core of reprocessed wood plus veneer facings on the sides. The real recommendation of the prior art brackets was their low cost, being essentially a salvage item. The low cost compensated for the lack of precision, strength, etc. Increasingly, of late, factories are eliminating the use of veneer facings, so there is not available the material necessary to provide these side facings. Attempts to use the chip core alone has resulted in splintering, loss of support and the like. This has become particularly critical when taller and taller furniture pieces are being made.

According to the invention, a sturdy, precise corner bracket is provided through the use of a unitary strap of metal with the end portions folded into upstanding flanges at 45° and with suitable bracing ribs installed in the strap. Through the use of the novel corner brace of the invention, the advantages of relatively low cost of the prior art brackets is achieved, yet with increased or additional advantages insofar as performance is concerned.

DETAILED DESCRIPTION OF THE INVENTION

The invention is described in conjunction with an illustrative embodiment in the accompanying drawing in which:

FIG. **1** is a fragmentary perspective view of a furniture piece (here a dresser) showing the inventive corner brackets installed and depicted in phantom line;

FIG. **2** is a fragmentary sectional view taken along the line **2—2** of FIG. **1**;

FIG. **3** is a fragmentary sectional view taken along the line **3—3** of FIG. **2**;

FIG. **4** is a perspective view of the corner bracket employed in connection with the showings in FIG. **1–3**;

FIG. **5** is a fragmentary sectional view taken along the line **5—5** of FIG. **4**; and;

FIG. **6** is a perspective view of a modified form of the invention;

FIG. **7** is a fragmentary sectional view taken along the line **7—7** of FIG. **4**.

In the illustration given and with reference first to FIG. **1**, the numeral **10** designates generally a furniture piece here illustrated as a dresser. As such, the dresser includes a frame **11**, a top **12**, and drawers **13** and **14**.

The frame **11** is defined in part by means of vertical frame members as at **15** (see the extreme right hand portion of FIG **1**). Additionally, the frame **11** includes parting rails as at **16**, which are essentially horizontal members interconnecting the frame. The inventive bracket, generally designated **17**, interconnects in a bracing fashion the vertical frame member **15** and the horizontal parting rail **16**. As indicated in FIGS. **1–3**, a plurality of the corner brackets are advantageously employed.

The corner bracket **17** is seen in enlarged perspective view in FIG. **4**, and is seen to consist essentially of a unitary, substantially rigid, member — such as a metal strap such as would be constructed of between 14 to 20 gauge steel.

The strap constituting the corner bracket **17** is seen to have been formed in three discrete portions. The flat intermediate portion **18** has, at each end thereof, end portions **19** and **20**, each of which is orthogonally related to the intermediate portion **18**. These in essence are formed by folding the end portions of the strap at right angles to the intermediate portion, but along lines that are 45° relative to the length of the intermediate portion **18**. Thus, the end portions **19** and **20** are in themselves orthogonally related.

The strap or blank from which the corner bracket is formed is equipped with ribbing generally designated **21** which is found primarily in the intermediate portion. More particularly, a first rib **22** is provided which extends longitudinally of the bracket **17** and, while primarily located within the intermediate portion **18**, has end portions as at **23** and **24** which terminate within the end portions **19** and **20**, respectively.

As can be seen clearly in FIG. **4**, the ribbing **21** also includes transverse ribbing as at **25** and **26** which serves to strengthen the bracket in a plane normal to the plane strengthened by the longitudinal rib **22**. It will be seen that the transverse ribbing **25** and **26** includes two ribs which are angularly related to each other.

In the illustration given in FIG. **4**, the bracket **17** has its end portions **19** and **20** equipped with a plurality of screw receiving openings as at **27** (see the upper left hand portion of FIG. **4**). Each of the end portions **19** and **20** in the face thereof confronting the frame member or parting rail, as the case may be, is equipped with an outstanding annular flange as at **28** (see FIG. **7**) which serves to enter into biting engagement with the surface to which the bracket **17** is secured.

Additionally, each of the end portions **19** and **20** is equipped with projections as at **29** (see FIG. **5**) on the above-mentioned confronting surfaces — those faces of the end portions which abut and are in contact with the frame members. The projections **29** are advantageously achieved by "dimpling" the end portions **19** and **20** — this resulting in the circular depressions as at **29'** seen in the upper left hand portion of FIG. **4**. It has been found advantageous to utilize the projections **29** but to restrict their outward extension to slightly less than the outward extension of the annular flange **28** — the difference in projection being exaggerated somewhat in the showing in FIG. **5**.

Still further, advantageous stabilization and reenforcement is achieved through the use of gussets as at **30** in the upper portion of FIG. **4**. Each gusset extends between the intermediate portion **18** and the associated end portion **19** or **20** as the case may be, with the gussets being provided as integral portions of the brackets **17** (see FIG. **5**, for example).

A modified form of the invention is seen in FIG. **6** wherein the bracket is designated generally by the numeral **117**. The various parts hereinbefore described are present, with the principal difference being in the openings in the end portions **119** and **120** for the purpose of securing the bracket to the orthogonally related frame member. In the illustration given in FIG. **6**, a pair of slots **131** and **132** are provided for the receipt of a staple **133** (see the lower right hand portion of FIG. **6**). A plurality of sets of staple-receiving openings are provided in each end portion of the structure illustrated in FIG. **6**. Also, the number of projections could be reduced as evidenced by the lesser number of dimples **129'** provided in the structure seen in FIG. **6**. However,

a slightly different arrangement of the dimples **129'** would permit the use of a larger number without departing from the spirit and scope of the invention.

I claim:

1. A corner bracket for a furniture case comprising a unitary substantially rigid member having a substantially flat intermediate portion and upstanding integral end portions disposed generally orthogonally relative to the intermediate portion, the end portions being orthogonally related to each other and so disposed as to bear against a horizontal parting rail and a vertical frame member, respectively, a plurality of gussets interconnecting said intermediate portion with said end portions, said intermediate portion being equipped with reenforcing rib means, said rib means including a first rib extending generally longitudinally of the member

and terminating within the end portions, said rib means also including transverse ribbing to strengthen said member in a plane normal to the plane strengthened by the longitudinal rib, said end portions being equipped with a plurality of screw receiving openings, each opening on the side of the end portion adapted to confront said parting rail and said frame member being equipped with an outstanding annular flange for biting engagement with said parting rail or frame member as the case may be, said end portions also being equipped with projections on the same surface as is equipped with said annular flanges, said annular flanges projecting outwardly from said surfaces slightly greater than said projections.

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