

No. 858,936.

PATENTED JULY 2, 1907.

J. F. YOUNG & F. A. LIBBY.

BUCKLE.

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Fig. 1.

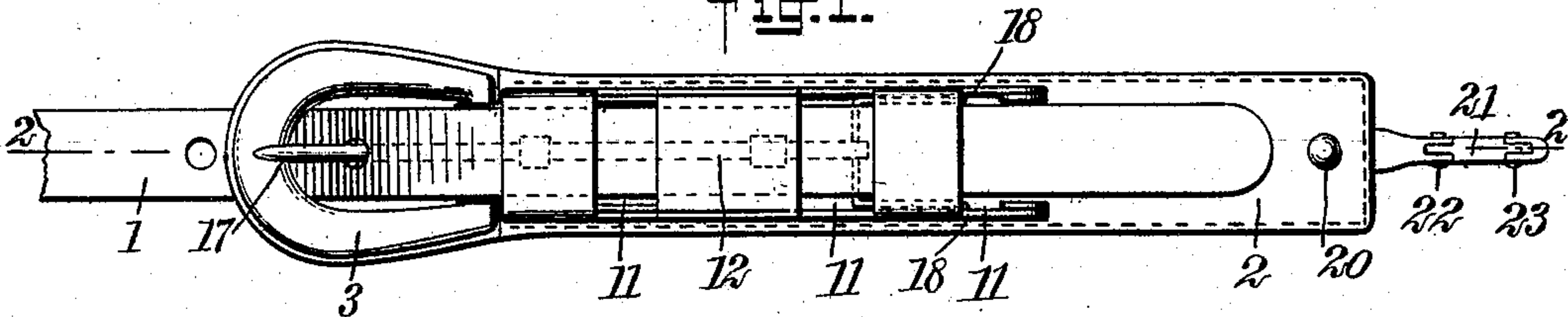


Fig. 2.

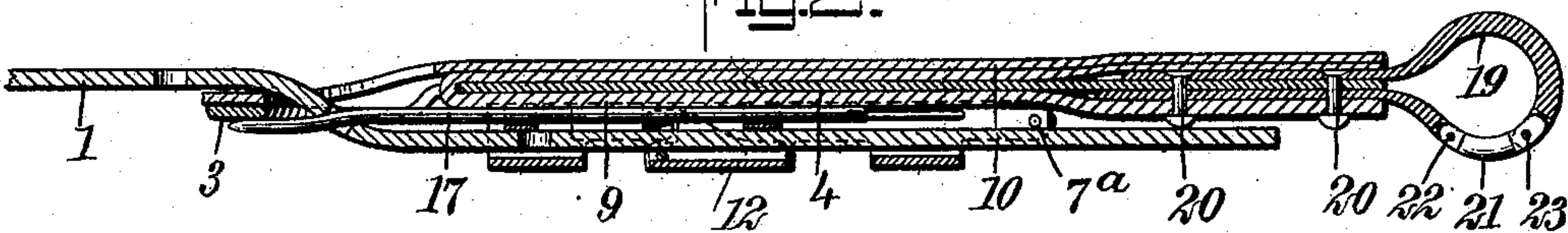


Fig. 3.

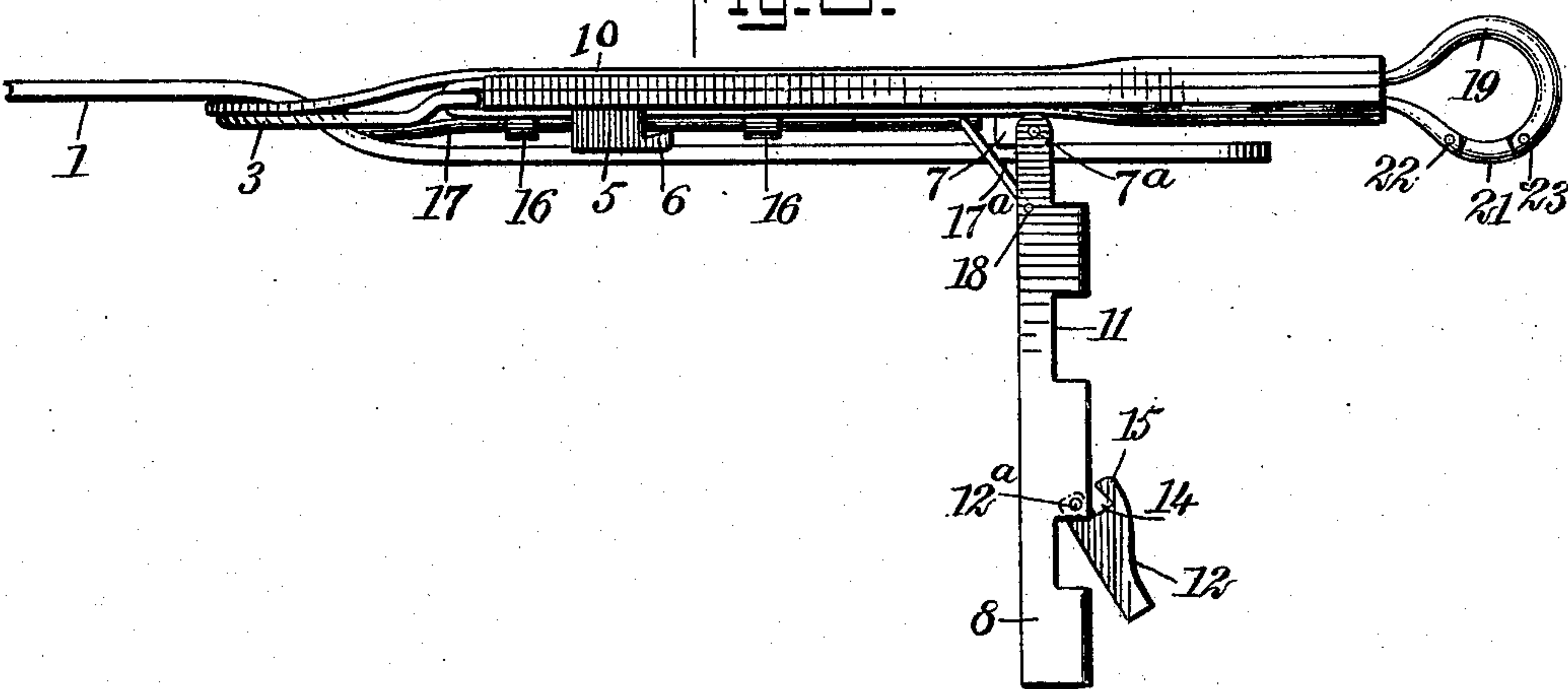
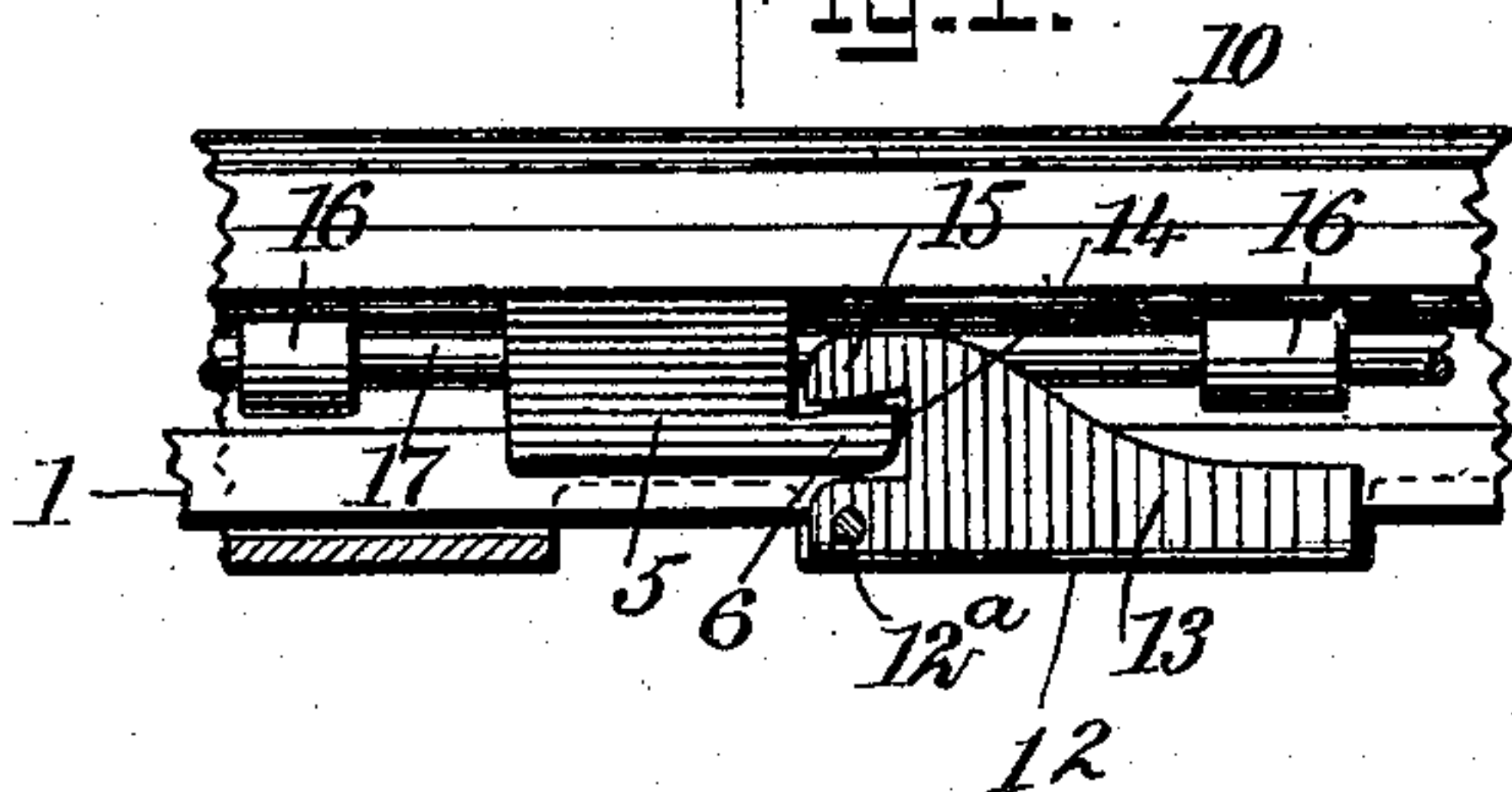


Fig. 4.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOSEPH FREDRICK YOUNG AND FREDERICK AUGUSTUS LIBBY, OF MORRISTOWN,  
NEW JERSEY.

## BUCKLE.

No. 858,936.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed April 24, 1906. Serial No. 313,436.

*To all whom it may concern:*

Be it known that we, JOSEPH FREDRICK YOUNG and FREDERICK AUGUSTUS LIBBY, citizens of the United States, and residents of Morristown, in the county of Morris and State of New Jersey, have invented a new and Improved Buckle, of which the following is a full, clear, and exact description.

This invention is an improvement in buckles, more especially designed to be used in connection with harness, but can be used with advantage where it is desirable to have a means by which two straps or like parts can be easily attached or detached.

It is well known by those accustomed to hitching and unhitching draft animals and taking care of the harness, that certain parts of the harness made from heavy, stiff leather, as for example, the traces, which are to be at times buckled and unbuckled, require considerable effort on the part of the hostler to perform this operation, due primarily to the fact that the strap connection is usually tightly engaged in the keeper and must be flexed to withdraw it, and also the strap must be slack in order that the tongue may be disengaged.

The object of this invention is to overcome these objections and provide a buckle which will permit the removal of the strap while under tension, and further, to allow the strap to be released from the keeper without flexing it, by simply removing the keeper.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a trace with our improved buckle attached, also showing an eye at the end of the attaching strap by which the trace is connected to the collar or breast strap; Fig. 2 is a longitudinal, horizontal section on the line 2—2 of Fig. 1; Fig. 3 is an edge view of Fig. 1 with the keeper shown in open position, and Fig. 4 is an enlarged, fragmentary view to more clearly disclose the latching means for the keeper.

The numeral 1 indicates a trace in connection with which our improved form of buckle is shown to connect it with an attaching strap 2. The buckle consists of a frame 3 of any desired outward formation, with a stem 4 extending therefrom, provided at a suitable point of its length with upturned flanges 5 having hooked ends 6, and at a point more remote from the buckle frame, with upturned flanges 7, on which a keeper 8 is pivoted. The bottom and top faces of the stem 4, as shown, are covered over with a strip of leather 9 by passing the strip through the buckle frame and sewing the edges together in connection

with an inner facing strip 10 of the exact shape of the buckle frame 3 and attaching strap 2.

The keeper 8 is made of sheet metal, with inwardly bent flanges by which it is pivotally connected at one end to the flanges 7 at 7<sup>a</sup>, and is also provided with cut away portions 11 beginning at the pivotal end of the keeper and dividing it into any desired number of sections. The central section is cut out at its top, and in the place thereof is a cover or cap 12 provided with inwardly turned flanges 13 exactly fitting in the keeper and pivotally connected to it by a pin 12<sup>a</sup>. The construction of that part of the flanges 13 directly across from the pin 12<sup>a</sup>, as best shown in Figs. 3 and 4, consists of notches 14 forming hooks 15 which engage the hooks 6 when the keeper is closed and the cover 12 pressed inwardly. By this construction an effective means is attained for locking the keeper in closed position; and also, the notches 14 form a stop for the hooks 6 when the top face of the cover 12 is in a plane with the top face of the keeper.

Projecting through the strap 9 adjacent to the top face of the stem 4, and on the longitudinal center thereof, are guiding eyes 16 preferably made from sheet metal, through which is adapted to slide a tongue 17 of the buckle. This tongue is connected at its rear end by a wire loop 17<sup>a</sup> passing through it and connected to the keeper 8 by outwardly turned ends 18 journaled in the keeper eccentrically to the pivot 7<sup>a</sup>, whereby as the keeper is operated to engage and disengage the free end of the strap, the tongue 17 will be simultaneously projected and withdrawn to and from the buckle frame.

In the operation of the buckle, the strap 1 is passed through the buckle frame and pulled until one of its holes is in alinement with the tongue 17. The keeper is then in the position shown in Fig. 3. By now closing the keeper, the tongue is automatically projected through the alining hole of the strap and the keeper and tongue held in locked relation by pressing the cover 12 engaging the hooks 6 and 15. If desired to release the strap from the buckle, the cover is turned on its pivotal connection to release the hook, which will allow the keeper to be withdrawn to the position shown in Fig. 3, thereby wholly disengaging the tongue and the keeper from the strap.

Connected to the opposite end of the strap 2 from the buckle frame is an eye 19 for fixing the attaching straps to the breast strap or the collar of the harness, said eye having its ends passed over the stem 4 and secured to it by rivets 20. The eye 19 is further provided with a pivotal section 21 with flattened ends held in bifurcations of the eye, respectively, by a pivot pin 22 and a removable pin 23. This construction permits



the ready withdrawal of the section 21 by withdrawing the pin 23 and engaging the eye with the collar or breast strap of the harness, as stated.

The precise embodiment of our invention is not material provided its essential characteristics are employed, as pointed out in the annexed claims.

Having thus described our invention we claim as new and desire to secure by Letters Patent:

1. In a buckle, a frame, a tongue adapted to be reciprocated to and from the frame, and a keeper pivoted at one end and having a tongue connected thereto at an intermediate point whereby when the keeper is withdrawn the tongue is also withdrawn, and when closed the tongue is projected.
2. In a buckle, a frame, a tongue adapted to be reciprocated to and from the frame, a keeper connected to the tongue for reciprocating it, and means for locking the keeper in closed relation.
3. In a buckle, a frame, a tongue adapted to be reciprocated to and from the frame, means connecting the tongue with a pivotally mounted keeper for reciprocating the tongue, and a hook for locking the keeper in closed relation.
4. In a buckle, a frame, a stem extending therefrom, hooked projections carried by the stem, a second set of projections carried by the stem, a keeper pivotally mounted on said second set of projections, a loop journaled in the keeper eccentrically to the pivotal connection, a tongue through which the loop passes adapted to reciprocate to and from the buckle frame, a cover pivoted to the keeper, and hooks carried by the cover for engaging the hooks carried by the stem to lock the keeper in closed relation.
5. In a buckle, a frame having a stem extending therefrom, a tongue adapted to be reciprocated to and from the frame, a pivotally mounted keeper, means connecting the tongue with the keeper for reciprocating the tongue, and cut away portions through the face of the keeper dividing the keeper into a plurality of sections, one of which consists of a pivotal cap with inwardly turned hooked ends for co-operating with hooked ends carried by the buckle stem in locking the tongue and keeper in closed relation.
6. The combination of a buckle frame, a stem extending therefrom, an eye secured to the stem at the opposite end thereof, flanges having hooked ends extending from the stem, flanges extending from the stem upon which a keeper is pivotally connected, a tongue carrying a member pivotally connected to the keeper whereby as the keeper is withdrawn and closed, the tongue is simultaneously withdrawn and projected, and a cap having hooked ends co-operating with the hooks extending from the buckle stem for locking the keeper and tongue in closed relation.

cate to and from the buckle frame, a cover pivoted to the keeper, and hooks carried by the cover for engaging the hooks carried by the stem to lock the keeper in closed relation.

5. In a buckle, a frame having a stem extending therefrom, a tongue adapted to be reciprocated to and from the frame, a pivotally mounted keeper, means connecting the tongue with the keeper for reciprocating the tongue, and cut away portions through the face of the keeper dividing the keeper into a plurality of sections, one of which consists of a pivotal cap with inwardly turned hooked ends for co-operating with hooked ends carried by the buckle stem in locking the tongue and keeper in closed relation.

6. The combination of a buckle frame, a stem extending therefrom, an eye secured to the stem at the opposite end thereof, flanges having hooked ends extending from the stem, flanges extending from the stem upon which a keeper is pivotally connected, a tongue carrying a member pivotally connected to the keeper whereby as the keeper is withdrawn and closed, the tongue is simultaneously withdrawn and projected, and a cap having hooked ends co-operating with the hooks extending from the buckle stem for locking the keeper and tongue in closed relation.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOSEPH FREDRICK YOUNG.  
FREDERICK AUGUSTUS LIBBY.

Witnesses:

EDWARD L. BRENNAN,  
WILLIAM G. MESLER.