

No. 708,339.

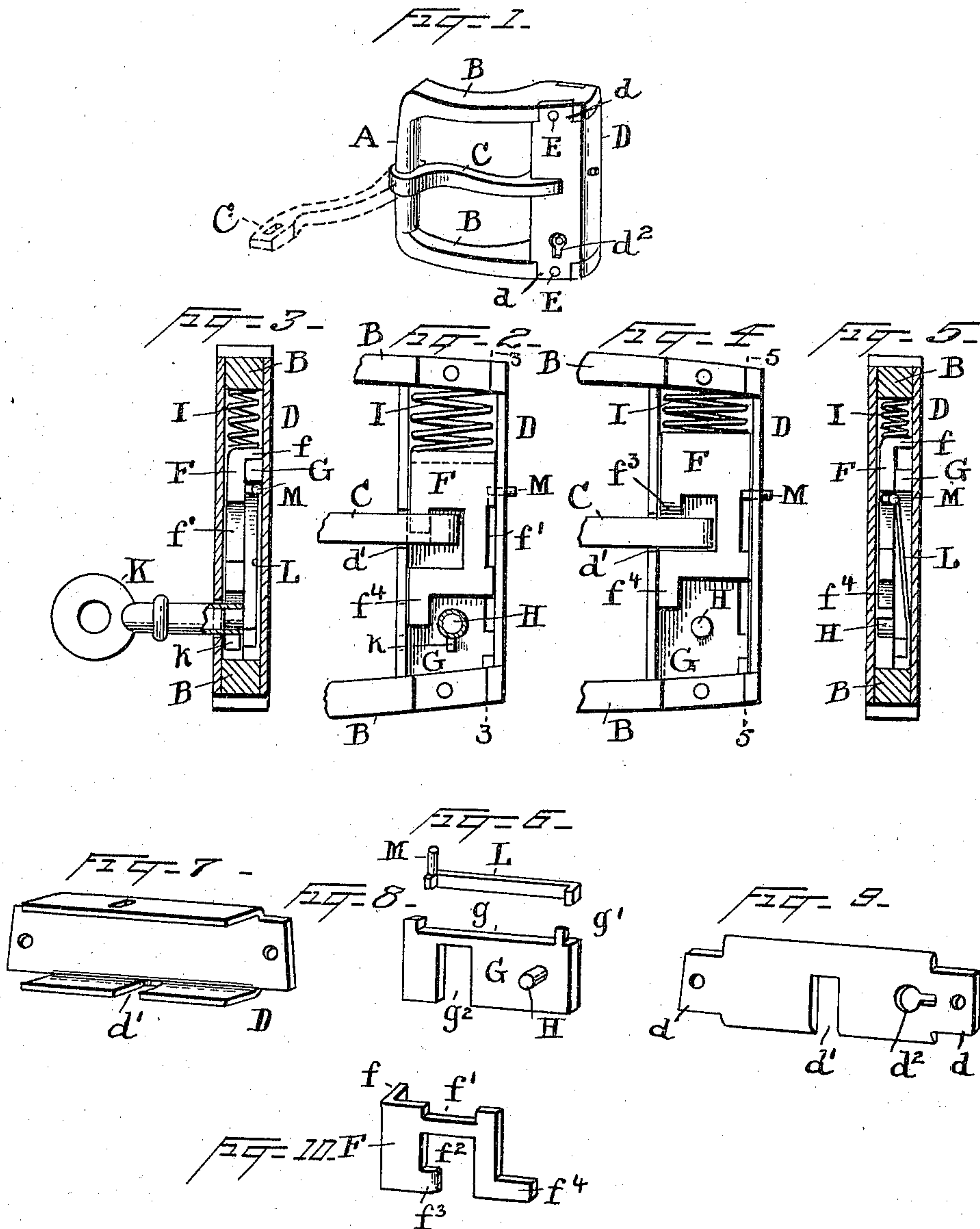
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C. A. GOOZEY.

LOCK BUCKLE.

(Application filed Feb. 14, 1902.)

(No Model.)



Witnesses
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LOCK-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 708,339, dated September 2, 1902.

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To all whom it may concern:

Be it known that I, CHARLES A. GOOZEY, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Lock-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 of reference marked thereon, which form a part of this specification.

This invention relates to lock-buckles; and its object is to improve the lock mechanism and provide a simple, efficient, and compact device in which the locking-bolt is automatically held when unlocked until released by moving a catch. This permits the buckle to be used either as a lock-buckle or a simple buckle at will.

In the accompanying drawings, Figure 1 is a perspective view of my improved lock-buckle. Fig. 2 is a side elevation, on a larger scale, of the lock mechanism in its locked position. Fig. 3 is a sectional elevation of the same on the line 3 3, Fig. 2. Fig. 4 is a side elevation of the lock mechanism unlocked. Fig. 5 is a sectional elevation of the same on the line 5 5, Fig. 4. Fig. 6 is a perspective view of the spring-catch which holds the bolt unlocked. Fig. 7 is a perspective view of the lock-case with the front removed. Fig. 8 is a perspective view of the key-plate. Fig. 9 is a perspective view of the front of the case. Fig. 10 is a perspective view of the bolt.

The buckle has the usual chape A and side arms B, preferably integral. The tongue C is hinged on the chape, as usual, and has an enlarged end containing a transverse hole c. The ends of the side arms are connected by the lock-case D, which is rectangular in cross-section and has at each end of its front and back projecting ears d, which fit into recesses in the side arms, the latter thus forming the ends of the case. Rivets E pass through the ears and side arms and hold these parts together. In the front and the bottom of the case is an opening d' to admit the end of the

tongue. Inside the case is a sliding bolt F, preferably a flat piece of metal shaped, as shown in Fig. 10, with a flange f at one end, a recess f' in its upper edge, a larger recess f² in its lower edge, with a beveled lug f³ projecting into it, and an abutment f⁴ extending from the end opposite the flanged end. The width of the plate is slightly less than that of the lock-case, so that the plate can slide easily therein. At the back of the case, behind the bolt-plate, is a stationary key-plate G, having a post H for the key, a recess g, and a notch g' in its upper edge and a recess g² in its lower edge registering with the opening in the case. The key-plate extends from one end of the case part way toward the other end, leaving a space in which the flange f of the bolt-plate can move. In this space between said flange and the side arm is a helical spring I, whose coils are preferably elliptical to fit the oblong cross-section of the lock-case. The bolt-plate is so arranged that when the spring forces the plate downward (in the drawing) the beveled lug f³ will stand across the opening d' in the case. When the tongue is shut down against the beveled lug, the bolt-plate is crowded up until it can automatically lock the tongue by the lug f³ entering the hole c. On inserting a key K through the keyhole d² in the front of the case its bit k when turned strikes the end of the abutment f⁴ and forces the bolt-plate upward (in the drawing) against the tension of the spring into the portion shown in Fig. 4, withdrawing the lug f³ from the hole in the tongue and leaving said tongue free to be opened.

In order to render it possible to use the buckle as an ordinary buckle, I provide a catch to retain the bolt-plate in its unlocked position. This is preferably constructed as follows: Clamped between the back of the case and the key-plate, with its end in the notch g', is a spring L, whose free end plays in the recess g and bears against the back of the bolt-plate. When the buckle is unlocked, the bolt-plate is moved so far that the end of the spring can pass into the recess f', where it catches the bolt-plate and prevents it from being forced into locking position by the spring when the key is withdrawn. To enable

the spring-catch to be pressed back to release the bolt, it is provided with a small pin or thumb-piece M, extending through a slot in the top of the case sufficiently far to be
5 conveniently moved by one's finger.

It will thus be seen that my invention provides a compact, strong, and simple lock-buckle with a spring-lock which is automatically held open when unlocked until released
10 by moving the spring-catch.

Having thus described my invention, what I claim is—

1. In a lock-buckle, the combination with the movable tongue, having a hole in its end,
15 of a lock-case lock mechanism comprising a spring-bolt, a spring-catch for engaging said bolt when it is withdrawn from the tongue in the act of unlocking and a thumb-piece on said catch projecting through the lock-case.

20 2. In a lock-buckle, the combination with the movable tongue, having a hole in its end, of a lock mechanism comprising a case, a stationary key-plate partially filling one end thereof and carrying a key-post, a sliding
25 bolt-plate movable over the key-plate, and having a flange at one end, a spring confined between said flange and the end of the case,

and an abutment on the other end of the bolt-plate adjacent to the key-post.

3. In a lock-buckle, the combination with 30 the movable tongue, having a hole in its end, of a lock-case having an opening for said tongue, a stationary key-plate in said case carrying a post, a bolt-plate movable over the key-plate and having a flange f , recess f^2 , 35 beveled lug f^3 and abutment f^4 , a helical spring between the flange and the end of the case.

4. In a lock-buckle, the combination with the movable tongue C, having a hole c in its 40 end, of a lock-case D having an opening d' , a bolt-plate F having a flange f , recesses f^1 , f^2 , beveled lug f^3 and abutment f^4 , a stationary key-plate G behind the bolt-plate, having recesses g , g^2 and notch g' , a spring I, and a 45 spring-catch L having a thumb-piece M projecting through the case.

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

CHARLES A. GOOZEY.

Witnesses:

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