

H. ZIMMERMAN.
BRACKET FOR SHUTTER BOWERS, &co.
APPLICATION FILED AUG. 3, 1907.

914,773.

Patented Mar. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

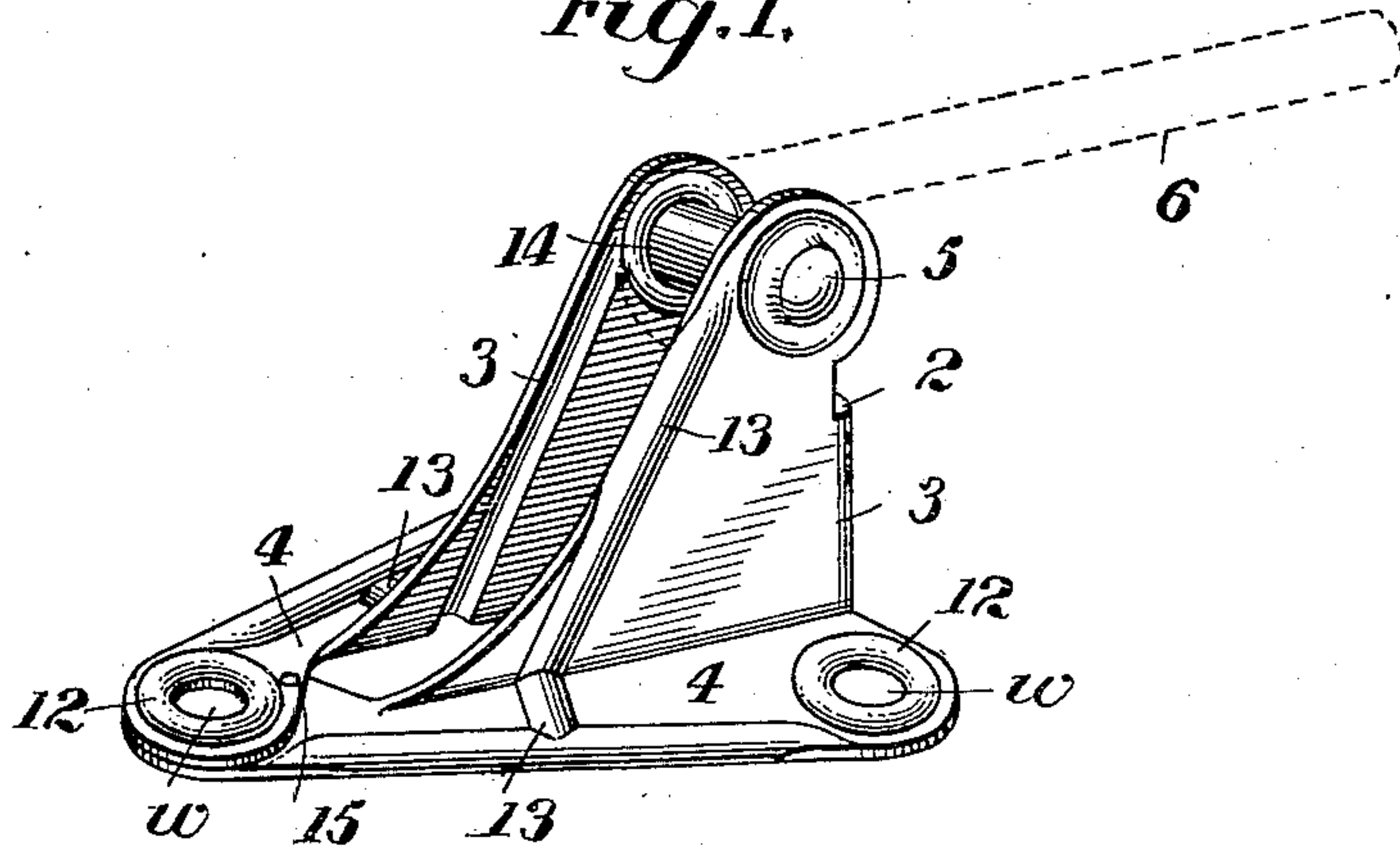


Fig. 2.

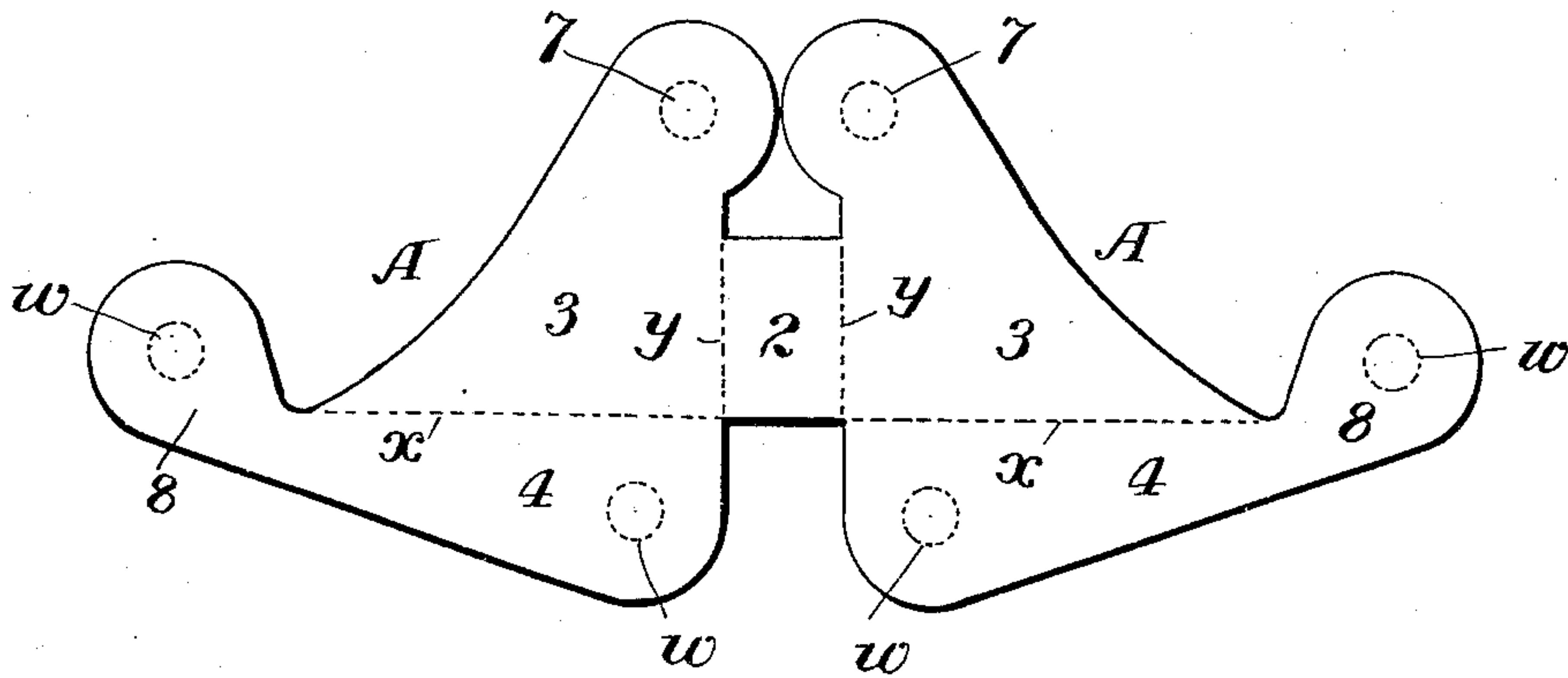


Fig. 3.

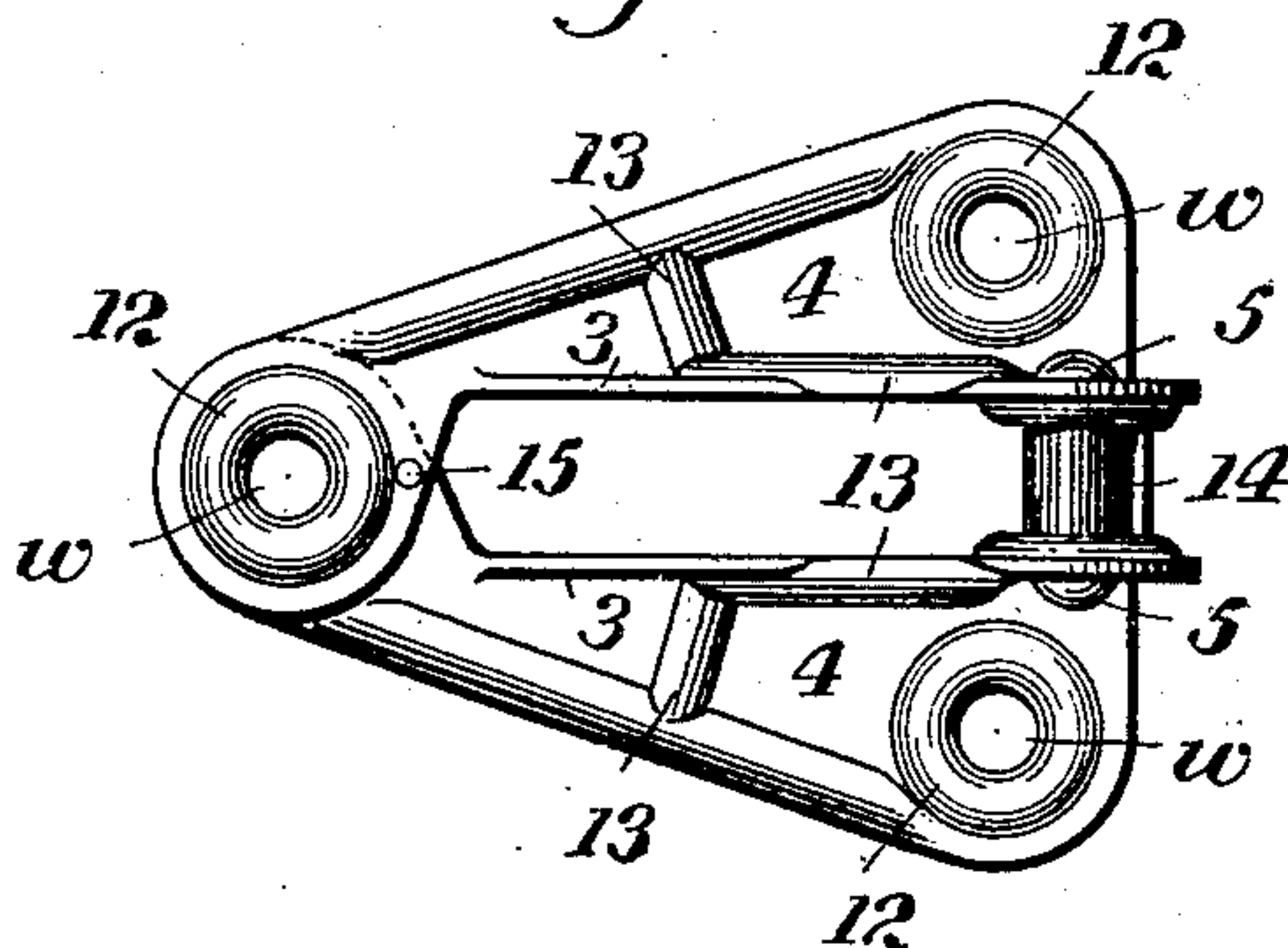
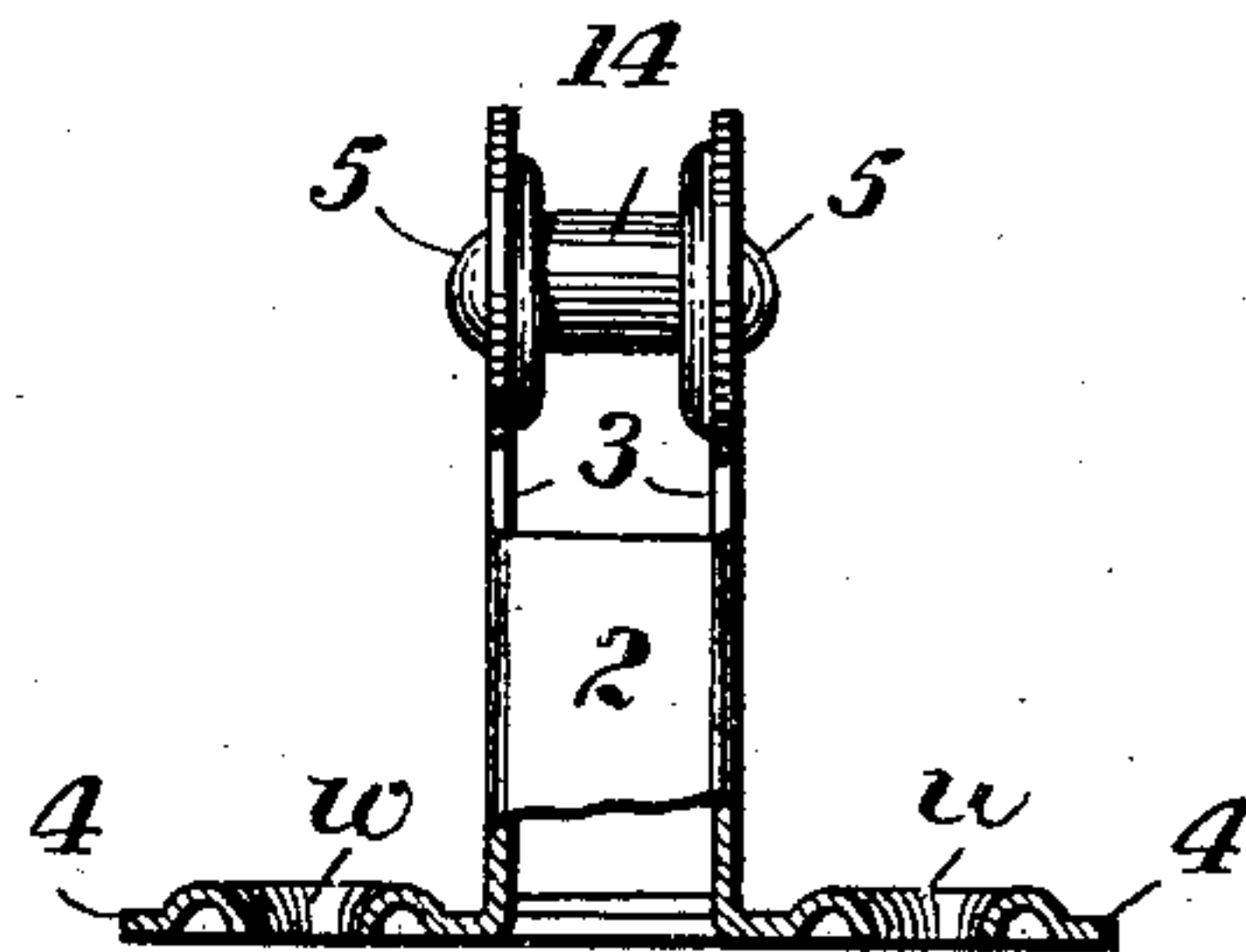


Fig. 4.



Witnesses
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2 SHEETS—SHEET 2.

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UNITED STATES PATENT OFFICE.

HARRY ZIMMERMAN, OF FREMONT, OHIO.

BRACKET FOR SHUTTER-BOWERS, &c.

No. 914,773.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed August 3, 1907. Serial No. 386,987.

To all whom it may concern:

Be it known that I, HARRY ZIMMERMAN, a citizen of the United States, residing in the city of Fremont, county of Sandusky, State of Ohio, have invented certain new and useful Improvements in Brackets for Shutter-Bowers, &c., of which the following is a specification.

My invention relates to metallic brackets adapted for different purposes, and more especially to brackets for supporting window brace rods, and consists in making each bracket of sheet metal bent up to form side cheeks which support the pivot pin, when the same is required, and base pieces for attachment to the proper support, as fully set forth hereinafter and as illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view showing one form of my improved bracket; Fig. 2, a plan of the blank from which the bracket, Fig. 1, is made; Fig. 3, a plan of the bracket Fig. 1; Fig. 4, an end view; Fig. 5, a perspective view showing additional bracing means for the cheeks; Fig. 6, a sectional plan on the line 6—6, Fig. 5; Fig. 7, a plan showing a modification. Fig. 8 is a detail view.

As shown, the bracket is formed of a single piece of sheet metal which may have different outlines, according to the general form of the bracket, but essentially is shaped to form two similar sections A, A, Fig. 2, united by a connection or wing 2. Each section A is of such shape that when bent upon a line x so as to bring the two parts 3, 4, at right angles to each other, the upper part will form a side piece and the lower a base piece, and by then bending the blank upon lines y, y where the parts 3 join the wing 2, the two parts 3, 3, form parallel side pieces or cheeks adapted to support between them the pin or pivot 5 for the usual brace rod 6, or other object to be supported. This cross pin may be a screw, bolt or rivet passed through perforations 7, 7, at the ends of the wings, or may be a cross pin, the ends of which constitute trunnions extending from the sides of the brace rod. Each base piece may constitute a lateral flange, as in Fig. 7, perforated to receive the usual securing screws, but preferably the blank is so formed with tongues 8, 8, at such an angle that when the base pieces are bent at right angles to the cheeks, and the latter brought parallel to each other, the tongues, 8, 8, will overlap,

as in Figs. 1, 3, 5 and 6, and the tongues have perforations w which then coincide so that a single screw will not only fasten both to the support, but will hold the base pieces securely in relation to each other. Said base pieces are preferably connected by a rivet 15. Where greater stiffness is required each cheek may have a lip 9 which, bent at right angles, overlaps or is overlapped by the similar lip of the other cheek, Figs. 5, 6 and 7, and further stiffening may be had by perforating the lips and connecting them by a rivet 10. To permit the use of lighter or thinner grade of metal I stiffen the parts by stamping the blank to form annular ribs 12 around the different screw holes, and also if required to form straight ribs 13 extending across the cheeks, preferably parallel to the edges, and onto the base pieces as shown.

By the above described construction I am enabled to greatly reduce the weight of the bracket, in respect to one made as usual of cast metal, and to so facilitate and reduce expense of manufacture that the cost of the article is much less than one of cast metal, while it is stronger, more durable and capable of a finer finish.

As shown a sleeve 14 surrounds the pivot pin 5 the ends of said sleeve being held by inwardly extending beads 16 on the cheeks 3. This sleeve acts to hold the cheeks in proper relative position.

I do not here claim the combination of the cheek pieces and intermediate sleeve and rivet, the same being the subject of a claim in my application for Letters Patent Serial No. 386,988.

Without limiting myself to the precise proportion and arrangements shown, I claim—

1. A bracket consisting of a single piece of sheet metal with parallel side cheeks and with a base flange at right angles to each side cheek, one flange overlapping the other at a point beyond the cheeks and adjacent to the base flanges, the said cheeks having perforations at their outer ends.

2. A bracket consisting of one piece of sheet metal and having parallel side cheeks, and base pieces each at right angles to one of the cheeks and a wing connecting the cheeks at a point immediately above the base pieces.

3. A bracket consisting of sheet metal shaped to form parallel connected side cheeks and base pieces at right angles thereto, with perforations in said parts and annular ribs

around the perforations, and other ribs extending across the cheeks and base pieces, for the purpose set forth.

4. A bracket consisting of sheet metal bent to form side pieces or cheeks, and base pieces at right angles to the side pieces the side pieces connected at a point immediately above the base pieces and each base piece

having a tongue 8 lying above or below the tongue of the other base piece.

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

HARRY ZIMMERMAN.

Witnesses:

KATHERINE DICK,
MATIE BISNETTE.