

(No Model.)

T. CORSCADEN.
SHELF BRACKET.

No. 493,484.

Patented Mar. 14, 1893.

Fig. 1

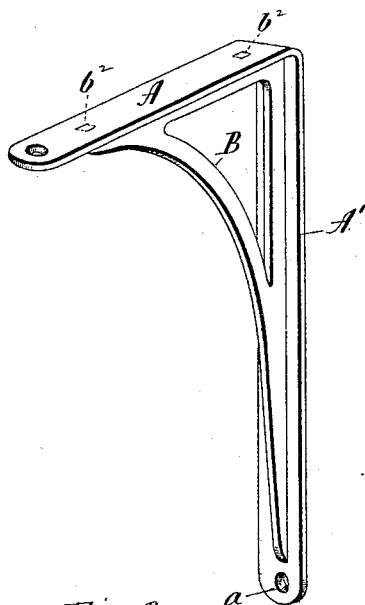


Fig. 2

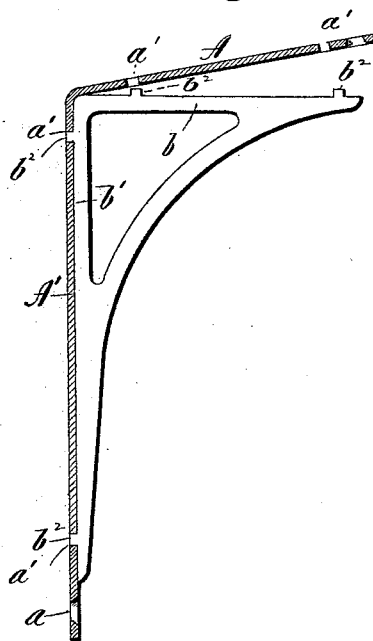


Fig. 3

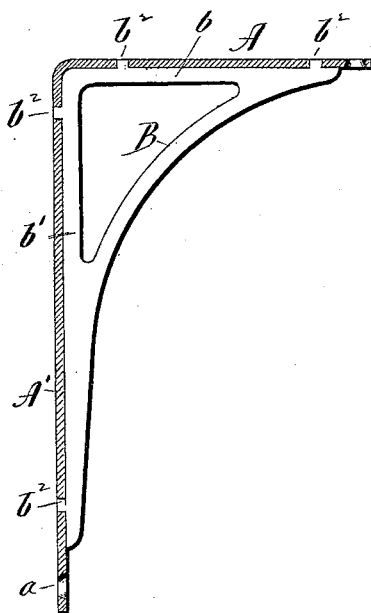
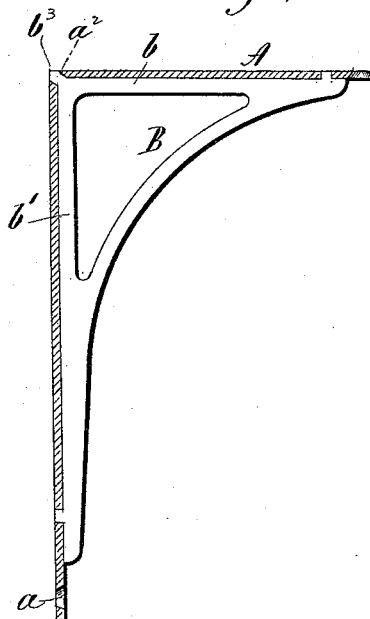


Fig. 4



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UNITED STATES PATENT OFFICE.

THOMAS CORSCADEN, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
STANLEY WORKS, OF SAME PLACE.

SHELF-BRACKET.

SPECIFICATION forming part of Letters Patent No. 493,484, dated March 14, 1893.

Application filed August 22, 1892. Serial No. 443,697. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CORSCADEN, of New Britain, in the county of Hartford and State of Connecticut, have invented a new
5 Improvement in Shelf-Brackets; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same,
10 and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of one form which a shelf-bracket constructed in accordance with my invention may assume. Fig. 2,
15 a view showing the body and the brace of the bracket in position for being put together, the former being shown in vertical section, and the latter in side elevation. Fig. 3, a similar view of the bracket when done. Fig.
20 4, a view of one of the modified forms which the bracket may assume.

My invention relates to an improvement in sheet metal shelf-brackets the object being to produce a simple, elegant, light and strong article.
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With these ends in view, my invention consists in a sheet metal shelf bracket having certain details of construction, as will be herein-after described and pointed out in the claim.

30 In carrying out my invention, I take a suitable strip of sheet metal and bend it transversely between its ends, and preferably to one side of its longitudinal center, to form a body which comprises the shelf-plate A, and
35 the wall-plate A', of the bracket. It is true that the members which I have designated as the shelf-plate A, and the wall-plate A', are not independent of each other, but both form a part of the same strip of metal, but I have
40 found it most convenient, and think it not misleading, to use the old terms. Before bending the metal, however, I provide it with circular perforations *a*, for receiving screws or nails, by which the bracket is put up, and by
45 which the shelf is secured to it. These circular perforations are disposed as in any ordinary bracket. I also perforate the strip to form rectangular openings *a'*, which are a very little wider than the stock from which
50 the brace B, is formed, is thick. I locate at

least one of the said rectangular openings at or near the outer end of the shelf-plate A, and of the wall-plate A', and I also locate such a perforation at or near the inner end of one or of both of the said plates. As shown
55 by Fig. 2 of the drawings, the inner or adjacent ends of both of the said plates are provided with perforations *a'*.

The brace B, of my improved bracket, I blank out from sheet metal of suitable thickness. Preferably it will be triangular in its general form, as herein shown, but whatever its form, and ornamental configuration, it will have two straight sides, *b* and *b'*, arranged at a right angle to each other, and respectively
60 shorter than the shelf-plate A, and the wall-plate A', of the body of the bracket, whereby the brace is adapted to be set into the said body in an edgewise position, or, in other words, in a plane at a right angle to the plane
70 of the said plates.

I would here call attention to the fact that the metal in the body is utilized flatwise, while the metal in the brace is utilized edgewise, the latter securing an economy of space.
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In blanking out the brace, I leave upon its sides, *b*, *b'*, lugs *b²*, arranged in correspondence with the arrangement of the rectangular openings *a'* in the shelf and wall plates of the body, the said lugs corresponding in cross-section to the shape of the said openings.
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In putting the said body and brace together, as thus formed, the body may be bent, as shown by Fig. 2, of the drawings, to an angle
85 a few degrees greater than a right angle. This permits the brace to be inserted into it, and the lugs on one of its sides properly inserted into their proper perforations in the body. After this, the body is bent so that its two
90 plates or members will stand at a right angle to each other, the off-setting member being thus closed down upon the lugs of the other side of the brace. After this, the lugs are riveted down, whereby the two parts of the
95 bracket are firmly secured together. I do not, however, limit myself to bending the body as described, for it might for instance, be first bent to form an angle a little less than a right angle, and then sprung open to an angle a
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little greater than one of ninety degrees, to permit the brace to be jumped, so to speak, into place.

Under the construction described it will be observed that the brace is not only connected at or near its ends with the shelf and wall-plates, but also that it is firmly connected therewith where the same come together, whereby it is not only held against lateral movement, but great structural rigidity is given to the bracket against downward strain, as will be apparent, and this is of course important in a bracket made of sheet-metal, which would not otherwise have the rigidity required. This feature of construction last described is not possible in those sheet-metal brackets in which the brace has been used flatwise instead of edgewise, and simply connected at its ends with the ends of the shelf and wall-plates of the body of the bracket. Moreover, in my construction, the brace is presented edgewise instead of flatwise, of the metal, securing more room, and also making a better appearance.

The shelf, and wall-plates being made in one piece of sheet-metal, form, as it were, a continuous wrought-metal back-bone or spine for the bracket, which is thus given not only great strength and rigidity, but also an elegant and finished appearance.

Preferably I shall provide both the wall and shelf-plates with perforations located near their inner ends, and the brace with corresponding lugs; but that construction is not absolutely essential, as a bracket might be constructed with only one lug at the bend of its body. In case one lug were used, it might be located in the position of either of the two inner lugs $b^2 b^2$ shown in Fig. 2, or it might be arranged as in Fig. 4, in which the lug b^3 is shown as located at the meeting points of the straight sides b and b' , of the brace, and the rectangular perforation a^2 to receive it, located at the meeting points of the wall and shelf-plates of the body. This construction shown by Fig. 4, would be a good construction, and one favoring a ready assemblance of the parts. I would, therefore, have it understood, that I do not limit myself to the exact construction shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention. I am aware, however, that a sheet-metal shelf-bracket is not broadly new, as before suggested, and that it is not

new to secure a brace within the body of the bracket by furnishing the latter with perforations, and the former with corresponding retaining lugs, and further, that it is not new to arrange a brace in a plane at a right angle to the shelf and wall-plates, of a bracket in which the shelf and wall-plates and the brace are made independently, of cast-metal and joined together. I do not, therefore, broadly claim a bracket having its body and brace made of sheet metal, nor a bracket having its body and brace coupled together by means of retaining lugs and perforations to receive the same, nor a bracket having its brace arranged edgewise to its wall and shelf plates but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, the herein described sheet-metal shelf-bracket made in two pieces, and consisting of a sheet-metal body and a sheet-metal brace, the said body consisting of a long narrow strip of sheet-metal bent transversely between its ends at a right angle, to form the shelf-plate and the wall-plate of the bracket for which the said body constitutes a continuous, jointless wrought-metal spine or back-bone, both of the said plates being perforated at or near their outer ends, and one or both of them being perforated at or near their inner ends, and the said sheet-metal brace being located between the said wall and shelf plates at a right angle to the planes thereof, and having two straight edges arranged at a right angle to each other, and furnished with retaining lugs corresponding to the said perforations in the said plates, and the said perforations and lugs being relatively arranged so that the former, or some of them, may only be inserted into the latter when the said wall-plate and shelf-plate of the body are at an angle to each other greater than a right angle, and the said plates being also furnished with additional perforations for the attachment of the bracket to the wall, and for the attachment of a shelf to the bracket, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS CORSCADEN.

Witnesses:

EDWARD C. PIERCE,
H. C. CURTIS.