

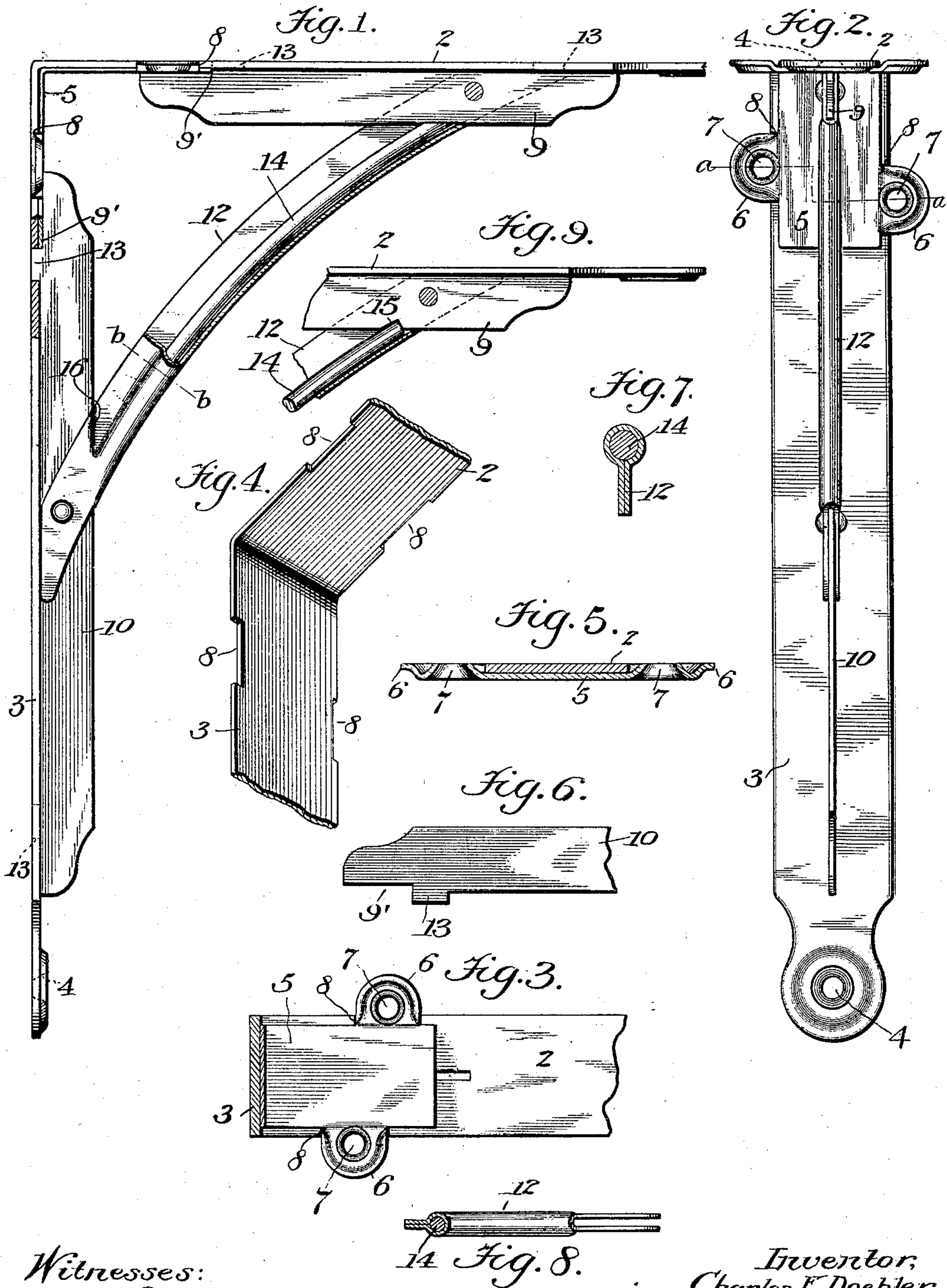
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C. F. DOEBLER.
BRACKET.

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(No Model.)



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UNITED STATES PATENT OFFICE.

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BRACKET.

SPECIFICATION forming part of Letters Patent No. 668,328, dated February 19, 1901.

Application filed April 10, 1900. Serial No. 12,295. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. DOEBLER, a citizen of the United States, residing in Middletown, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Brackets, of which the following is a specification.

This invention relates to brackets—such, for instance, as wall or shelf brackets; and one object of the invention is to provide an improved bracket of this class the parts of which may be readily constructed out of sheet metal and be assembled quickly in a firm and rigid manner.

A further object of the invention is to provide an improved bracket of this class embodying, among other features, an improved three-part brace for the wall and shelf arms of the bracket, the construction of the brace being such that the ornamentation of the bracket is materially enhanced.

In the drawings accompanying and forming part of this specification, Figure 1 is a side view, partially in section, of one form of this improved bracket. Fig. 2 is a front view thereof. Fig. 3 is an inner side view of one portion of one of the arms. Fig. 4 is a perspective view of the shelf and wall arms adjacent to the point of juncture thereof. Fig. 5 is a cross-sectional view taken in line *a a*, Fig. 2. Fig. 6 is a view of one end of one member of the three-part brace. Fig. 7 is a cross-sectional view taken in line *b b*, Fig. 1, of another member of said three-part brace. Fig. 8 is a view illustrating one end of the curved brace member shown in Fig. 1, and Fig. 9 is a detail view illustrating a somewhat different assemblage of the curved member of the three-part brace from that shown in Fig. 1.

Similar characters of reference designate like parts in all the figures of the drawings.

This improved shelf or wall bracket is preferably constructed entirely of sheet metal, except as to any rivets which may be necessary to assemble the parts, and comprises in a general way a shelf-arm and a wall-arm, rigid with and extending at right angles to each other, a corner member, and an improved brace comprising a three-part structure, two

of the parts or members thereof being effective to assist in maintaining the corner member in position, said three-part brace being so assembled with the arms as to enhance the appearance of the bracket.

The bracket in its preferred form comprises a shelf-arm 2 and a wall-arm 3, integrally connected and extending at right angles to each other. Each arm is provided at its free end with an opening 4 for a suitable fastening device, such as a screw, and which opening may be formed in some suitable way, usually by bending the metal upon itself.

Located at the juncture of the shelf and wall arms is a corner member 5, (shown as a plate bent to form a right-angled structure,) preferably formed of sheet metal, and which member is provided with laterally-extending ears 6, having openings 7 for the passage of suitable fastening devices. These ears are located diagonally opposite to each other, whereby the screws or other fastening devices which may be used will be out of alignment, and consequently will not split the wood. This corner member is shown of less width than the shelf and wall arms, and therefore it can be made of scraps cut from the main brace, such shelf and wall arms being recessed at their edges, as at 8, for the reception of the ears 6, which are bent or pressed over edges of the arms at the recessed parts thereof, whereby sidewise movement of the corner member is prevented. The provision of this corner member carrying the ears for the fastening devices not only avoids the necessity of forming the ears directly on the shelf and wall brackets, but provides against a material waste of the stock, which would be the case if the ears were formed as a part of the shelf and wall arms, since a much wider strip would have to be cut in order to permit the formation of the ears.

To firmly brace the shelf and wall arms an improved brace is provided comprising a three-part structure, preferably a pair of ribs 9 and 10 and a curved brace member 12. Each of these ribs is shown formed separately from its arm and is recessed at its inner end 9' to overlap one end of the corner member,

being rigidly secured to its arm by tenons 13. By this construction it will be seen that the corner member is firmly clamped in position against movement by the main brace. Connected to these ribs is the curved brace member 12, reinforced by a stiffener, such as a wire 14, at its outer edge, around which the metal forming the brace member is bent and pressed. The ends of this curved brace member are bifurcated to receive the ribs to which such ends are riveted. In one form the ends of the wire are beveled to engage the outer edges of the ribs, while in another form the ribs are recessed—as, for instance, at 15—to receive the ends of such wire. This stiffened brace member provides a very firm and rigid support for the arms, since the stiffener not only acts to reinforce the brace member proper, but owing to its engagement with the ribs acts itself to brace the shelf and wall arms.

The sides of the curved brace member are pressed or bent around the outer edges of the ribs, as shown at 16, and thereby assist in holding such ribs in position, such ribs in turn maintaining the corner member in position, as above set forth, the whole forming a rigid structure, all parts of which are assembled without other independent means than a pair of rivets. By providing the ribs with ogee curves at their inner as well as their outer ends a pleasing appearance is given to the bracket, which is materially enhanced by having the ribs terminate relatively remote to the point of juncture of the shelf and wall arms and which also makes it possible to save considerable stock.

Having described my invention, I claim—

1. A bracket comprising shelf and wall arms having two sets of diagonally-located recesses at their edges and a corner member secured to said bracket, and having two sets of diagonally-located ears registering with said recesses for the reception of fastening devices.

2. A bracket comprising shelf and wall arms; a rib extending throughout longitudinally of and secured to one of said arms; and a corner member secured in position by said rib.

3. A bracket comprising shelf and wall arms; a corner member therefor; and a pair of ribs secured to said arms, one part of each of which overlaps and clamps one part of said corner member in position.

4. A bracket comprising a pair of arms bent at an angle to each other; a corner member therefor; a pair of ribs clamped to said arms, each being recessed at its inner end to engage and clamp one end of said corner member in position.

5. A bracket comprising shelf and wall arms bent at right angles to each other, each having a pair of diagonally-located recesses

at its edges; a corner member of less width than said arms and provided with two sets of diagonally-located ears each registering with one of said recesses and clamped over the edge thereof; and a pair of ribs secured to said arms, each being recessed at its inner end and overlapping and clamping one end of said corner member in position.

6. A bracket comprising shelf and wall arms, and a brace comprising a pair of ribs, one secured to each of said arms and having their inner ends terminating relatively remote to the juncture-point of said arms, and a corner member secured in position by said ribs.

7. A bracket comprising shelf and wall arms, a rib secured to one of said arms and having a recess in its outer edge, and a brace member connected to said rib, and provided with a stiffener having its end projecting into the recess of said rib.

8. A bracket comprising shelf and wall arms, a pair of ribs secured to said arms, and a curved brace member secured to said ribs and having a stiffener clamped therein, said curved member having its ends cut away to permit the ends of said stiffener to engage the edges of said ribs and thereby act to brace the arms.

9. A bracket comprising shelf and wall arms, and a brace comprising a pair of ribs secured to said arms, and each having a recess in its outer edge, and a curved member secured to said ribs and provided with a stiffener having its ends projecting into the recesses of said ribs.

10. A bracket comprising shelf and wall arms; a pair of ribs secured thereto; a curved member having bifurcated ends overlapping said ribs and secured thereto; a wire located in said curved member and engaging the outer edges of said ribs.

11. A bracket comprising shelf and wall arms bent at right angles to each other and each having a pair of diagonally-located recesses at its edges; a corner member of less width than said arms and provided with two sets of diagonally-located ears each registering with one of said recesses and clamped over the edge thereof; a pair of ribs secured to said arms, each being recessed at its inner end to overlap and clamp one end of said corner member in position; a curved member having bifurcated ends overlapping and secured to said ribs; and a stiffener located in said curved member and engaging the edges of said ribs.

12. A bracket comprising shelf and wall arms; a corner member therefor; a pair of ribs secured to said arms, and each clamping one part of said corner member in position; and a curved brace secured to said ribs.

13. A bracket comprising shelf and wall arms; a corner member therefor; a pair of

ribs secured to said arms and each clamping one part of said corner member in position; and a stiffened member secured to said ribs.

14. A bracket comprising shelf and wall arms; a corner member therefor; a pair of ribs secured to said arms, each having one of its ends clamping one part of said corner mem-

ber in position; a curved brace member secured to each of said ribs; and a stiffener inclosed in said brace member.

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