

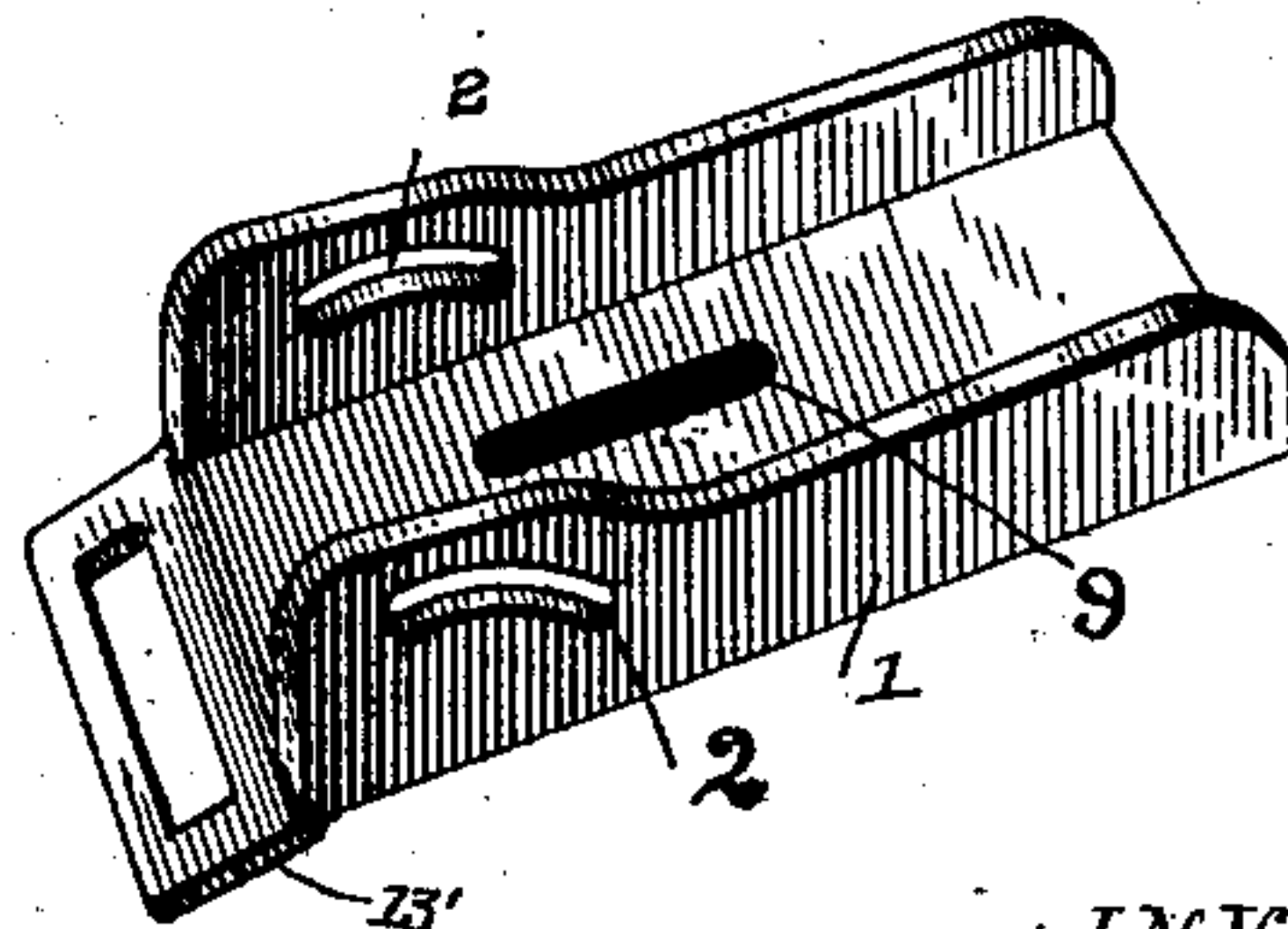
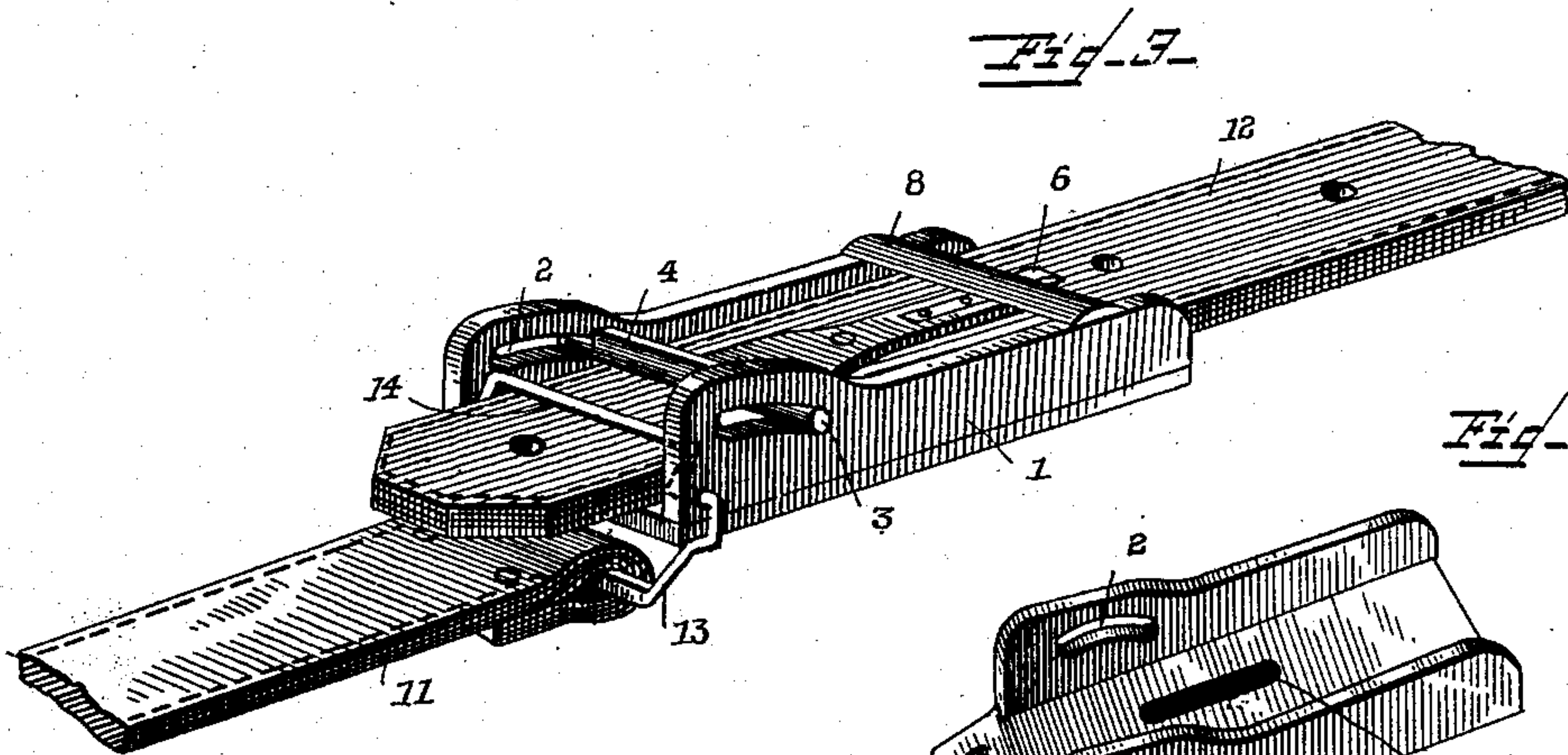
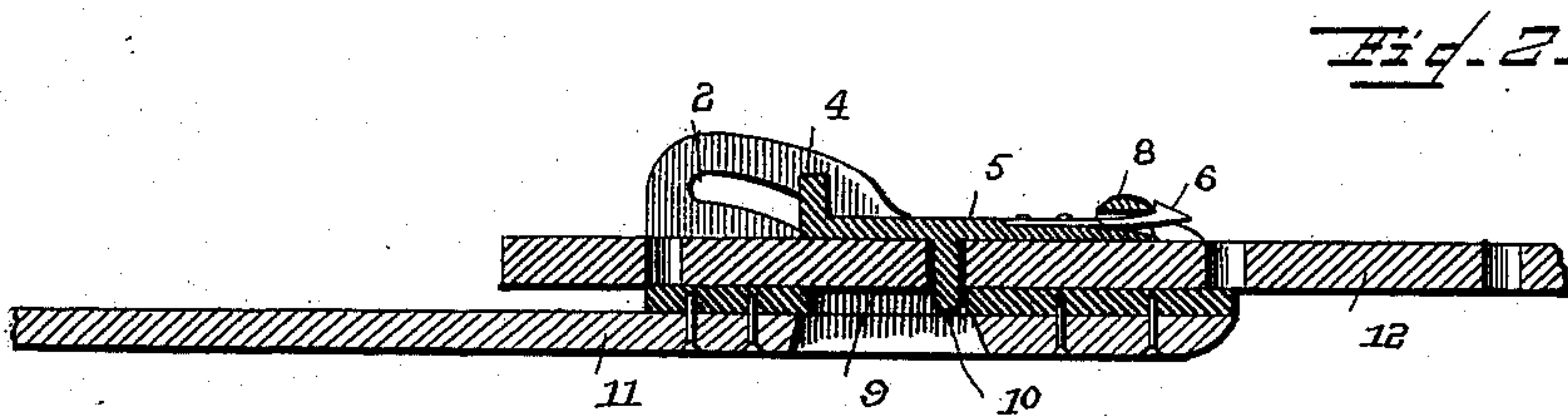
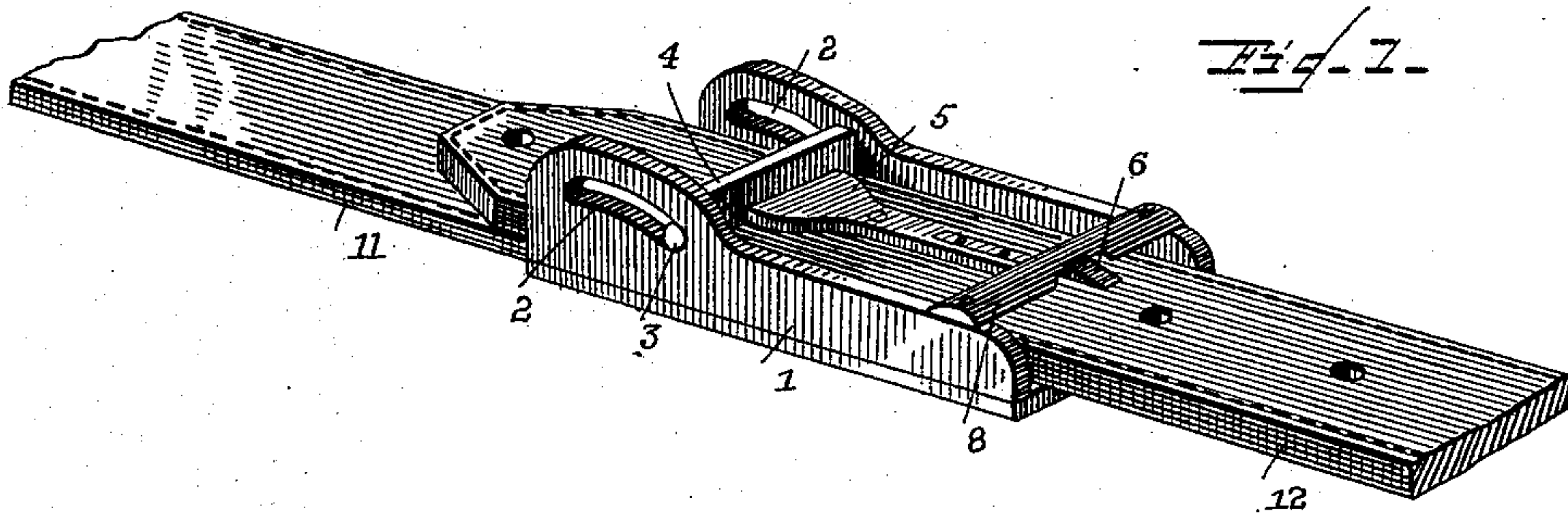
(No Model.)

C. H. ANDERSON.

BUCKLE.

No. 393,736.

Patented Dec. 4, 1888.



WITNESSES.

Edwin L. Jewell,  
M. A. Pumphrey.

INVENTOR.

Charles H. Anderson,  
by Robert H. Read,  
his Attorney.



# UNITED STATES PATENT OFFICE.

CHARLES H. ANDERSON, OF HUNTINGDON, PENNSYLVANIA.

## BUCKLE.

SPECIFICATION forming part of Letters Patent No. 393,736, dated December 4, 1888.

Application filed April 3, 1888. Serial No. 269,458. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. ANDERSON, a citizen of the United States, residing at Huntingdon, in the county of Huntingdon and State of Pennsylvania, have invented certain new and useful Improvements in Buckles; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to harness or strap buckles, and has for its object the secure engagement of the strap and convenient release of the same when desired.

To these ends my invention embodies certain features of construction, which will be hereinafter fully described in the specification, and then definitely indicated in the appended claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective view of my improved buckle with strap shown locked. Fig. 2 is a longitudinal section on a plane passing through the locking-pin. Fig. 3 is a perspective view of a modification. Fig. 4 shows another modification.

The buckle is provided with a frame, 1, having lateral vertical wings, as shown. The fixed strap 11 may be secured to the bottom of this frame, as shown in Figs. 1 and 2, or it may be secured to a metallic loop, 13, as shown in Figs. 3 and 4. In the bottom of the frame is a slot, 9, the function of which will presently be set forth. Slots or guideways 2 2 are made in the side wings of the frame, which form bearings for the trunnions 3 of a lock-piece, 4, adapted to slide in the slots. The slots are inclined downwardly in the direction in which the strain will be exerted when the buckle is in use. As will be seen, when the free strap 12 is slipped into the frame, if the lock-piece 4 be pushed forward it will be carried down into frictional engagement with the free strap by the inclined guideways. An arm, 5, is attached to the locking-piece. On the under face of the arm is a pin, 10, made of such a size that it will readily enter a hole in the strap. The arm 5 is provided at its end with

a spring-catch, 6, which co-operates with a bar, 8, suitably secured to the frame.

The operation of the form shown in Figs. 1 and 2 will now be understood. The locking-piece is slid back to the highest part of the guideways 2 2 and the free end of the strap 12 is inserted. Said strap is drawn as tight as desired, and pin 10 is inserted in one of its holes. The locking-piece is pushed forward and rides down the guideways and grips frictionally the strap 12. At the same time the catch 6 comes under the bar 8 and establishes a firm lock. To unbuckle the strap, the catch 6 is pressed down with the thumb and strap 12 pushed forward quickly, when arm 5 will fly up and locking-piece 4 ride up on the guideways. This throws pin 10 out of the hole in the strap, and the latter may be withdrawn. The slot 9 in the bottom of the frame is preferably left open. When the fixed strap is secured as shown in Figs. 1 and 2, a slot is cut in it to register with slot 9. Any dust or dirt sediment which may accumulate in slot 9 may thus be readily removed. In fact, it will not ordinarily accumulate, because it finds a free exit. This opening may also be used to push out the pin 10 in case arm 5 should not readily rise on opening the buckle. The frame need not of necessity be made of an unbroken web of metal, as shown, but may be of a skeleton form, if desired, the only desideratum being that suitable bearing-surfaces under the path of the lock-piece 4 and under bar 8 shall be provided.

In the modification shown in Fig. 3 the fixed strap 11 is secured to a metallic loop, 13, pivoted in the end of the frame 1. A gripping-bar, 14, is carried above the pivotal points, so that when the buckle is under strain this bar will be forced down into firm frictional engagement with strap 12.

In the modification shown in Fig. 4 the rear end of the frame is bent down at 13' to form a loop, to which the fixed strap may be secured.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a buckle, the combination, with a frame to receive the strap, of a locking-piece sliding in guideways in said frame, the guideways inclining toward the face of the strap



in the direction of strain, and a spring-catch for locking the piece in firm engagement with the strap.

2. In a buckle, the combination, with a  
5 frame provided with guides for holding a strap from lateral displacement, of a locking-piece sliding in guideways in said frame, said guideways inclining toward the face of strap in the direction of strain, the frame being  
10 provided with a bearing-surface for the straps under the guideways, a pin in the locking-piece adapted to enter a hole in the strap, and a spring-catch for locking the pieces in firm engagement with the strap and prevent-  
15 ing the pin from slipping.

3. In a harness-buckle, the combination of a frame, 1, said frame being provided with lateral slots or guideways 2 2, locking-piece 4, sliding in said guideways, arm 5, pin 10,  
20 slot 9 in the frame, co-operating with said pin, and a spring-catch for locking the arm when in engagement with the strap.

4. In a harness-buckle, the combination of frame 1, a locking-piece trunnioned in the sides of the frame, a pin on said piece adapted  
25 to enter a hole in the strap, a detent for locking the pin in place, and a pivoted loop for attaching the fixed strap, said loop being provided with a friction-grip for engaging the loose strap.  
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5. In a harness-buckle, the combination of frame, inclined guideways 2 2, and slot 9 in said frame, sliding locking-piece 4, trunnioned in the guideways, arm 5, spring-catch 6, bar 8, co-operating therewith, and pin 10, as and  
35 for the purpose described.

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

CHARLES H. ANDERSON.

Witnesses:

J. R. RITCHEY,

JNO. M. MAGUIRE.