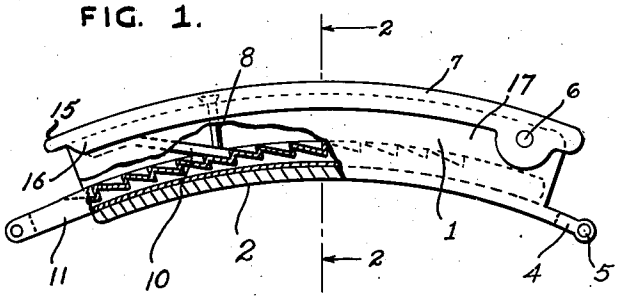
June 28, 1949. L. C. SCHMITH 2,474,372

BUCKLE

Filed Feb. 12, 1946

FIG. 1.



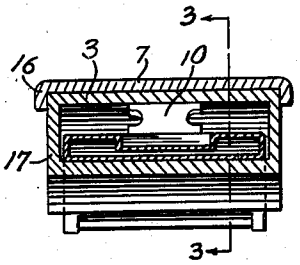


FIG. 2.

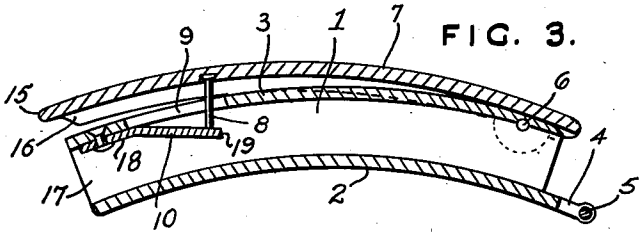


FIG. 3.

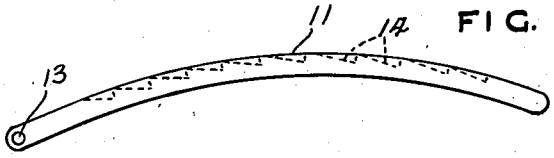


FIG. 4

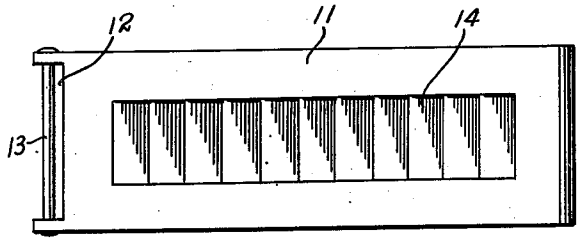


FIG. 5.

Inventor

LESTER C. SCHMITH,

By McMorrow, Berman & Davidson

Attorneys

Patented June 28, 1949 2,474,372

UNITED STATES PATENT OFFICE

2,474,372

BUCKLE

Lester C. Schmith, Sacramento, Calif.

Application February 12, 1946, Serial No. 647,089

2 Claims. (Cl. 24—206)

1

The present invention relates to buckles and is more particularly concerned with a separate buckle and tongue especially adaptable to wrist watches and belts.

The primary object of the invention is to provide a buckle and tongue which will quickly and readily interlock and yet be detachable at will by pressure on the frontal plate of the buckle.

A further object of the invention is to provide a buckle and tongue of simpler and more compact construction than prior devices.

With the foregoing and other objects and advantages in view the invention consists of the novel construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawing illustrating the invention—

Figure 1 is a side elevation of the buckle and tongue assembly partly in section.

Figure 2 is a transverse section on line 2—2 of Figure 1.

Figure 3 is a longitudinal section of the buckle taken substantially on the plane of the line 3—3 of Figure 2, but showing the parts differently positioned.

Figure 4 is a side elevation of the tongue.

Figure 5 is a top plan view of the tongue.

Like numerals are used in the description and drawing to designate the same parts of construction.

The buckle case 1 may be flat or slightly curved, as desired, and is formed with a bottom 2, a top 3 and perpendicular sides 17, as viewed in the drawing. It is preferably open at each end. Bottom 2 is extended a suitable distance from one end to form a keeper 4 with a transverse bolt or pin 5 to which is adapted to be fastened one end of a wrist watch strap or a belt.

The top 3 of the case 1 intermediate the sides 17 and inwardly of one end thereof is formed to provide an aperture 9 therethrough. A leaf spring 10 is secured to the under side of the top 3 adjacent the aperture 9 by one end 18 of such spring. The leaf spring 10 extends longitudinally of the case 1 and is inclined downwardly toward the bottom 2 of the case. Such downwardly inclined end 19 of the spring 10 underlies the aperture 9 of the top 3. An upstanding pin 8 has its lower end secured in any suitable manner to the upper surface of the spring 10 adjacent the free end 19 thereof. The upper end of the pin 8 is secured in any suitable manner to the under surface of a frontal plate 7 for the buckle. The frontal plate 7 overlies the top 3 of the case 1, and one end thereof is pivoted to the case 1 by any suitable

2

pivot means 6 extending transversely through the side walls 17 adjacent one end thereof. An opposite end portion 15 of the plate 7 extends longitudinally outwardly beyond the corresponding end of the case 1 to provide a tongue to facilitate lifting of the plate 7. The side edges of the plate 7 are formed with depending flanges 16 adapted to overlie upper side portions of the side walls 17 of the case. The spring 10 is biased so as to normally retain the plate 7 in the Figure 1 position, but permits lifting of the same to the slightly raised Figure 3 position for a purpose to be described presently.

The tongue 11 is flat or curved to conform to the shape of the buckle case 1 and is preferably rectangular. It is provided with a keeper 12 and pin 13 similar to the belt or strap fastening means on the case. The top of the tongue is provided longitudinally with a field 14, having ratchet-like teeth, which may be formed by stamping or otherwise so as to be positioned above the surface or below, as shown. The tongue 11 may be inserted in case 1 in one direction so that the ratchet field 14 thereof contacts and rides under the lower end 19 of the spring 10. However, withdrawal of the tongue 11 is prevented by the ratchet engagement of the free end 19 of the spring with the ratchet field 14. Thus, when the buckle is tightened to suit the wearer, the tongue 11 is held fast within the buckle case. To release it, the frontal plate 7 is raised sufficiently by its free end 15 from the Figure 1 to the Figure 3 position to disengage the spring blade or detent 10 from the ratchet teeth, when the tongue may be withdrawn, as indicated in Figure 3. Upon release of the frontal plate 7, the spring 10 returns it from the Figure 3 position to the Figure 1 position.

This buckle and its tongue may be constructed of metal or plastics, and any size to suit the use. If desired, the parts may be stamped from metal and readily assembled.

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

1. In a buckle for wrist watch straps or the like, including an open-ended case having bottom, top and side walls, a separate tongue slidable in said case along said bottom wall, and a field of ratchet teeth formed on an upper surface of said tongue; said upper surface of said tongue and said field being downwardly spaced from said top wall, a leaf spring having one end fixed to said top wall, a free end of said spring being inclined downwardly to a position to engage said ratchet field, a cover plate for said case overlying

said top wall, means connecting said plate and case to permit upward movement of said plate relative to said case, and said means including a rigid connection between said plate and said free end of said spring whereby upward movement of said plate is operative to raise the said free end of said spring above the plane of said ratchet field.

2. In a buckle for wrist watch straps or the like, including an open-ended case having bottom, top and side walls, a separate tongue slidable in said case along said bottom wall, and a field of ratchet teeth formed on an upper surface of said tongue; said upper surface of said tongue and said field being downwardly spaced from said top wall, a leaf spring having one end fixed to said top wall, a free end of said spring being inclined downwardly to a position to engage said ratchet field, a cover plate for said case overlying said top wall, means connecting said plate and case to permit upward movement of said plate relative to said case, said top wall being formed with an aperture therethrough over said free end of said spring, and means extending through said aperture and providing a rigid connection between said plate and said free end of said spring whereby upward movement of said plate is operative to raise said free end of said spring above the plane of said ratchet field.

LESTER C. SCHMITH.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,590,063	Schillerstrom	Jan. 22, 1926
1,627,776	Haumerson	May 10, 1927
1,663,621	Bowman	Mar. 27, 1928
1,887,825	Statham	Nov. 15, 1932
2,171,448	Holtz	Aug. 29, 1939