

R. B. BENFORD.  
CROSS LINE BUCKLE.

APPLICATION FILED MAR. 17, 1908.

899,375.

Patented Sept. 22, 1908.

Fig. 1.

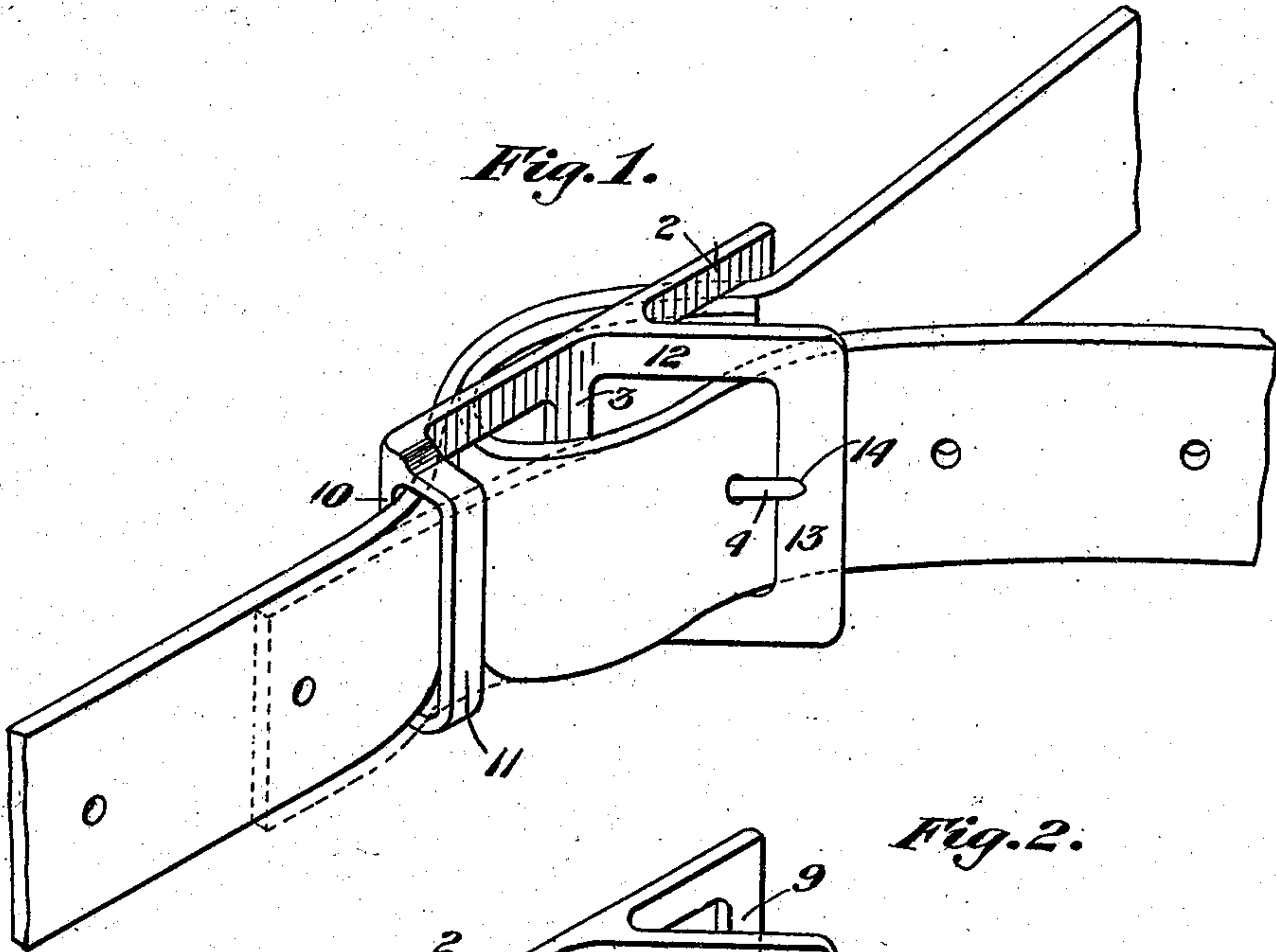


Fig. 2.

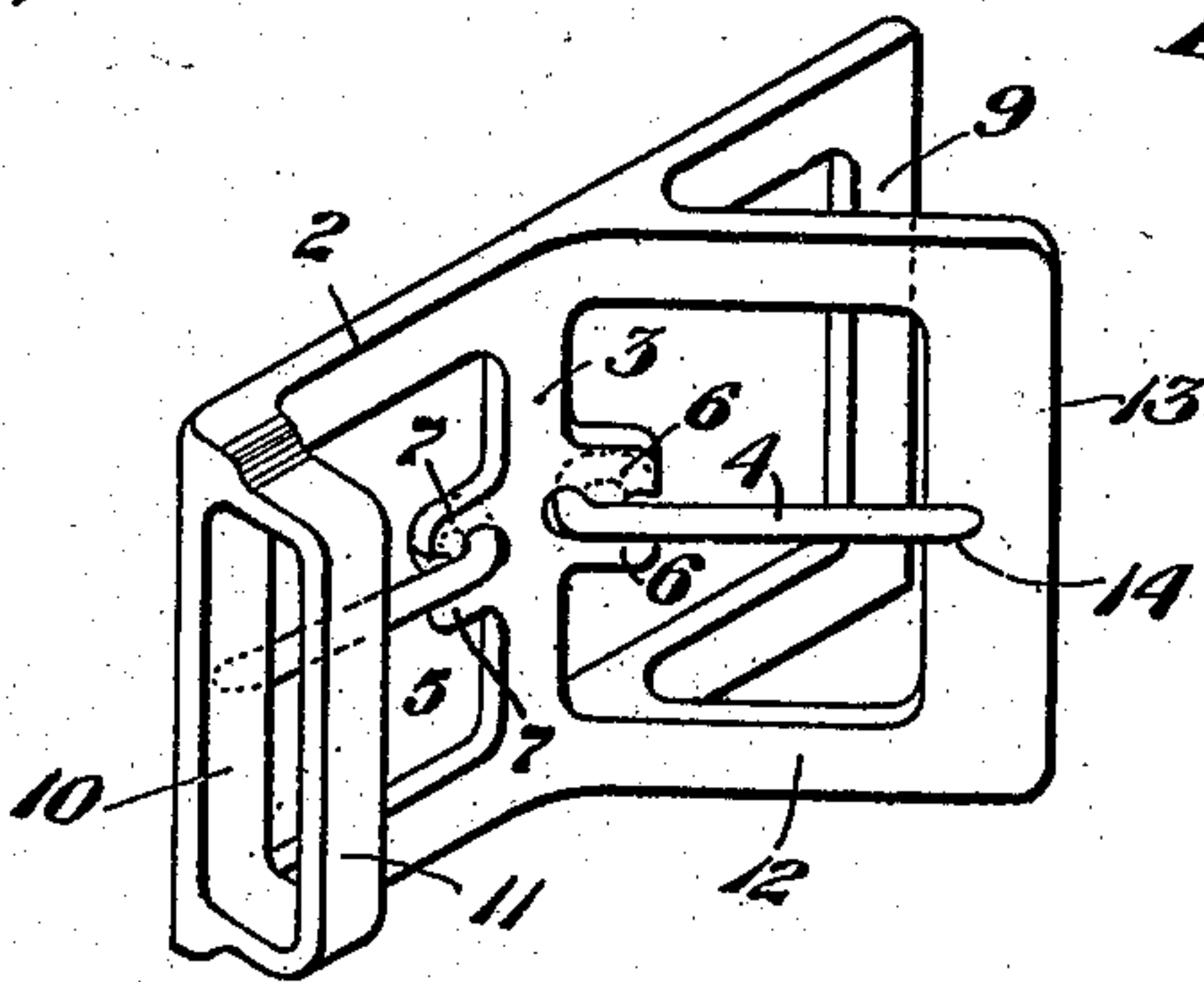


Fig. 3.

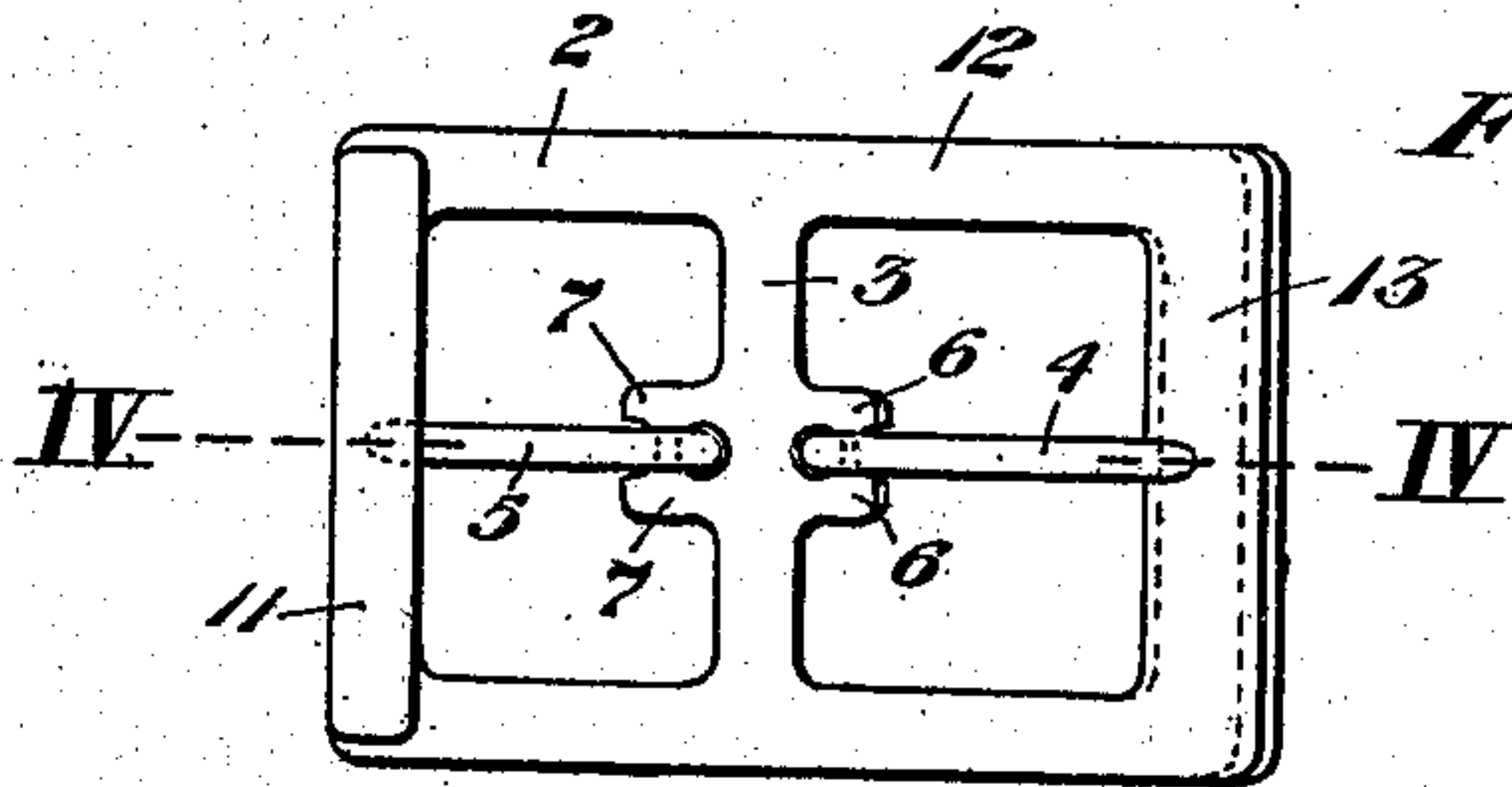
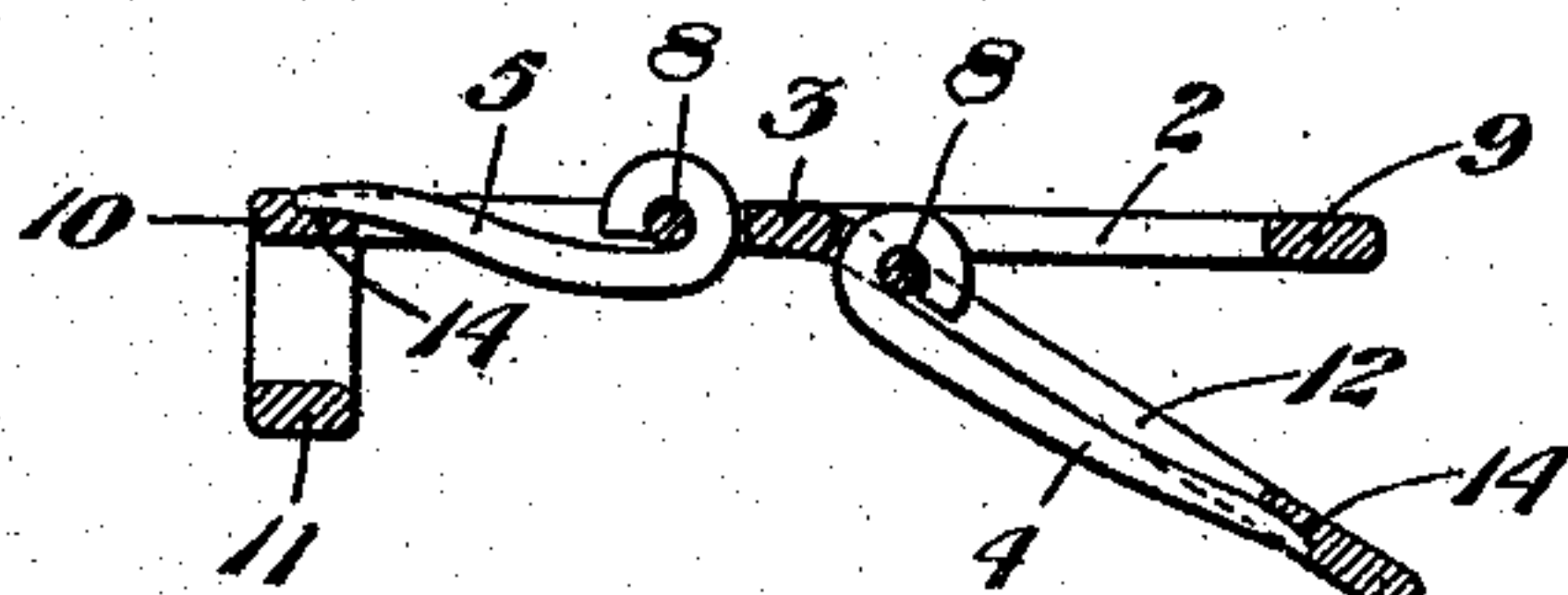


Fig. 4.



Witnesses:

Chas. S. Sibley.  
Henry Senn.

Inventor:

R. B. Benford  
by C. M. Clarke  
his attorney



# UNITED STATES PATENT OFFICE.

REZIN B. BENFORD, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD TO JOHN T. MATTHEWS, OF PITTSBURG, PENNSYLVANIA, AND ONE-THIRD TO GEORGE W. JONES, OF SEWICKLEY, PENNSYLVANIA.

## CROSS-LINE BUCKLE.

No. 899,375.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed March 17, 1908. Serial No. 421,681.

*To all whom it may concern:*

Be it known that I, REZIN B. BENFORD, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Cross-Line Buckles, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention consists of improvements in buckles and is particularly designed to provide a buckle for use with a plurality of straps, as for instance, the cross lines of harness or wherever it is desired to connect two straps so as to provide double straps at one end of the buckle and a single strap at the other.

Generally stated, the invention consists of a main frame having portions adapted to engage the straps in the manner desired with a middle transverse tongue-pivoting portion, made in one integral piece, preferably of cast metal, and provided with the pivoted tongues, in the manner hereinafter described.

Referring to the drawings illustrating the invention:—Figure 1 is a perspective view of the buckle and the several straps, showing their relative arrangement and the manner in which the buckle is used. Fig. 2 is a similar view showing the buckle alone. Fig. 3 is a plan view of the buckle. Fig. 4 is a central longitudinal sectional view indicated by the line IV. IV. of Fig. 3.

The main body portion of the buckle consists of a preferably rectangular frame 2 having a hollow middle portion divided by a single transverse cross bar 3, adapted to provide a pivotal mounting for the outwardly extending tongues 4, 5, said cross bar 3 having oppositely extending lugs 6, 6, and 7, 7, with integral connecting pivoting stems or bearings 8, around which the inner ends of the tongues are bent to provide hinged mountings.

The outer portions of lugs 6 and 7 are extended sufficiently beyond the pivoting cross element 8 to provide side bearings for the coiled hinge portion and inner end of each tongue, so as to prevent lateral movement thereof, and to insure its constant central position, while back of each pivoting element 8, only sufficient clearance is provided for free movement of the tongue.

Each end of the main frame 2 is composed

of a cross bar 9 and 10 respectively, providing strap bearings, one end of the main frame having an outwardly extending integral hasp or keeper 11 with an intervening opening sufficiently wide to permit of the passage of one or two straps as desired, as indicated in full and dotted lines in Fig. 1.

Extending outwardly from the main frame portion 2, on the same side with hasp 11, and extending forwardly and upwardly from the main frame at its opposite end, is a supplemental buckle frame 12 having a terminal cross bar 13. Tongues 4 and 5 are adapted to bear against the cross bar 10 and 13 respectively at opposite sides, and to set in recesses 14 therein, for the purpose of making a substantially flush engagement with the outer faces of such bearing bars, when the straps are in position. The object of such construction is that the tongues are thereby prevented from extending outwardly beyond the main surfaces of the buckle, preventing any interference with or scraping of the animal.

As thus constructed the buckle comprises merely the single integral frame having the several elements arranged as described, with their pivoted tongues, and while I have described and shown it as used for a particular manner of attachment with the straps or reins of harness, it will be obvious that it may be used for the same general object with equal success and advantage by re-arranging the straps in other ways as will be readily suggested to the user.

The advantage of the integral metal frame is that it will constantly maintain its original form due to the rigid and unyielding character of the metal, the mounting of the tongues insures their continual use without displacement, the article may be plated or burnished to greatly enhance its appearance, while the cost of manufacture is reduced to a minimum.

What I claim and desire to secure by Letters Patent is:—

1. A cross line buckle consisting of a main rectangular frame having an open interior and provided with an integral retaining hasp at one end and a middle transversely arranged cross bar having oppositely extending pairs of integral hinge-bearing lugs connected by pivoting portions, an integral angularly arranged auxiliary frame diverging from the middle portion of the main frame, and



tongues mounted on the pivoting portions between said pairs of lugs and arranged to bear against the end of the main frame and said auxiliary frame, substantially as set forth.

2. In a cross-line buckle, the combination of a single integral rectangular main frame having diverging portions at one end joined at the middle portion of the frame and an oppositely extending portion at the other end provided with an outwardly extending integral keeper, a continuous integral middle transverse tongue-bearing bar provided with bearing lugs extending toward each end of the buckle and connected by pivoting por-

tions, and tongues pivoted on said portions extending oppositely towards the ends of the buckle and arranged to bear against the end of one of the diverging portions at one side of the buckle and against the end of the oppositely extending portion at the other side of the buckle respectively, substantially as set forth.

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

REZIN B. BENFORD.

Witnesses:

C. M. CLARKE,  
CHAS. S. LEPLEY.