

(No Model.)

G. M. AYLSWORTH.
BUCKLE.

No. 524,298.

Patented Aug. 14, 1894.

Fig. 1

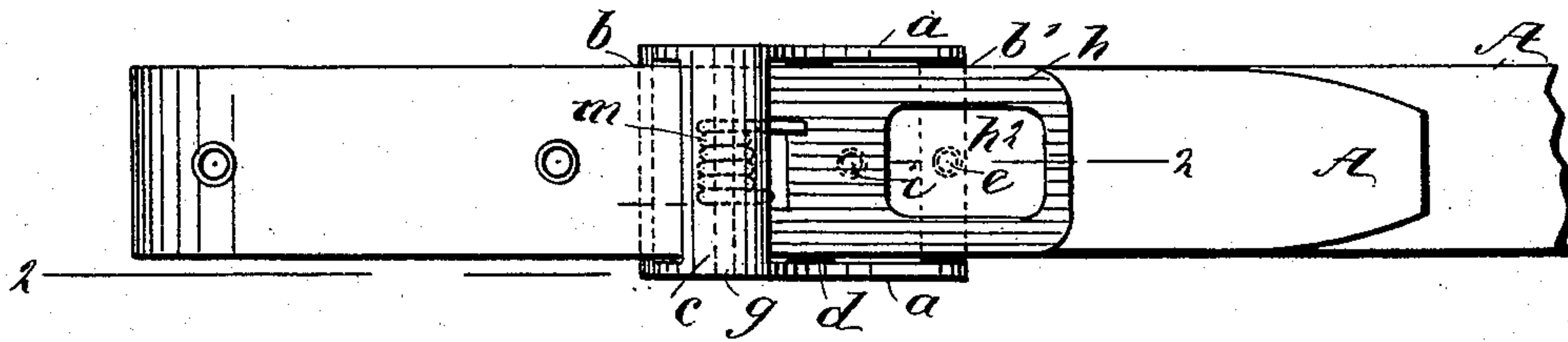


Fig. 2

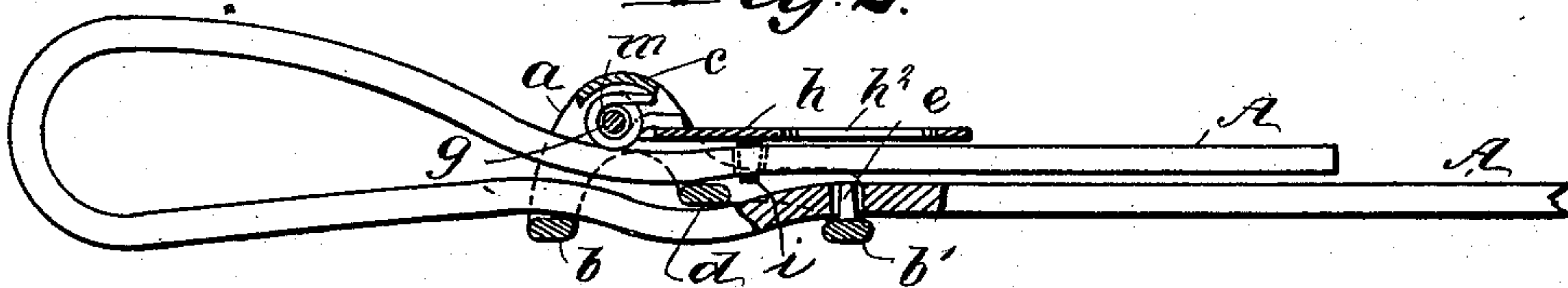


Fig. 3

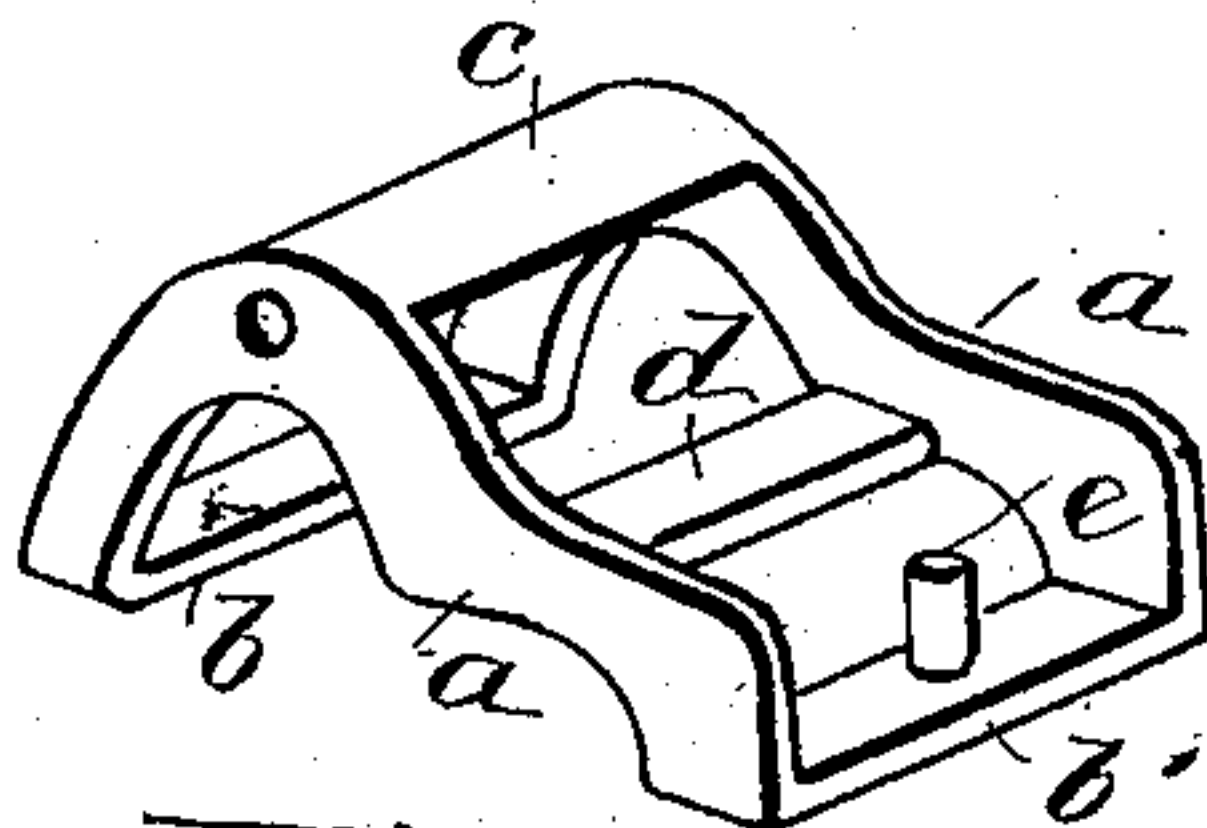


Fig. 5

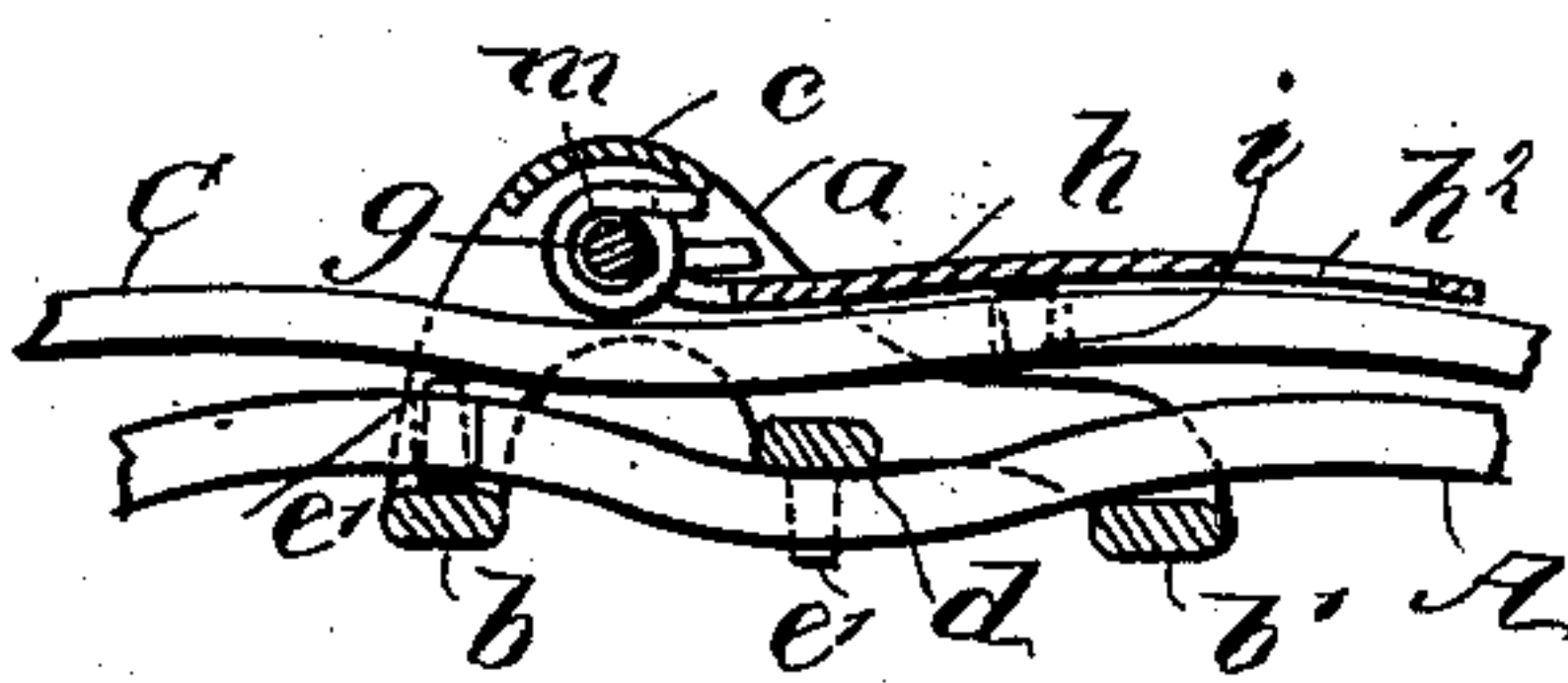


Fig. 4

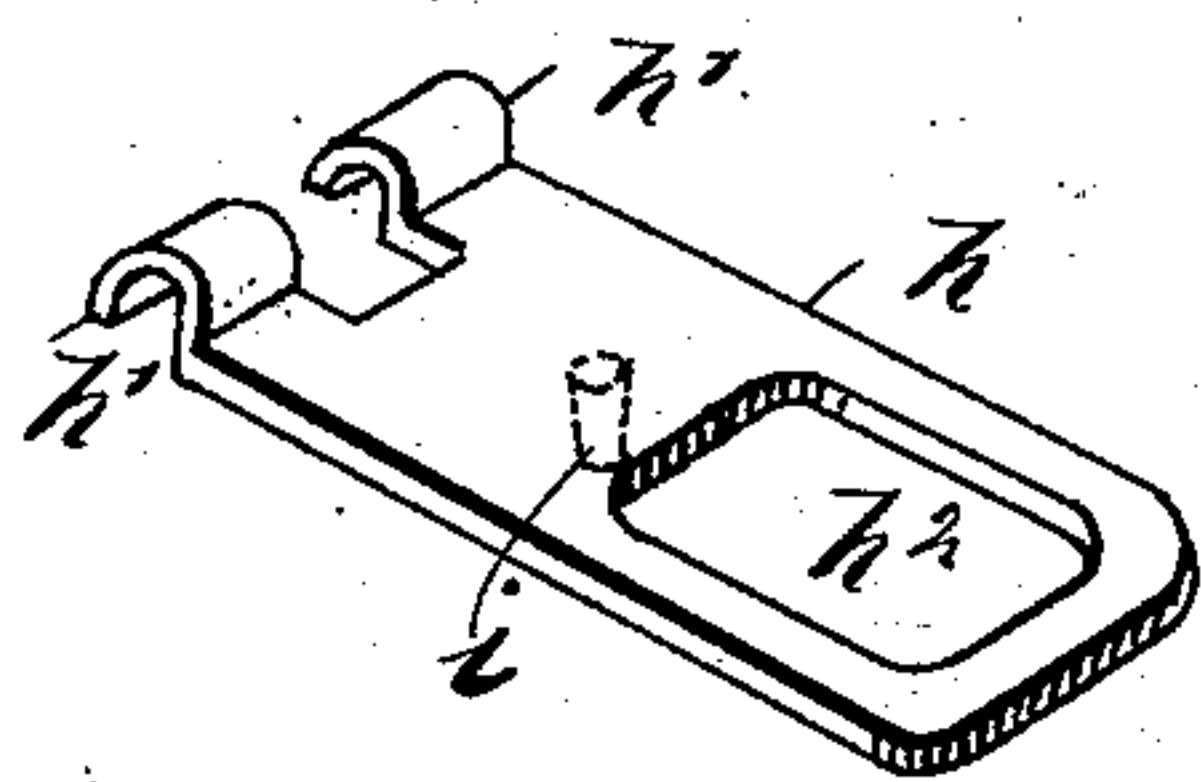
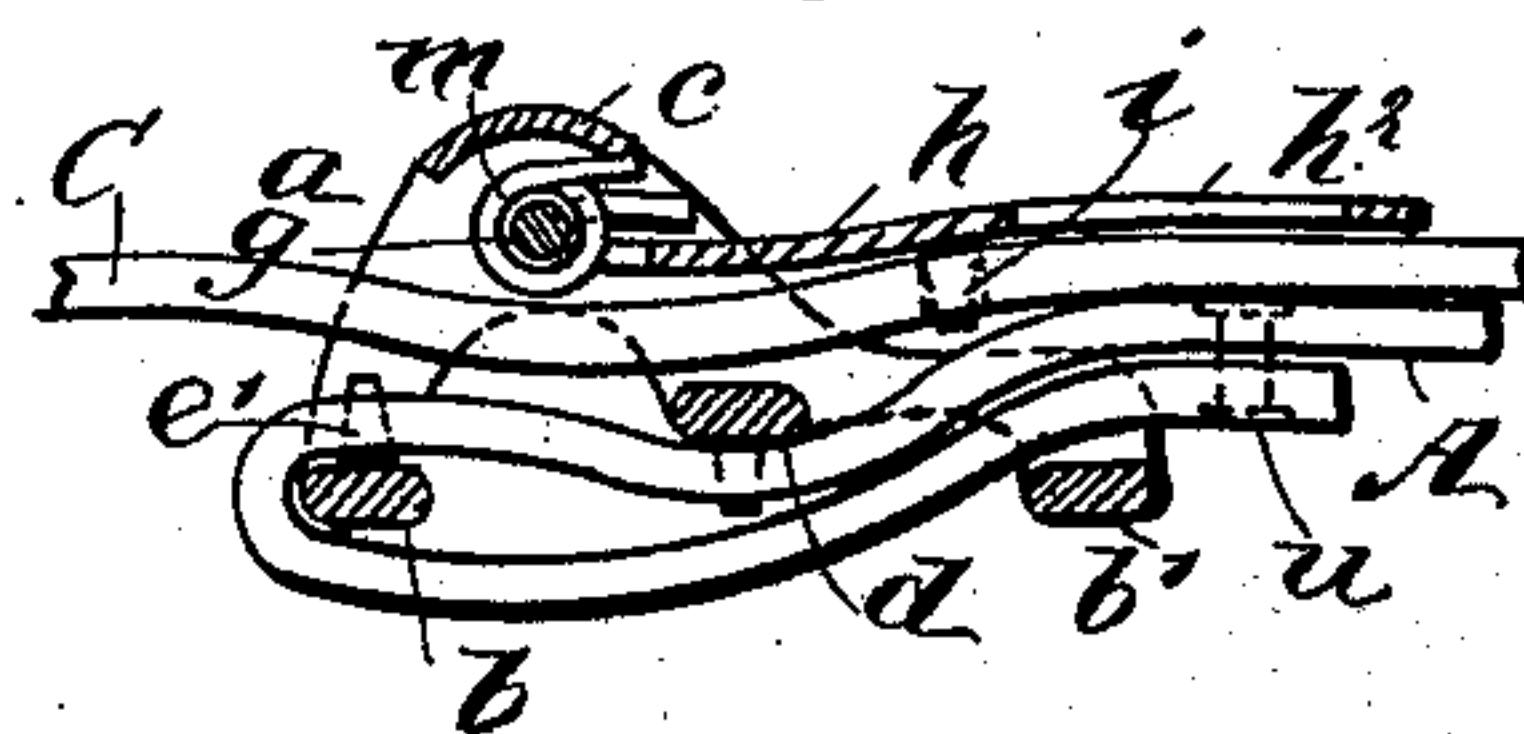


Fig. 6



WITNESSES:

F. M. Andle
C. Sedgwick

INVENTOR

G. M. Aylsworth
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE MILLER AYLSWORTH, OF COLLINGWOOD, CANADA.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 524,298, dated August 14, 1894.

Application filed October 13, 1893. Serial No. 488,341. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MILLER AYLSWORTH, of Collingwood, in the Province of Ontario and Dominion of Canada, have invented a new and useful Improved Buckle, of which the following is a full, clear, and exact description.

My invention relates to improvements in buckles for harness, and has for its object to improve the construction of the buckle patented by me, February 21, 1893, No. 492,256, so as to adapt it for an attachment upon harness or other straps, and avoid the necessity of sewing or riveting the buckle frame in place, on a part of the strap that is supplied with the improvement.

To this end my invention consists in the peculiar construction and combination of parts, as is hereinafter described and claimed. Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a top view of the buckle applied to a folded strap to produce a loop on the strap near one end. Fig. 2 is a longitudinal sectional view of the buckle on the looped strap, taken on the broken line 2—2 in Fig. 1. Fig. 3 is a detached perspective view of the buckle frame represented in Figs. 1 and 2. Fig. 4 is a detached perspective view of the improved buckle tongue. Fig. 5 is a longitudinal sectional view of a modified form for the improvement; and Fig. 6 is a longitudinal sectional view of the modified form, showing it applied to a looped end on a strap and its connection therewith made permanent by a rivet.

The patented buckle that the present invention improves, comprises in brief, a frame consisting of a sheet metal flat web piece that integrally joins two similar parallel side walls or wings, between which a flat tongue is pivoted and spring pressed toward the web piece of the frame, the latter being adapted for an attachment upon a leathern or other strap by rivets or sewing as may be preferred; there is a cylindrical stud projected from the side of the tongue plate nearest to the web piece of the frame, so that a perforated strap that

is slid between the tongue plate and bottom of the frame may be engaged by the stud that will enter any of the perforations in the strap, which is to be adjustably connected to the strap whereon the buckle frame is secured.

It has been found advantageous in the manufacture of the buckle protected by Patent No. 492,256, to cast the frame in skeleton form, and provide means for removably locking said frame upon the looped end of a strap, or at any desired point in its length, so that another strap may be detachably connected with it, and to this end the features of the additional improvement have been devised, that will be described.

The buckle frame is formed of two side bars *a, a*, that are joined together and held in parallel position by the cross bars *b, b'*, a sufficient space intervening the side bars to permit a strap of desired width to pass between them.

The side bars *a*, are arched near the same end on each, to afford space below the cross bar *c*, that joins the tops of said arched portions for a purpose that will appear. The side bars of the frame are further strengthened and connected by an intermediate cross bar *d*, that is integral with the side bars and is arranged in parallel with the bars *b, b'*, lying in a plane above that of said cross bars, and on the bar *b'*, a locking pin *e*, is upwardly projected from its top side at the center.

Below the cross bar *c*, a transverse pintle *g*, is located by an engagement of its ends with the side bars *a*, and thus adapted to receive the hook-shaped end *h'*, of the plate-like tongue piece *h*, the form of the latter being clearly shown in Fig. 4.

The tongue piece *h*, is preferably apertured at *h²*, to lighten it, and at a point between the cross bars *d* and *b'*, a depending locking stud *i*, is formed on or secured to the lower side of the tongue piece.

The hooked end portion *h'*, of the tongue piece *h*, is notched at its center of width to afford space for the introduction of a coiled spring *m*, the ends of which respectively engage with the cross bar *c* and top of the tongue piece, so that the latter is normally pressed toward the cross bar *b'*.

In use, a looped end may be formed on a strap A, by first inserting the strap through between the cross bars *b*, *d*, *b'*, passing it over the outer cross bars, and below the intermediate one, a perforation in the strap receiving the pin *e*, that projects from the bar *b'*. This attachment of the frame will lock it fast to the strap A, at any desired point from its end portion that is to form the loop, which latter is produced by folding the strap so as to return its end toward the flat tongue piece *h*, beneath which it is slid, so that the locking stud *i*, may enter any of a series of holes in the strap for a locked engagement therewith.

In Fig. 5, there are locking pins *e'*, formed on the bars *b* and *d*, and none on the bar *b'*, these affording a secure connection for the buckle frame with a strap between its ends, the other parts of the frame being similar to that shown in Figs. 1, 2, and 3.

In Fig. 6, the buckle frame having the locking pins *e'* on the cross bars *b*, *d*, is shown as applied to a strap at an end of the latter by the formation of a loop, this being available where strength and great security of connection is necessary, and to prevent any possible displacement of the frame, a rivet *u*, may be inserted where the strap end portion laps near the bar *b'*.

The construction of the buckle frame as represented in Figs. 5 and 6, permits the free introduction of the loose strap C, and its adjustable connection with the strap A, by means of the tongue piece *h*, and stud *i*, on the latter.

By the formation of the frame of the improved buckle as herein shown, it may be cast into form without cores and thus be cheaply produced, and it will be seen that the hook shape of the end portion *h'* on the tongue piece *h*, permits the tongue piece to be cast into form also.

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

In a buckle, the combination with a frame composed of two arched side bars, two end cross bars and an intermediate cross bar parallel with the end bars and above the plane thereof, one of said bars having a locking pin, of a spring-pressed tongue piece pivoted to the frame at the arch thereof, and having a locking stud projecting therefrom at the under side, substantially as described.

GEORGE MILLER AYLSWORTH.

Witnesses:

C. GAMON,
JOHN PETER.