

(No Model.)

H. D. ALLEN.
SHEET METAL LATCH BOLT.

No. 479,582.

Patented July 26, 1892.

Fig. 1.

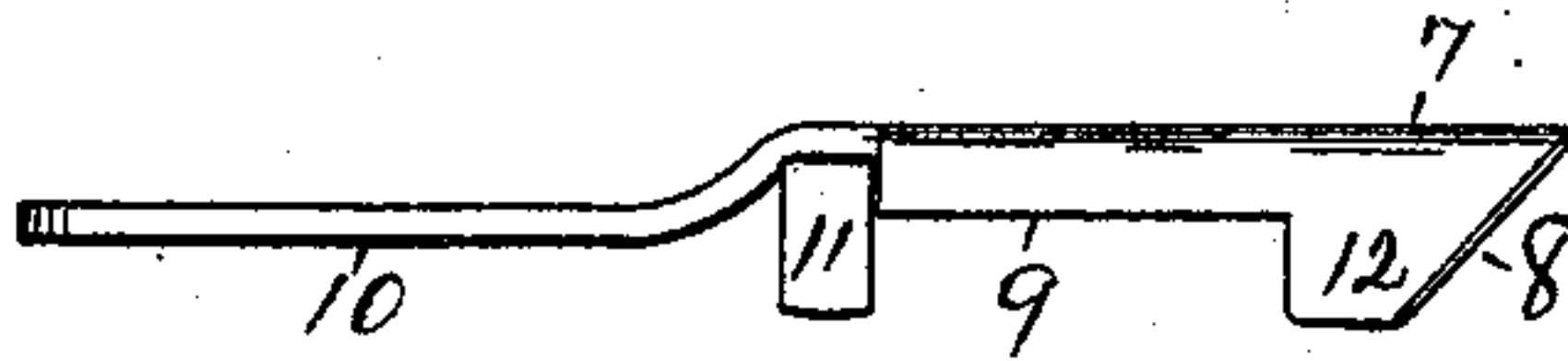


Fig. 2.

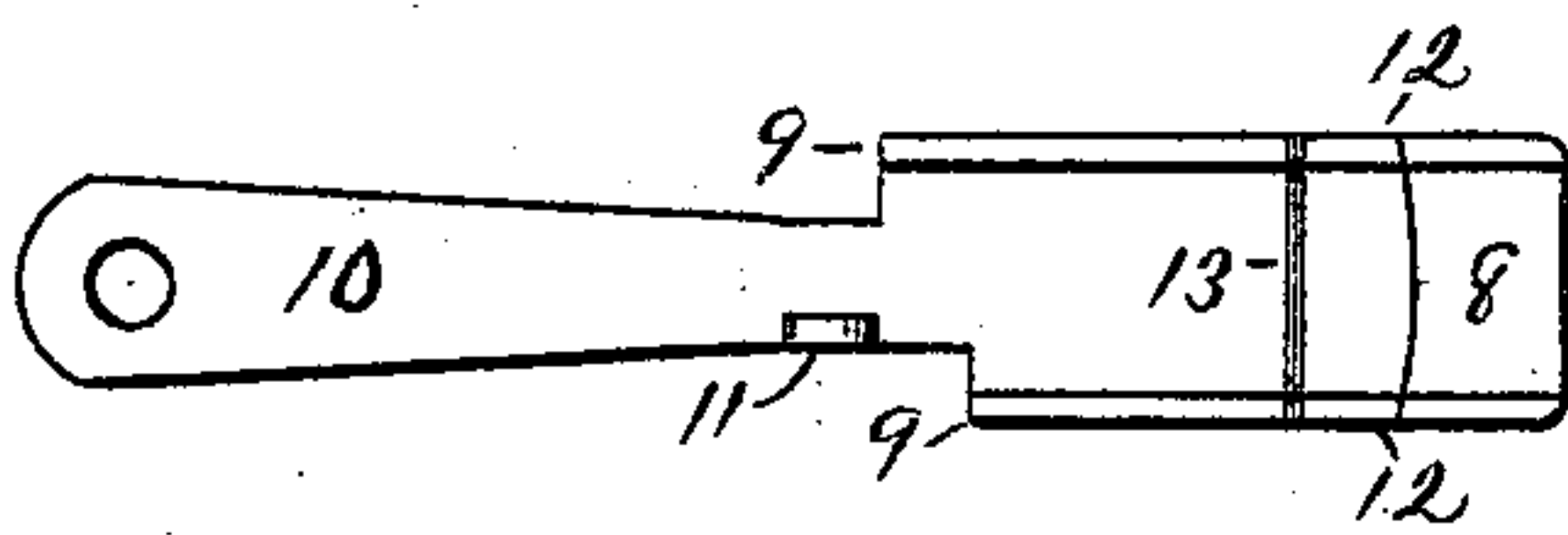


Fig. 3.

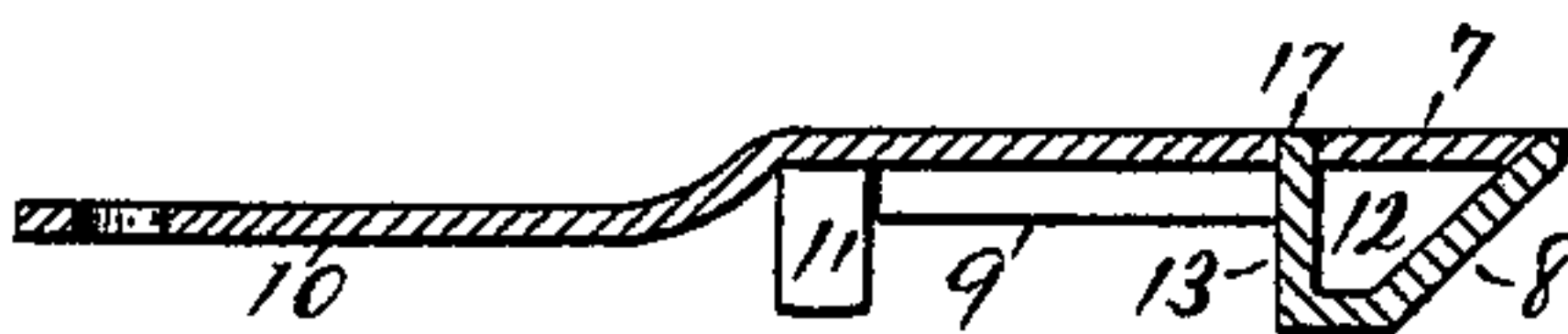


Fig. 4.

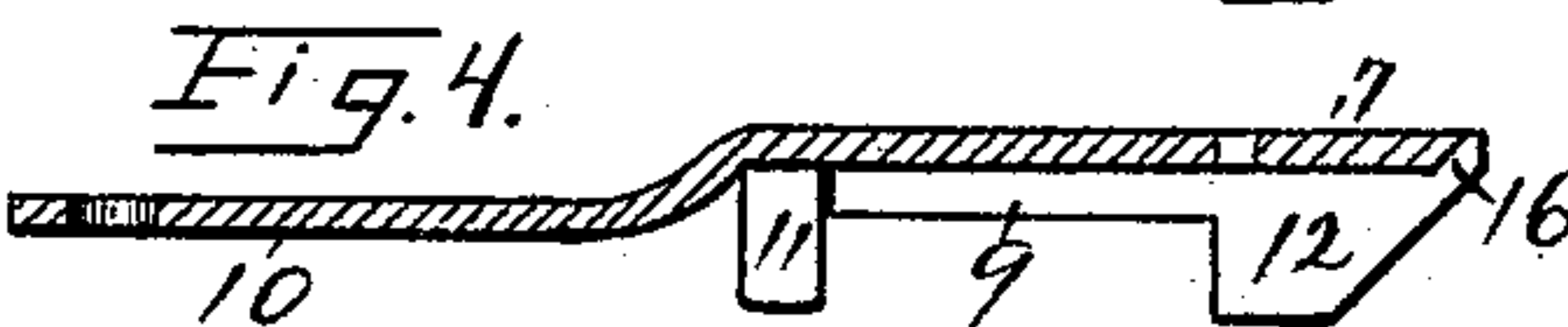


Fig. 5.

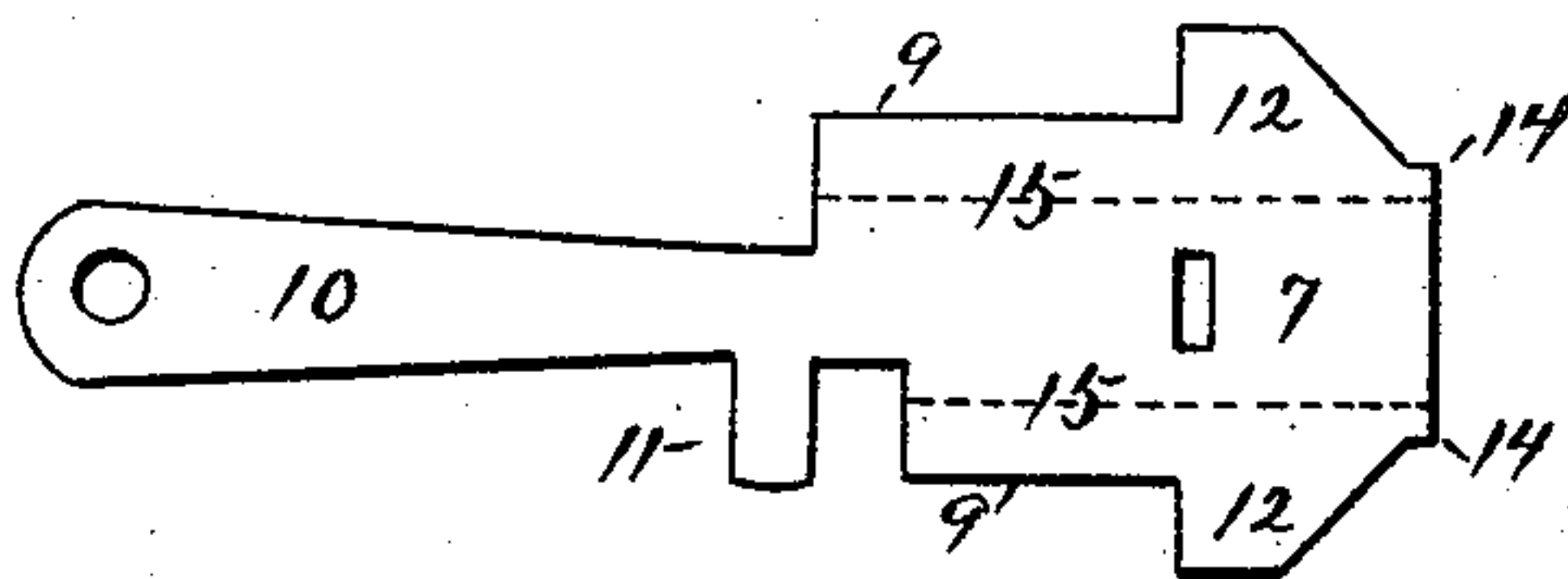
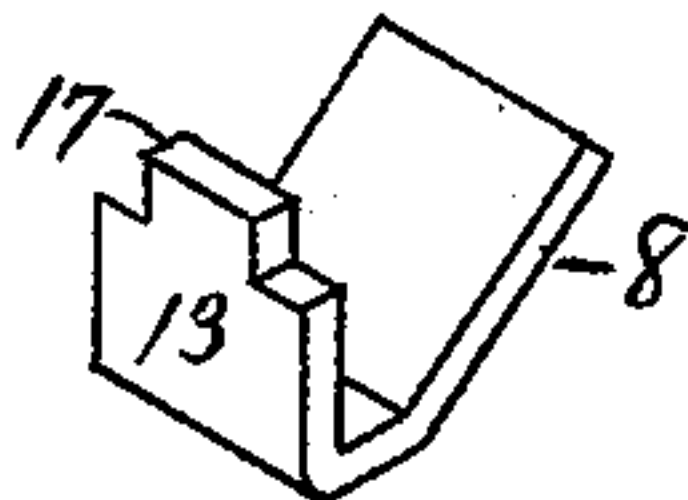


Fig. 6.

Witnesses.
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UNITED STATES PATENT OFFICE.

HOWARD D. ALLEN, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
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SHEET-METAL LATCH-BOLT.

SPECIFICATION forming part of Letters Patent No. 479,582, dated July 26, 1892.

Application filed February 1, 1892. Serial No. 419,856. (No model.)

To all whom it may concern:

Be it known that I, HOWARD D. ALLEN, 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 Sheet-Metal Latch-Bolts, of which the following is a specification.

My invention relates to improvements in sheet-metal latch-bolts; and the objects of my improvements are simplicity and cheapness of construction and the production of a superior article.

In the accompanying drawings, Figure 1 is an edge view of my latch-bolt. Fig. 2 is an elevation thereof, showing the side having the beveled face. Fig. 3 is a central longitudinal section of the same. Fig. 4 is a like view of the main portion of the same. Fig. 5 is a plan view of the blank from which I form the main portion of my latch-bolt, and Fig. 6 is a perspective view of the angular finishing-piece for the head of my latch-bolt.

The head of the finished latch-bolt is of the ordinary form, having the straight holding-face 7 and wiping beveled face 8, while the body or back for some distance inwardly from the head has a side flange 9 at each edge. The shank or tail 10 may be of any ordinary form and provided with any suitable lug, as at 11, for a spring to press against or other use, according to the kind of latch in which the bolt is to be used. My invention relates to the head end and adjacent body of the latch-bolt—that is to say, the end having the beveled wiping-face 8. I construct the main portion of this end, together with the shank or tail 10, from a flat sheet-metal blank, having side wings 12 and connected flanges 9, while the middle portion of the blank forms the back on which is the straight holding-face 7 of the finished latch-bolt. I perforate the blank through the back at a point opposite the inner ends of wings 12, as shown in Fig. 5. I bevel the outer corners of the side wings 12 on substantially the desired bevel for the beveled wiping-face 8, excepting as I leave small corners 14 in the blank near the bending-lines, as shown in Fig. 5. The side wings

12 and connected flanges 9 are bent up on the lines 15, Fig. 5, into substantially the form shown in the preceding figures. The outer edge of the metal between the side wings is then cut out a little and beveled off, as shown at 16 in Fig. 4, the bevel thereof being back from the beveled edge of the side wings a distance about equal to the thickness of metal employed for making the latch. I also form of sheet metal the angular finishing-piece, Fig. 6, the same being of a width that will fill the space between the side wings 12. This piece is provided with a tenon 17, designed to fit the hole in the back of the latch-bolt, into which it is riveted, the metal contiguous with said tenon constituting the square end 13 of the latch-bolt head, as best shown in Fig. 3. The slanting arm of the angular finishing-piece, which constitutes the main portion of the beveled face 8, lies in between the side wings near their beveled edges, so as to complete that end of the latch-bolt head. After thus firmly securing the angular finishing-piece in place the latch-bolt may be finished by grinding or polishing, thereby removing all surplus metal that may remain of the corners 14 of the blank, Fig. 5, and otherwise shaping the bolt—as, for instance, squaring the nose and rounding off the beveled face, &c.

By leaving the corners 14 in the blank, Fig. 5, I insure full corners at the nose of the latch-bolt after bending up the side wings. The latch-bolt is easily formed of sheet metal, whereby it can be produced at a small cost. It is strong and efficient and presents a neat appearance.

I claim as my invention—

The herein-described latch-bolt, consisting of a main portion having side wings 12, bent up from a connected back, and an angular finishing-piece set in between said wings and secured to said back, substantially as described, and for the purpose specified.

HOWARD D. ALLEN.

Witnesses:

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M. S. WIARD.