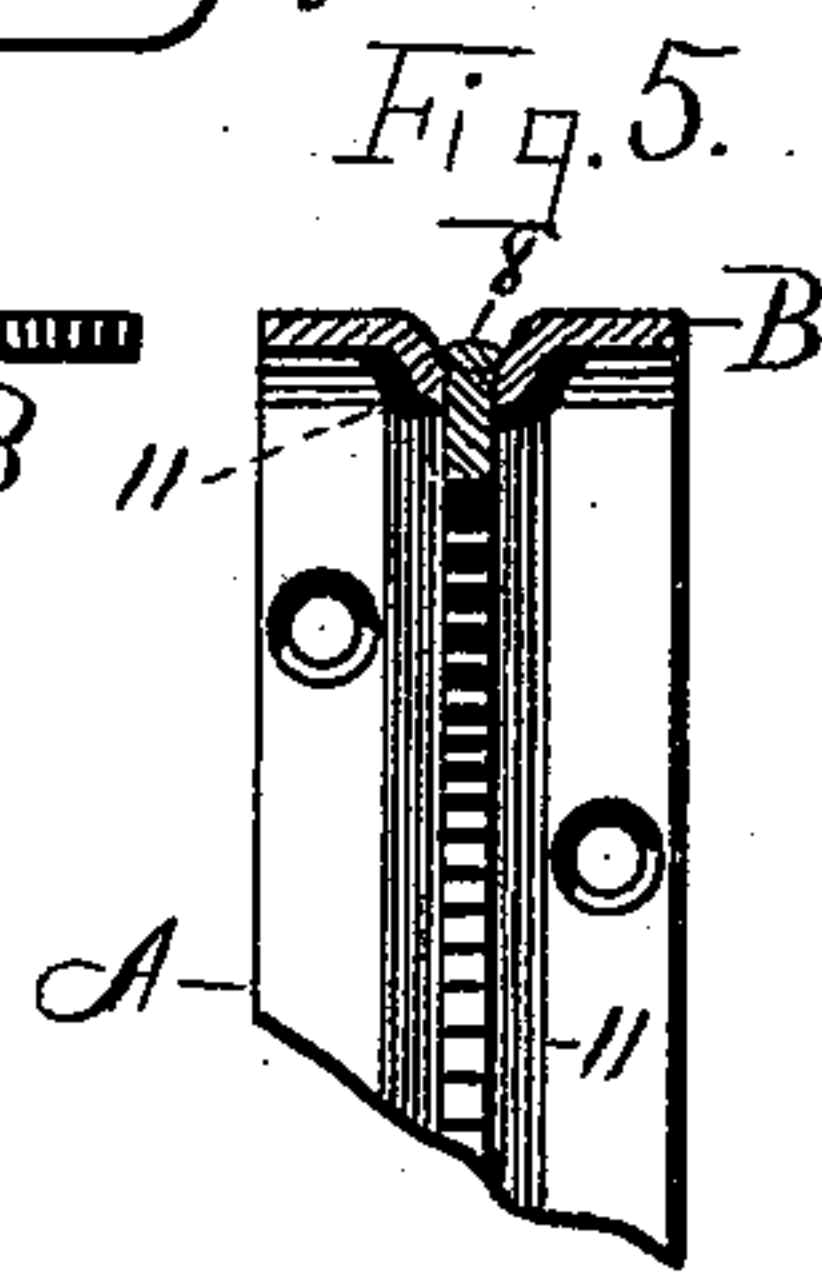
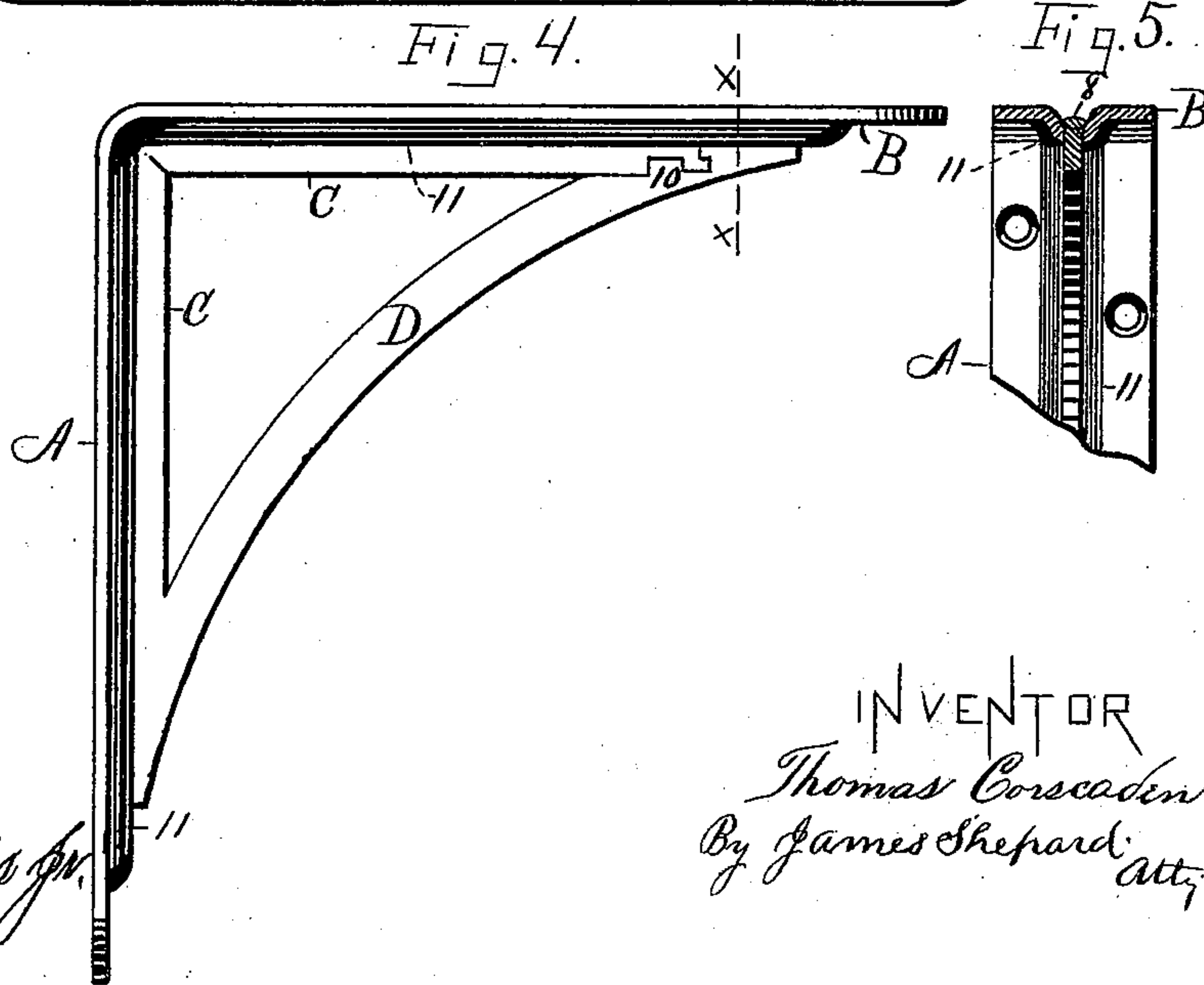
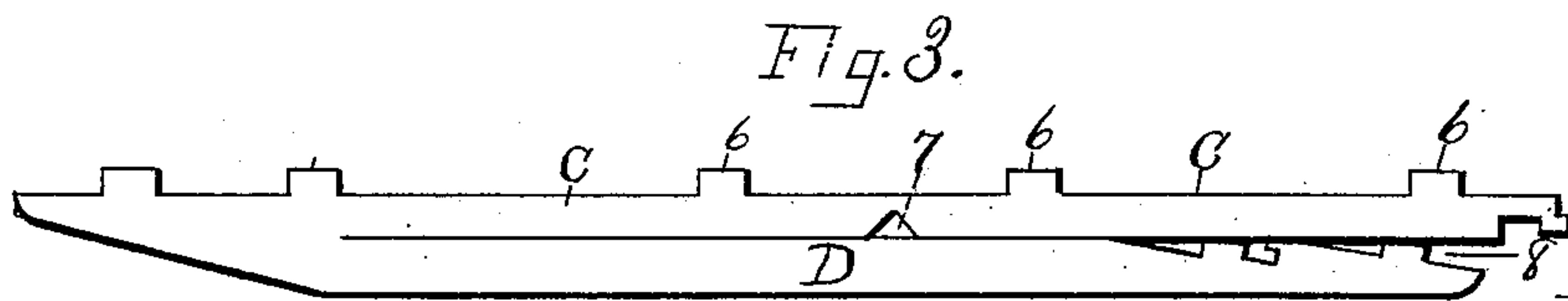
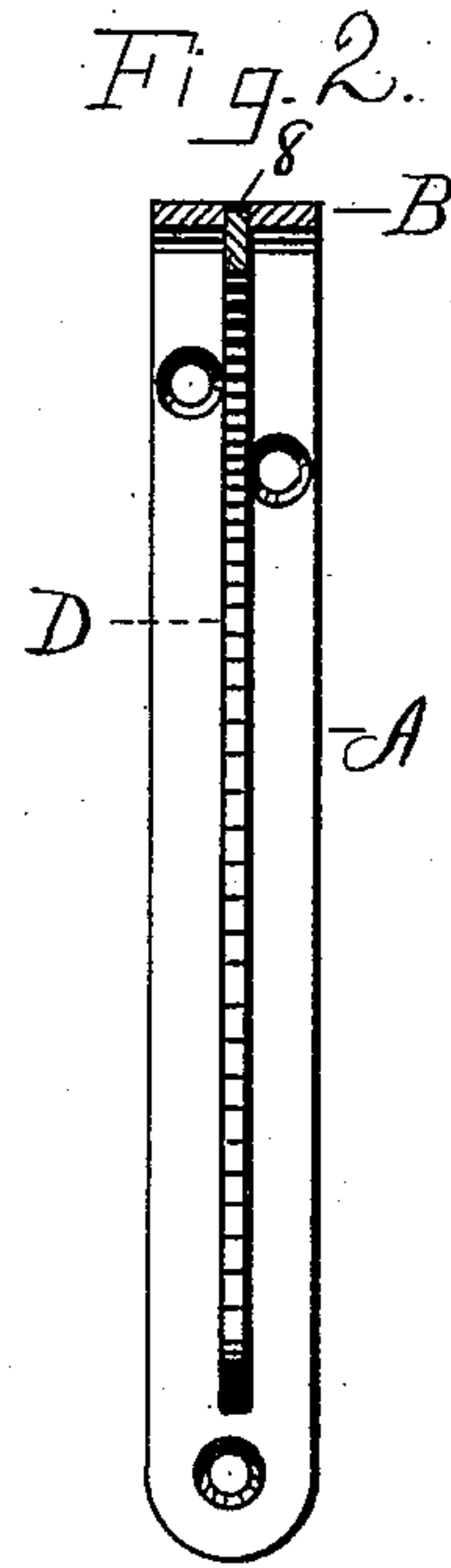
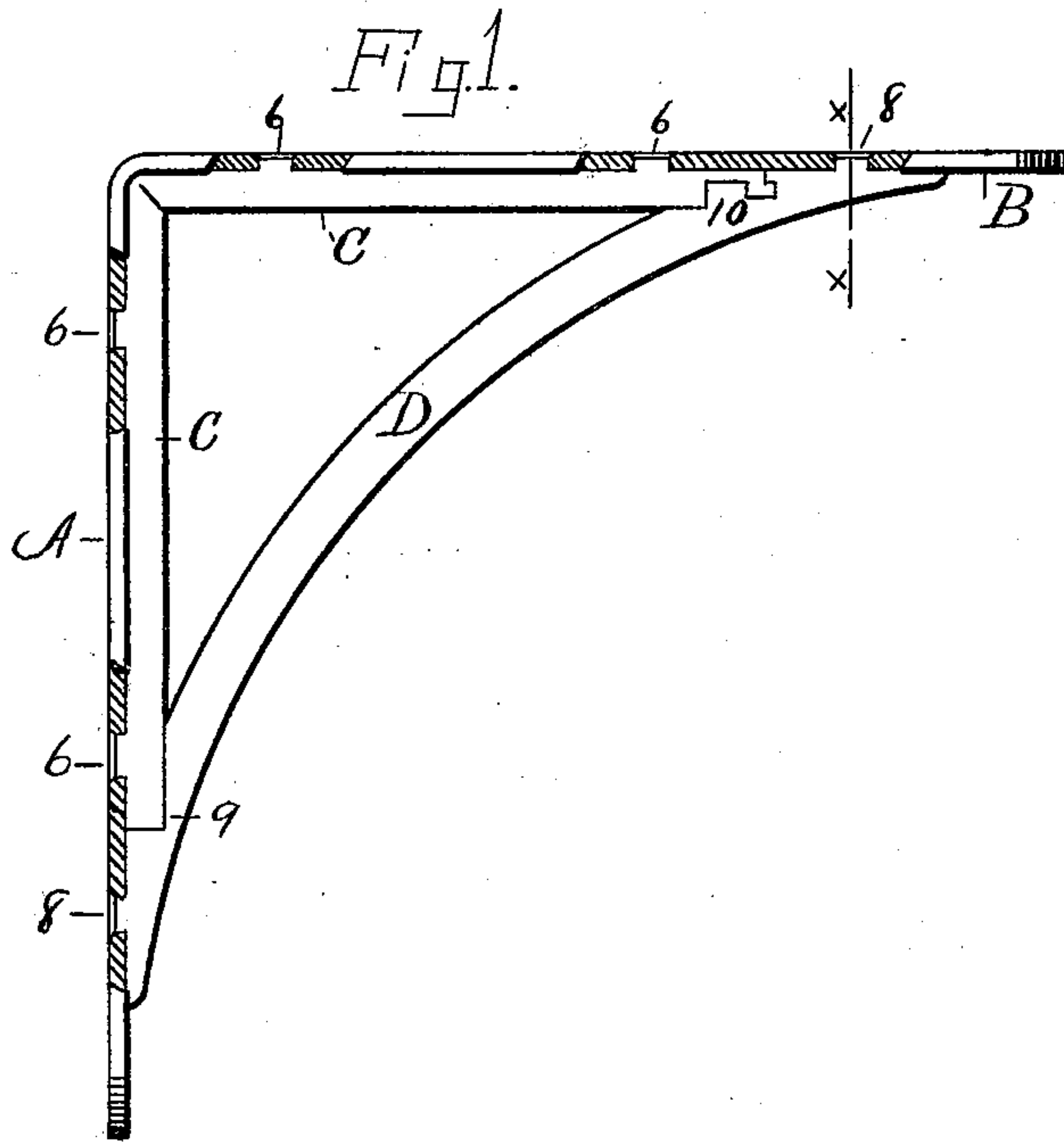


(No Model.)

T. CORSCADEN.  
SHELF BRACKET.

No. 512,685.

Patented Jan. 16, 1894.



WITNESSES  
Arthur G. Beach  
C. Darwin Lomis Jr.

INVENTOR  
Thomas Corscaden  
By James Shepard atty

# 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. 512,685, dated January 16, 1894.

Application filed January 14, 1892. Serial No. 418,115. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS CORSCADEN, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Shelf-Brackets, of which the following is a specification.

My invention relates to improvements in shelf brackets and the main object of my improvement is to produce a strong and durable bracket (especially in the larger sizes) of sheet metal with but little waste of stock.

In the accompanying drawings, Figure 1 is a side elevation of my bracket partly in vertical section. Fig. 2 is a sectional view of the same on the line  $x, x$  of Fig. 1, the parts back of said section being shown in front elevation. Fig. 3 is a plan view of a compound blank for a strengthening rib and brace. Fig. 4 is a side elevation of one of my brackets with its strengthening rib and brace formed from such a compound blank, and Fig. 5 is a sectional view of a portion thereof on line  $x, x$  of Fig. 4.

I form the wall plate A and shelf plate B of a single strip of metal by bending it transversely at the junction of said plates. The plates are provided with the ordinary screw holes to receive the fastening screws and also with slots or mortises at the middle of their width to receive the lugs hereinafter described.

I provide each of the plates A, B with a flat thin strengthening rib C having lugs 6 at its edge that enter part of the slots or mortises in the plates A, B and by heading said lugs these strengthening ribs are secured in place on the inside of said plates, in an edgewise position at right angles to each other, and at right angles to the body of said plates. These ribs may be formed by cutting them out from a plate of sheet metal in the form shown in Fig. 1; but without any seam at their angle, or they may be formed from a straight strip of metal of the desired width for the ribs by making a notch at their junction as at 7, Fig. 3, and then bending the narrow web by the side of said notch to bring said ribs into the form shown in Fig. 1; or they may be formed of two straight strips properly mitered at their junction.

D designates a brace which is also formed of sheet metal, of a thickness corresponding to that of the ribs C. Its edge at one end rests upon the wall plate A and at the opposite end upon the shelf plate B, while the ends of the ribs C are made to abut against the edge of said brace at points just inside of the end edges thereof where they rest upon said plates. The end edges of the brace are provided with tenons 8 that enter holes in the plates and by heading down which tenons the brace is firmly secured in place as shown. The contour of the strengthening ribs and the brace where their edges abut may be plain as at 9 at the foot of the vertical strengthening rib in Fig. 1, or it may be irregular so as to form a lock as shown at 10 in Figs. 1 and 4, at the upper end of the brace. This brace may be cut out from a plate in its final form or it may be cut out substantially straight and bent edgewise into form.

While I prefer to form the brace and strengthening ribs from separate blanks, they may be formed with but little waste of stock from a single compound blank of the form shown in Fig. 3, slit along its middle portion, then bending the brace D into its curved form, then bending the web by the side of the notch 7 at the junction of the strengthening ribs to bring said ribs at right angles to each other and then locking together the free ends thereof at the upper end of the brace and adjacent strengthening rib, thereby changing the blank from the form shown in Fig. 3, to that of the finished strengthening ribs and brace shown in Fig. 4. I have also shown in Figs. 4 and 5 a central bead 11 in both of the plates A, B, and the strengthening ribs and brace both rest upon said bead as they are secured to these plates by their lugs as before described.

In all the constructions shown the opposite ends of the curved brace rest upon and are secured to the wall and shelf plate and one or both ends of the strengthening rib inside said brace and on the other side of the seam or joint between said brace and rib also rests upon and is secured to said plate as shown at both ends of the brace and the end of the strengthening rib adjoining the upper end of the brace in Figs. 1 and 4.



I am aware that a prior patent for a bracket shows wall and shelf plates with a separately formed substantially triangular and perforated or open work brace all in one solid piece  
5 without seam or joint, secured to said plates, and I hereby disclaim the same.

I claim as my invention—

1. A shelf bracket consisting of a single strip of metal bent transversely to form substantially a right angle as seen in edge view,  
10 and non-integral strengthening ribs formed of a single piece of metal bent to form a corresponding angle, said ribs before bending being notched to form when bent the miter  
15 joint at the angle just inside of their continuous edge, substantially as described and for the purpose specified.

2. A shelf bracket consisting of the wall and shelf plates having the central longitudinal  
20 bead, projecting from that face of said plates

that is inside of the angle formed by them, the strengthening ribs and the brace on the inside of said plates, said ribs and brace both resting upon said bead and secured thereto, substantially as described and for the pur- 25 pose specified.

3. A shelf bracket consisting of a single strip of metal bent transversely to form substantially a right angle as seen in edge view, strengthening ribs secured edgewise on the  
30 inside of said plates and the brace secured thereto with the seam between the abutting edges of said brace and strengthening ribs formed in part by one end of one of said ribs, substantially as described and for the pur- 35 pose specified.

THOMAS CORSCADEN.

Witnesses:

JAMES SHEPARD,  
A. G. BEACH.