Sept. 7, 1965 R. SOKOLOFF 3,204,314

RETRACTABLE PRONG BELT BUCKLE

Filed April 29, 1964

Fig. 1

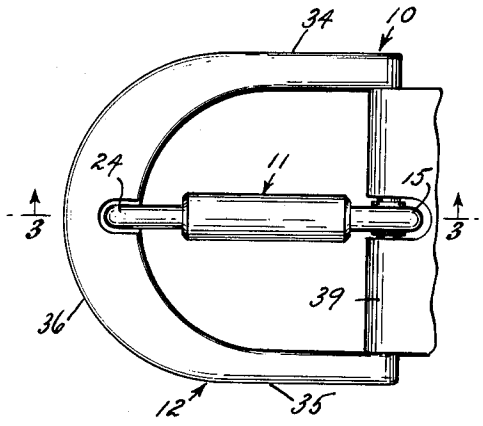



Fig. 2

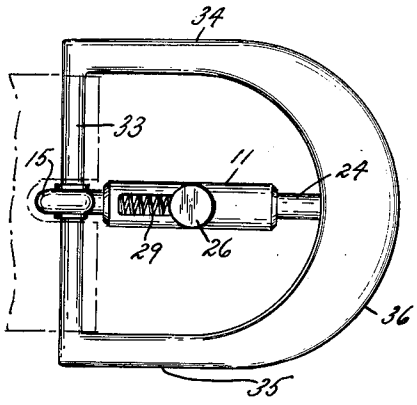



Fig. 3

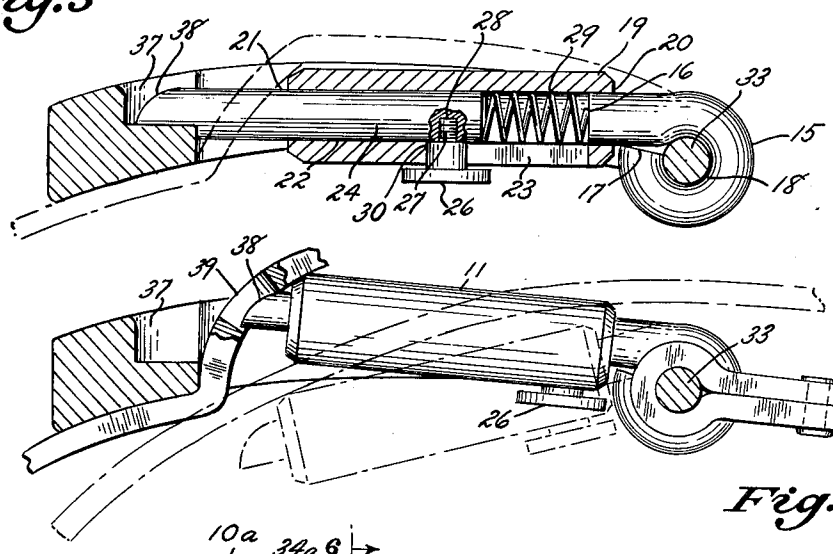



Fig. 4

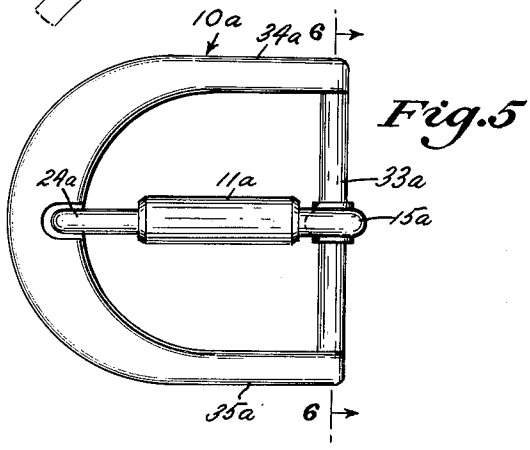
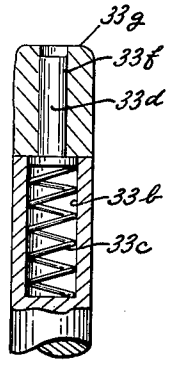



Fig. 5

Fig. 6



United States Patent Office 3,204,314 Patented Sept. 7, 1965



3,204,314

# RETRACTABLE PRONG BELT BUCKLE

Raymond Sokoloff, 2245 Ocean Parkway, Brooklyn, N.Y.

Filed Apr. 29, 1964, Ser. No. 363,380
1 Claim. (Cl. 24—188)

This invention relates generally to the field of belt interconnecting devices, and more particularly to a retractable prong belt buckle suitable for use as an interconnecting means for a man's leather or web belt.

In belt buckles of this type, there is normally provided a D-ring having a generally rectilinear transverse portion which engages one end of the belt, and which mounts a pivotally arranged prong, the oppositely disposed free end of which is adapted to penetrate one of a plurality of holes in an opposite end of the belt, wherein upon the donning of the same, tension pulls the belt, which in turn moves the prong to engage a second portion of the D-ring element, to prevent further expanding movement.

Under certain conditions, it is often desirable to conveniently adjust the belt by enlarging the length thereof in a manner as unobtrusive as possible. With conventional belt buckles, this normally requires the grasping of the free end of the belt, and a further tightening of the same a degree sufficient to disengage the free end of the prong with the presently engaged opening in the belt, and allowing the belt to slide through the D-ring element a degree sufficient to permit a different opening in the belt to be subsequently engaged. This operation also entails the manual outward movement of the prong element in order to permit its disengagement. Where the adjustment is performed while the wearer is in a sitting position, it calls for considerable manual manipulation, usually drawing considerable attention from those nearby.

It is among the principal objects of the present invention to provide an improved form of belt buckle which may be readily adjusted using the fingers of a single hand, and without the necessity of further tightening the belt prior to release.

Another object of the invention lies in the provision of an improved retractable prong belt buckle, in which the prong may be conveniently shortened against the action of a resilient means to permit the disengagement of the prong with a particular hole in the belt, and its subsequent engagement with an adjacent hole while the entire belt buckle is concealed beneath the hand of the wearer.

Another object lies in the provision of an improved retractable prong belt buckle possessed of the above advantages, in which the cost of fabrication may be of a reasonably low order, with consequent wide sale, distribution and use.

A feature of the invention lies in the fact that the inventive concept of the present disclosure may be incorporated into a wide variety of shapes and sizes of belt buckles by those skilled in the art to which the invention pertains.

Another feature of the invention lies in the fact that the device may be manufactured using existing techniques and tooling well known in the art.

These objects and features, as well as other incidental ends and advantages, will more fully appear in the progress of the following disclosure, and be pointed out in the appended claim.

In the drawing, to which reference will be made in the specification, similar reference characters have been employed to designate corresponding parts throughout the several views.

FIGURE 1 is a fragmentary view in elevation of an embodiment of the invention.

FIGURE 2 is a view in elevation thereof, showing the side opposite that seen in FIGURE 1.



FIGURE 3 is an enlarged longitudinal sectional view as seen from the plane 3—3 in FIGURE 1.

FIGURE 4 is a similar sectional view, but showing certain of the component parts in altered relative position.

FIGURE 5 is a view in elevation of an alternate form of the embodiment.

FIGURE 6 is an enlarged fragmentary sectional view, partly in elevation as seen from the plane 6—6 in FIGURE 5.

In accordance with the principal form of the embodiment of the invention, the device, generally indicated by reference character **10** comprises broadly a pivotally mounted prong element **11** and a D-ring element **12**, the same to be used in conjuction with a conventional belt of plastic, leather or webbing, generally indicated by reference character **13**.

The prong element **11** includes a circular eye member **15**, preferably formed by suitably bending metallic wire, and including a first or inner end **16** and a second or outer end **17** defining a circular opening **18**, by means of which the prong element **11** is pivotally mounted on the D-ring element **12**. Interconnected to the first end **16** is an elongated metallic sleeve **19** having first and second end openings **20** and **21**, respectively leading to a continuous longitudinal bore **22**. Extending through the body of the sleeve **19** is an elongated slot **23** which communicates with the bore **22** over a portion of the length thereof.

Positioned within the bore **22**, and extending outwardly of the opening **21** is a prong member **24**, the inner end **25** of which is provided with a finger engaging member **26** having a threaded portion **27** engaged within a correspondingly threaded bore **28**. A coil spring **29** is disposed to contact the end **16** and the inner end **25** to urge the prime member **24** outwardly, or leftwardly as seen in FIGURE 3, outward movement being limited by contact of the finger engaging member **26** with the leftward end **30** of the slot **23**.

The D-ring element **12** may be of any suitable conventional configuration, normally including an elongated transverse member **33** which mounts the eye member **15** in pivotal relation, a pair of longitudinal members **34** and **35** and an end member **36** which may be of either curved or rectilinear configuration as desired. As best seen in FIGURE 3, the end member **36** is preferably provided with a recess **37** for accommodating the outer end **38** of the prong member **24**.

Referring to FIGURE 3, the belt **13** may be engaged with the device in a conventional manner, in which the prong member **24** projects through a desired opening **39**. Where a quick release is desired, it is necessary only to move the finger engaging member **26** rightwardly as seen in FIGURE 4, wherein the end **38** clears the recess **37**, and normal tension exerted on the belt causes the prong member **24** to pivot downwardly, wherein the free end of the belt **13** may be withdrawn through the opening in the D-ring element **12**. If a mere adjustment of the belt is desired, it is necessary only to move the finger engaging member **26** rightwardly as seen in FIGURE 4, and to release the same when the desired opening **39** has been reached, at which point the end **38** re-enters another opening **39** to complete the adjustment. By placing the thumb of the user on the member **26**, the fingers of the hand of the user may completely conceal the operation while adjustment is taking place, thus drawing a minimum of notice to the operation.

Turning now to the alternate form of the embodiment, illustrated in FIGURES 5 and 6 in the drawing, parts corresponding to those of the principal embodiment have been designated by similar reference characters with the additional suffix *"a."*

In the alternate form of the embodiment **10***a*, the member **34***a* is of selectively detachable construction, each

free end thereof including a bore 33*b* having a spring 33*c* urging a pin 33d into a bore 33f at the extreme end 33g of the member 34*a*, this construction permitting removal and replacement of the prong element should the same, at any time, become necessary or desirable.

I wish it to be understood that I do not consider the invention limited to the precise details of structure shown and set forth in this specification, for obvious modifications will occur to those skilled in the art to which the invention pertains.

I claim:

In a belt buckle for use with a flexible elongated belt, a first element having a transverse member engaging one end of said belt and a second member, a portion of which is laterally disposed with respect to the axis of said first member, the second member having an outer surface and an inner surface, the inner surface of the laterally disposed portion being the sole engaging surface by the belt on said laterally disposed portion, the inner surface being adapted to engage the body circumference, and a retractable elongated prong element assembly having an outer and an inner surface, the outer surface of said prong assembly being the sole contacting surface by the belt on said prong assembly, the said prong element assembly being pivoted at one end thereof to said first member and in extended position selectively contacting the outer surface of said second member, said prong element assembly including a hollow elongated metallic sleeve having a



first end opening and defining an elongated longitudinal bore therein, there being a second elongated opening extending longitudinally of said sleeve along its inner surface and communicating with said bore, and an elongated prong member of rod-like material slidably disposed within said bore and projecting through said first end opening, resilient means positioned within said bore and urging said prong member outwardly thereof, a finger engaging member on the inner surface of said prong element assembly connected to said prong member adjacent an inner end thereof and laterally extending therefrom to project through said second opening.

**References Cited by the Examiner**

UNITED STATES PATENTS

| | | | |
|---|---|---|---|
| 259,034 | 6/82 | Meyer | 24—166 |
| 689,119 | 12/01 | Pierce | 24—178 |
| 2,066,398 | 1/37 | Getts | 24—178 |

FOREIGN PATENTS

| | | |
|---|---|---|
| 1,041,517 | 10/53 | France. |
| 208,040 | 4/40 | Switzerland. |
| 328,403 | 4/58 | Switzerland. |

WILLIAM FELDMAN, *Primary Examiner.*

DONLEY J. STOCKING, *Examiner.*