

No. 793,887.

PATENTED JULY 4, 1905.

C. A. MANN.

BUCKLE.

APPLICATION FILED JAN. 21, 1905.

Fig. 1.

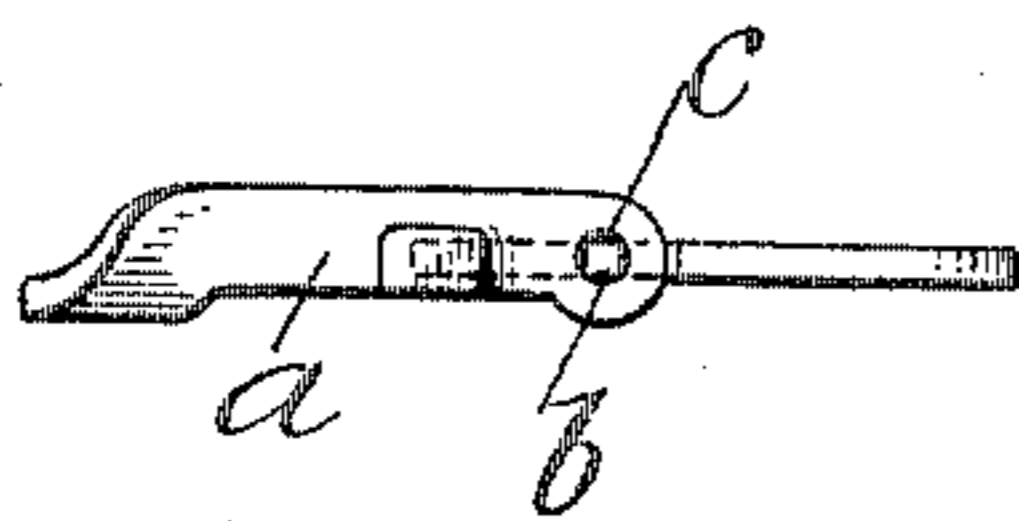


Fig. 3.

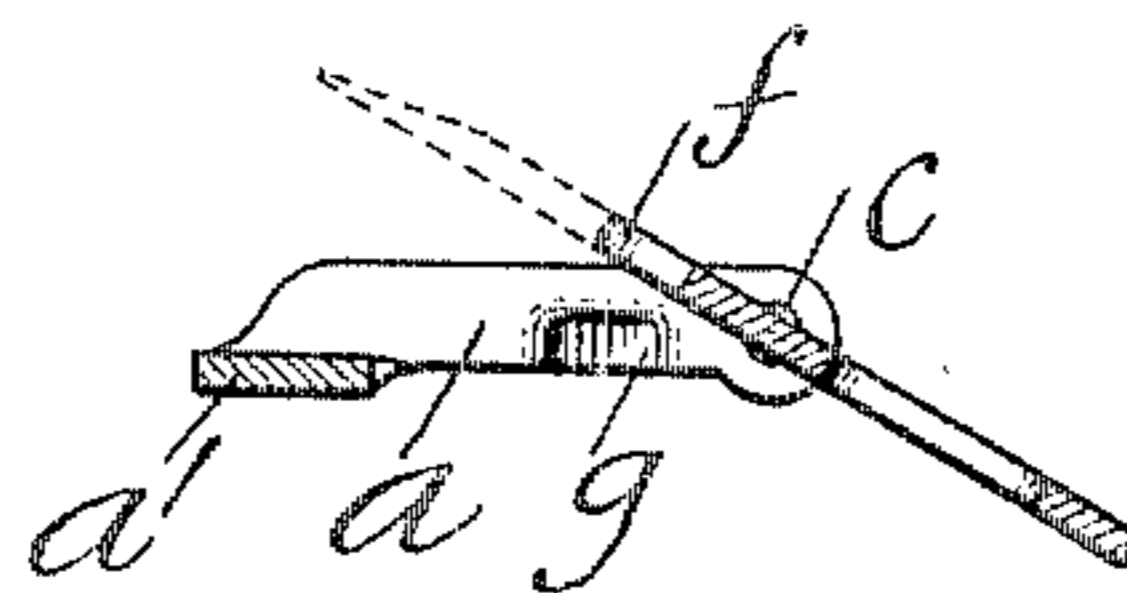


Fig. 2.

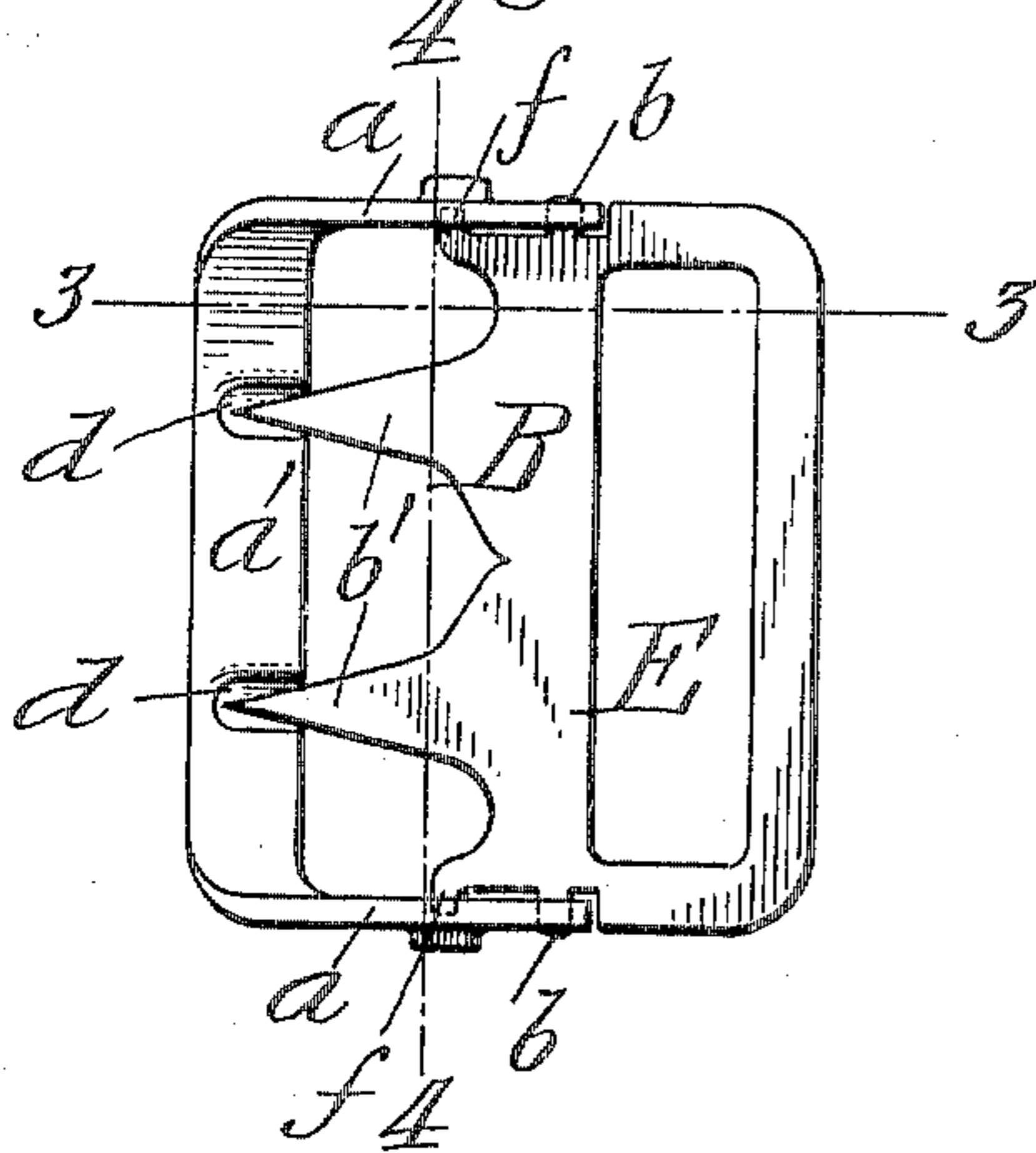


Fig. 4.

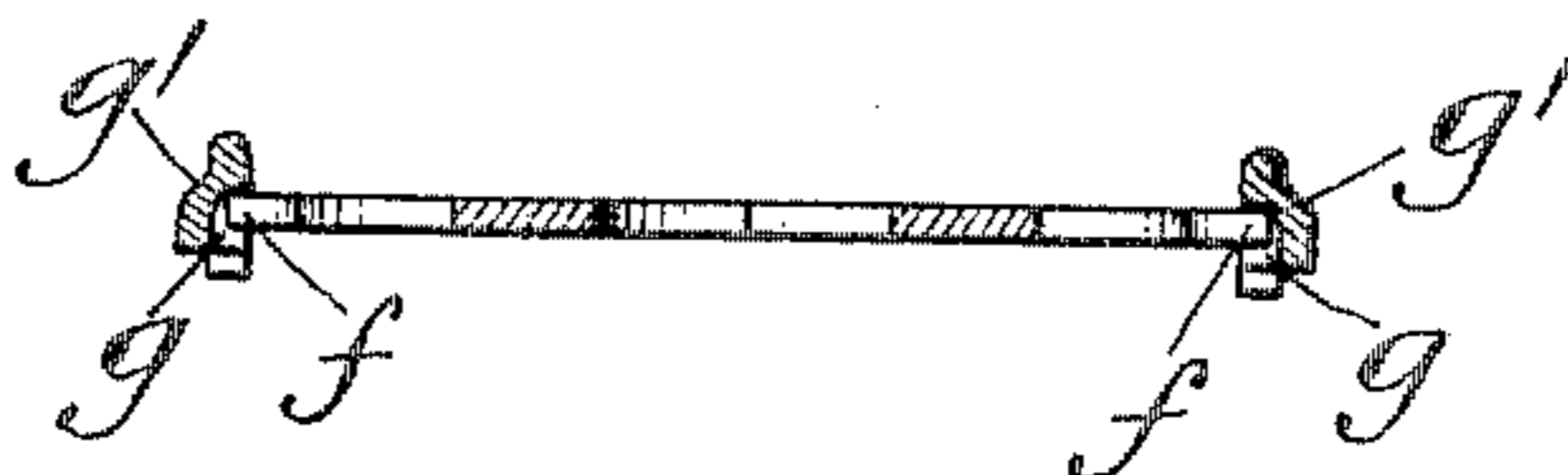
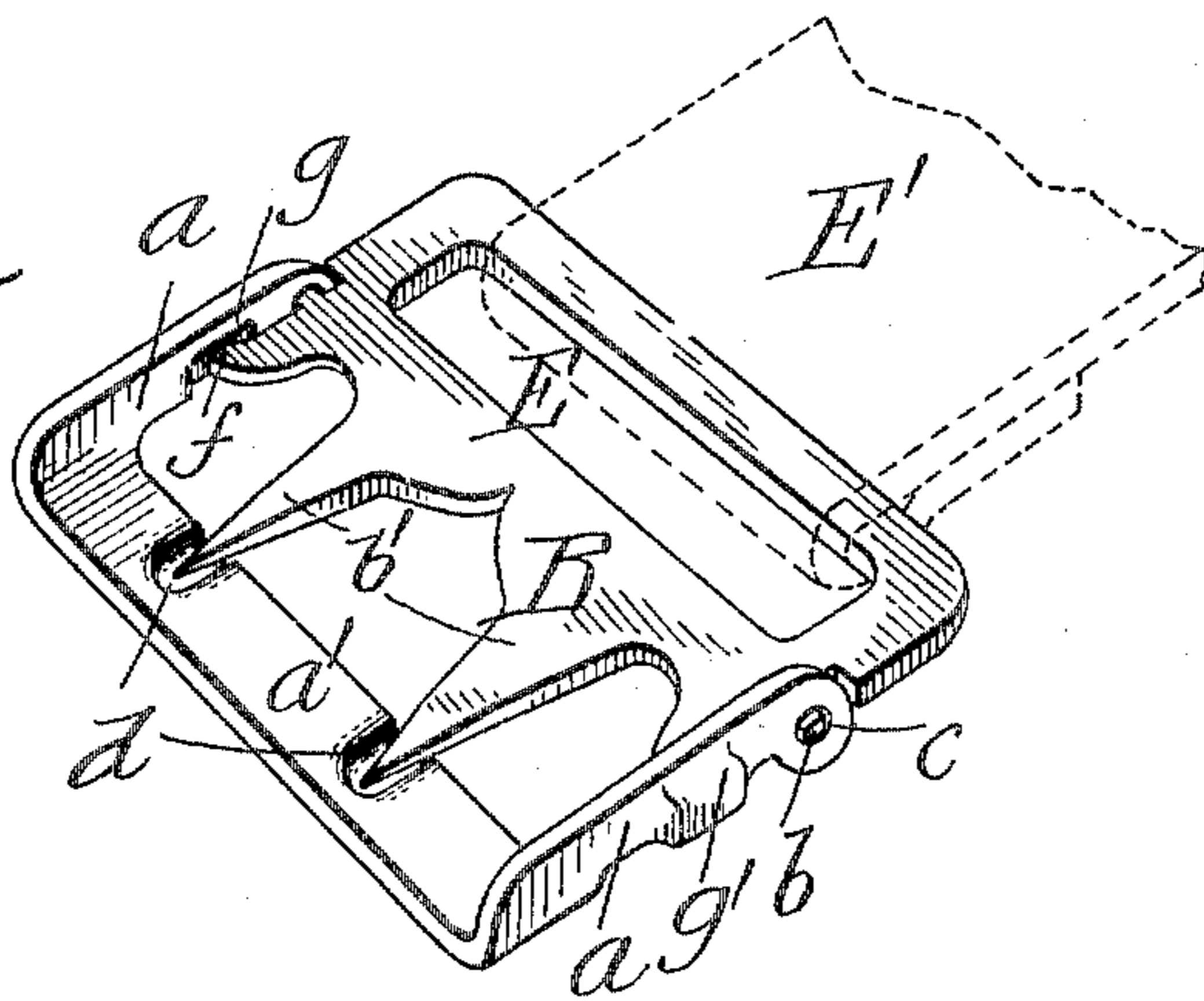


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES A. MANN, OF BUFFALO, NEW YORK.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 793,887, dated July 4, 1905.

Application filed January 21, 1905. Serial No. 242,042.

To all whom it may concern:

Be it known that I, CHARLES A. MANN, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Buckles, of which the following is a specification.

This invention relates to the class of buckles employed for fastening together the back straps of vests and trousers, and more particularly to buckles of this kind having means for locking the tongue-plate in its closed position, so as to prevent accidental disengagement of the tongues from the strap.

One of the objects of the invention is to so construct the parts of the buckle that while preserving a reliable locking action of the parts a more favorable or increased leverage is obtained for unlocking the tongue-plate.

A further object of the invention is to improve the construction of the buckle with a view of facilitating the assemblage of its frame and the tongue-plate and reducing its cost of production.

In the accompanying drawings, Figure 1 is a side elevation of my improved buckle, showing the tongue-plate locked. Fig. 2 is a top plan view thereof. Fig. 3 is a longitudinal section of the buckle in line 3 3, Fig. 2, showing the tongue-plate unlocked. Fig. 4 is a transverse section in line 4 4, Fig. 2. Fig. 5 is a perspective view of the buckle.

Similar letters of reference indicate corresponding parts throughout the several views.

The frame of the buckle is substantially U-shaped, being composed of side bars *a* and a cross-bar *a'*, connecting the front ends of the side bars and depressed below their upper edges, as shown. The buckle-frame is preferably constructed from a flat U-shaped blank of sheet metal, as steel or brass, the side bars of which are bent up into a plane at right angles to that of the cross-bar.

B indicates the tongue-plate, pivoted to the buckle-frame by studs or pintles *b*, projecting from the lateral edges of the tongue-plate between its front and rear edges and seated in openings *c*, formed in the rear portions of the side bars *a*. The plate B is provided with the customary spurs or tongues

b', which close against the cross-bar *a'*, the latter having the usual seats or indentations *d* for the tongue-points, as shown. On the rear side of its pivots the tongue-plate is provided with a loop E for receiving the doubled or looped end of the strap E', by which the buckle is attached to the back of a vest or other garment, said strap being shown by dotted lines in Fig. 5.

The buckle is provided with suitable automatic means for yieldingly locking the tongue-plate in its closed position to prevent the tongues from becoming accidentally disengaged from the usual garment-strap passed between them and the cross-bar *a'*. The preferred locking devices shown in the drawings consist of lips or projections *f*, arranged at the lateral edges of the tongue-plate in front of the pivots *b* and adapted to interlock with recesses or depressions *g*, formed in the side bars *a*, as shown in Figs. 2, 4, and 5. These locking-recesses may be formed by offsetting the adjacent portions of the side bars outwardly beyond the general plane of the bars from points below their upper edges to their lower edges, as best shown in Figs. 4 and 5, thus forming shoulders *g'*, under which the locking-lips *f* of the tongue-plate engage. Upon swinging the tongue-plate from the open position shown in Fig. 3 to the closed position shown in the remaining figures the lips *f* deflect or spring the side bars of the buckle-frame farther apart until the lips arrive opposite the recesses *g*, when the side bars by their reaction return to their normal position, causing the recesses to snap over the lips and locking the tongue-plate in its closed position. To unlock the tongue-plate, the cross-bar of the buckle-frame is grasped between the thumb and fingers of one hand and the loop E of the tongue-plate is likewise seized with the other hand and swung open, the side bars *a* being thus spread farther apart and releasing the lips *f* from the recesses *g*.

The loop E of the tongue-plate serves not only as a strap attachment for the buckle, but as it extends rearwardly beyond the pivots of the tongue-plate it acts as a lever which greatly facilitates the unlocking of the plate.

By reason of the strain exerted on the loop by the attached garment-strap it also tends to close the tongue-plate and keep it in that position.

5 Owing to the three-sided or U-shaped form of the buckle-frame, the rear portions of its side bars, which receive the pintles of the tongue-plate, possess sufficient elasticity to permit the pintles to be sprung into the open-
10 ings of both of said bars. This is an important advantage, which cheapens the manufacture of the buckle, inasmuch as it permits a quicker assemblage of the parts than a buckle having a rectangular frame. Such a
15 construction, owing to the stiffness of the side bars, renders it impracticable to bend up both bars parallel with each other before pivoting the tongue-frame thereto, it being necessary to leave one of said bars in the
20 plane of the two cross-bars and after engaging the tongue-plate with the bent-up bar to engage it with the other bar by finally bending up the latter.

I claim as my invention—

25 1. A buckle comprising a U-shaped, sheet-metal frame having its side bars bent up in a plane at an angle to the general plane of the cross-bar which connects their front ends, whereby the disconnected rear portions of
30 the side bars are free to spring outward, said side bars being provided in their rear portions with pintle-openings, a tongue-plate

composed of rigid side bars and rigid front and rear bars connecting the same and forming a strap-loop therewith, the tongue-plate
35 being provided with lateral pintles extending outwardly into said pintle-openings whereby the pintles can be engaged with said openings by springing the yielding side bars
40 outwardly, and cooperating locking-faces arranged on the yielding side bars of the buckle-frame and the lateral edges of the tongue-plate, substantially as set forth.

2. A buckle, comprising a U-shaped, sheet-metal frame having its side bars bent up at
45 an angle to the general plane of the cross-bar connecting their front ends, whereby the disconnected rear portions of the side bars are free to spring outward, said side bars being provided with pintle-openings and in front
50 of said openings with offset portions, and a tongue-plate having lateral pintles extending outwardly into said pintle-openings and provided on the rear side of its pintles with a
55 strap-loop and on the front side thereof with lateral projections arranged to interlock with the offset portions of said side bars, substantially as set forth.

Witness my hand this 18th day of January, 1905.

CHARLES A. MANN.

Witnesses:

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E. M. GRAHAM.