(No Model.)

W. A. LIPPHARD.

BRACKET ATTACHMENT FOR TUBULAR UPRIGHTS.

No. 539,364. Patented May 14, 1895.

Fig. 1.

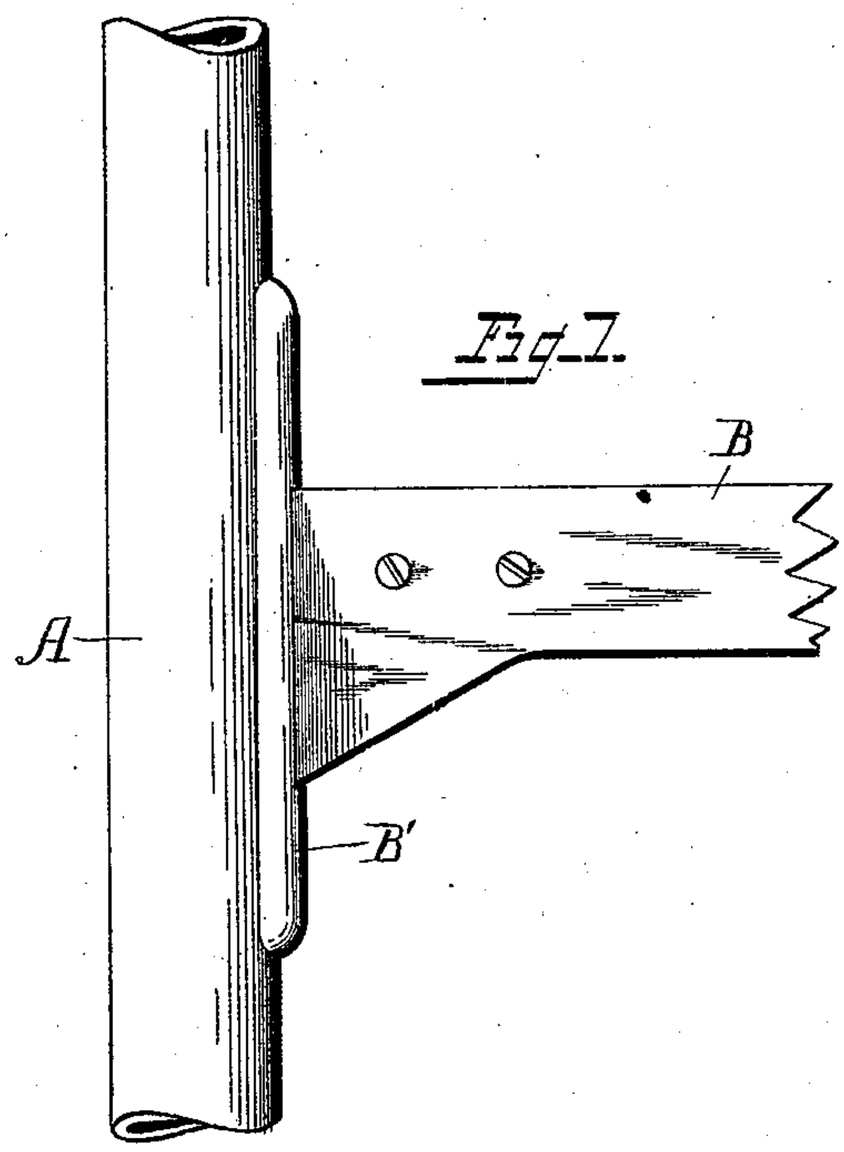


Fig. 3.

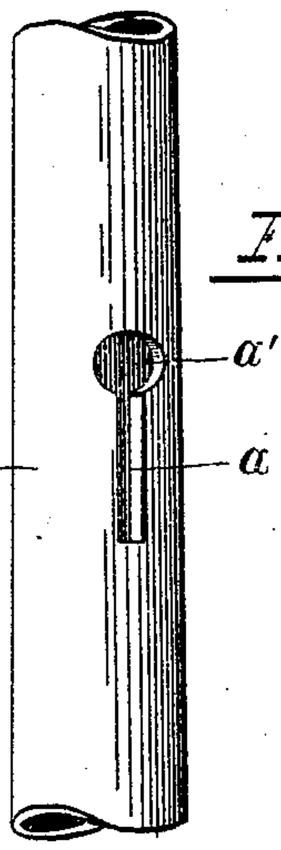


Fig. 2.

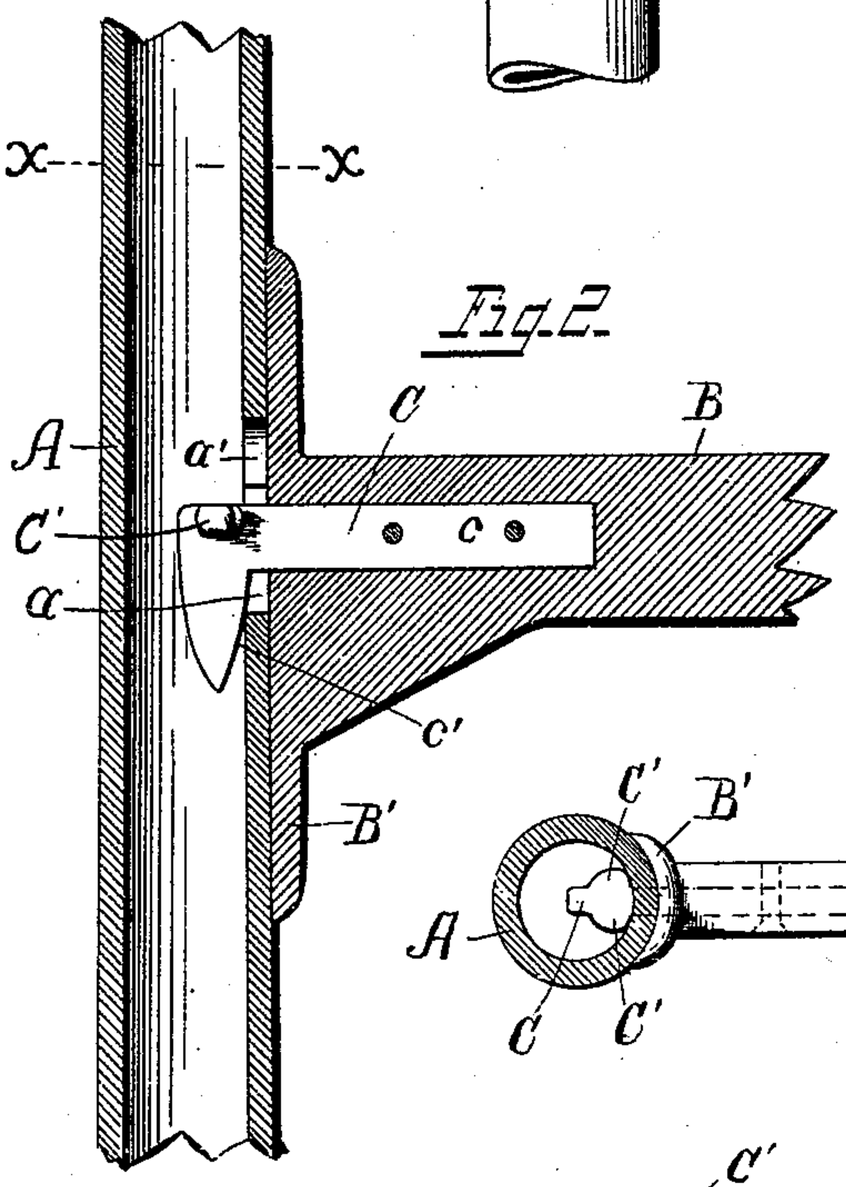
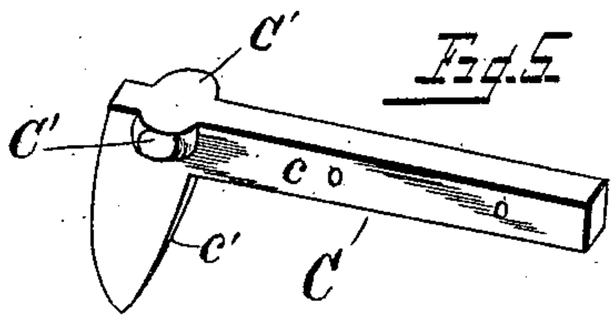


Fig. 4.

Fig. 5.



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BRACKET ATTACHMENT FOR TUBULAR UPRIGHTS.

SPECIFICATION forming part of Letters Patent No. 539,364, dated May 14, 1895.

Application filed March 28, 1895. Serial No. 543,511. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. LIPPHARD, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Bracket Attachments for Tubular Uprights; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in bracket attachments for tubular uprights, and it consists in the construction and arrangement of parts hereinafter described and definitely pointed out in the claim.

The aim and purpose of the invention is the provision of an improved bracket attachment whereby a firm unyielding connection is effected between the members, and the removal of the bracket from the upright quickly and easily effected.

The objects of the invention are attained by the construction illustrated in the accompanying drawings, wherein like letters of reference designate corresponding parts in the several views, and in which—

Figure 1 is an elevation of the upright and bracket adjusted thereto. Fig. 2 is a longitudinal vertical section. Fig. 3 is an elevation of the slotted section of the upright. Fig. 4 is a cross-section on the line *x x*, Fig. 2. Fig. 5 is a detail view of the attaching section of the bracket.

In the drawings A designates the tubular upright, having an elongated slot *a* cut through its side, the upper end of which terminates in a circular aperture *a'* of a diameter greater than the width of the slot.

B designates the bracket arm having at its end a rigid brace member or foot B', fashioned on its outer face to correspond with the cylindrical shape of the side of the upright, and having its sides extended to lap onto the sides of the upright, while its ends are extended in opposite directions beyond the arm.

C designates the securing lug arranged centrally between the ends of the foot and having a shank *c* at its upper end which is embedded in the end of the bracket, passing through the foot and by suitable means rigidly secured in place. The lower portion of the lug is inclined on its inner face as at *c'*, the upper end of the inclined edge being in such proximity to the foot as to prevent the wall of the upright from striking the horizontal portion or shank of the lug.

On the upper end of the lug is formed two hemispherical projections C', the same being located on opposite sides, and jointly with the lug, are of a diameter substantially that of the aperture *a'* in the upright. The inner faces of these projections are arranged at a point slightly outward from the outer end of the shank. The circular form of these projections corresponds with that of the inner wall of the upright.

When the bracket is to be adjusted on the upright, the lug is passed into the same, the tapered or wedge end passing through the slot, while the hemispherical or curved projections C' pass through the aperture *a'*. The bracket is then forced down until the lower wall of the slot is tightly wedged between the inclined edge of the lug and the curved face of the foot. While in this position the curved sides of the projections C' are forced into close contact with the inner wall of the upright, and thereby prevent any lateral movement of the bracket. By this means it will be seen that the foot is drawn closely and firmly onto the upright and its curved edges prevent its turning, while the inclined edge of the lug holds the bracket in place and the projections at the upper end of the lug bearing against the curved wall of the interior of the upright effectually prevent any tilting or lateral independent movement of the members.

In constructions where hooks are employed a tearing effect of the uprights has been experienced when the parts are inclined independently, but by my construction and with the lateral projections fitting the wall of the upright all such effect is avoided as the strain is brought directly on the inner face of the wall at opposite sides of the slot, as well as on the wall below the slot, while the foot closely embraces the upright.

The employment of my connecting means in connection with light articles of furniture is of great advantage and importance, as in such structures the uprights are usually formed of light metal.

I am aware that many minor changes in the

construction and arrangement of the parts can be made and substituted for those herein shown and described, without in the least departing from the nature and principle of my invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

The combination with the tubular standard having a vertical slot therein and an aperture into which the slot leads, of a bracket having a vertical foot thereon curved to embrace the standard, and a securing lug located at a point substantially midway between the ends of the foot and having curved lateral projections on its outer upper end corresponding to the curvature of the inner wall of the standard, and a depending wedge section below the projections, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WM. A. LIPPHARD.

Witnesses:
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