D. S. BEARS.

BELT BUCKLE.

APPLICATION FILED MAY 4, 1920.

1,352,937.

Patented Sept. 14, 1920.

Fig. 1

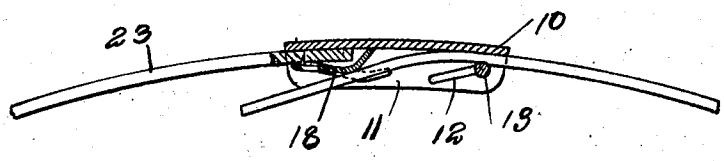


Fig. 2

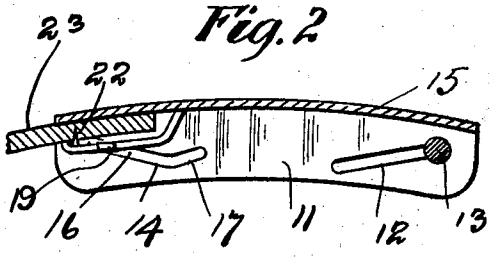


Fig. 3

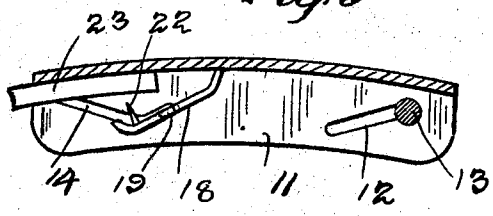


Fig. 4

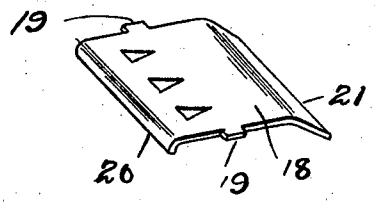
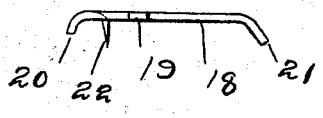


Fig. 5



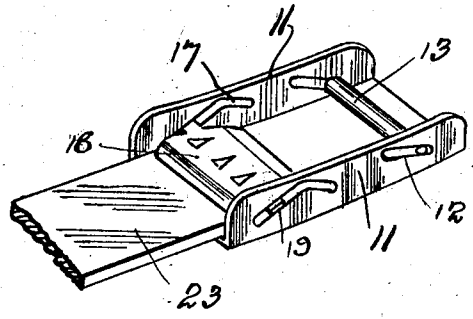


Fig 6

Inventor

Daniel S Bears

By Howard E. Barlow

Atty.

UNITED STATES PATENT OFFICE.

DANIEL S. BEARS, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO RELIANCE MANUFACTURING CO., OF PROVIDENCE, RHODE ISLAND, A COPARTNERSHIP COMPRISING DAVID A. HART AND DEXTER E. PARTELOW.

BELT-BUCKLE.

1,352,937. Specification of Letters Patent. **Patented Sept. 14, 1920.**

Application filed May 4, 1920. Serial No. 378,893.

To all whom it may concern:

Be it known that I, DANIEL S. BEARS, a citizen of the Dominion of Canada, and resident of the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Belt-Buckles, of which the following is a specification.

This invention relates to belt buckles of the class adapted to automatically grip and bind a belt in adjusted position about the body of the wearer; and the object of this invention is to provide a belt-gripping plate in the buckle-body, which is provided with biting teeth and which is slidably mounted in guide slots in the sides of the body in such a way that its teeth may be readily and completely withdrawn from engagement with the belt when it is desired to release the same.

The nature and advantages of the invention will be better understood when the following detail description is taken in connection with the accompanying drawings, the invention residing in the combination and arrangement of parts as claimed.

In the drawings forming part of this specification, like numerals of reference indicate similar parts in the several views and wherein:—

Figure 1 is an edge view illustrating my improved buckle in section and in position on the belt.

Fig. 2 is an enlarged side elevation of the buckle in section, showing the belt-gripping member in operative position as engaging the belt end.

Fig. 3 is the same as Fig. 2 but showing the belt gripping plate as raised into position to withdraw its teeth from engagement with the belt.

Fig. 4 is a perspective of the clamp-plate.

Fig. 5 is an edge view of this plate.

Fig. 6 is a perspective view showing the under side of the belt-buckle.

My improved buckle is preferably of that type in which one end of the belt is gripped and positively retained by a binding plate while the other end of the belt is adjustably retained by an independent gripping member, the free end of the belt being guided to the rear or back of the other portion of the belt so as to present the appearance of being endless.

The following is a detail description of one construction of mechanism by which my invention is carried out.

With reference to the drawings, 10 designates the body of the buckle which is usually formed of precious metal or plated stock and is provided with two side walls 11 turned back at substantially a right angle to the plane of the front plate.

Each of these side walls is shown as being provided with inclined slots 12 in which the usual belt-gripping bar is slidably mounted.

My invention however relates to the mechanism at the opposite end of the buckle. The side walls 11 at this end of the buckle being also provided with inclined slots 14, the lower end 16 of each of these slots being disposed to extend at an angle outwardly from the back of the buckle and the outer end 17 of each slot being turned to extend a short distance inwardly toward the back 15 of the buckle.

A gripping or binding plate 18 is mounted between the sides of the buckle, which plate is provided with laterally extending ears or projections 19 which project into the slots 14, which projections are narrow and are arranged to fit loosely in these slots whereby the plate may swing slightly and adjust itself to belt-gripping position.

The outer edge 20 of this plate is preferably turned inwardly slightly against the belt while the opposite or inner edge 21 of this plate is also turned inwardly but to a greater extent whereby it may engage the inner surface of the buckle back when in operative position.

This gripping plate is also provided with a plurality of inwardly-turned teeth 22 which are adapted to embed themselves into the surface of the belt-end 23 to securely bind and hold this end of the belt against the body of the buckle.

It is found in practice very difficult to release the teeth 22 from the belt by simply sliding the plate outwardly in the grooves 14 as the teeth must necessarily be of sufficient length to bite deeply into the belt, and, therefore, it is found to be of advantage to be able to tip the toothed edge of this plate

upwardly or outwardly as illustrated in Fig. 3, to completely remove or withdraw these teeth from the belt. To accomplish this I force the bearing members 19 of the plate up into the inwardly-extending portion 17 of the slot whereby the rear or toothed end of this plate is raised sufficiently to completely withdraw the teeth from the belt as illustrated in Fig. 3.

When in operative position the plate is slid back down the incline and its teeth engage the belt, then the greater the strain upon the belt the greater the biting or gripping effect is produced by the plate upon the belt against the back of the buckle.

By my improved construction I overcome all of the difficulties which have heretofore been experienced with this class of buckle, and I am enabled to grip and bind this end of the belt and securely retain it in the buckle-body while the free end of the belt may be readily adjusted by the gripping member 13 at the opposite end of the buckle.

The device is extremely simple and practical in construction and effective in its operation.

The foregoing description is directed solely toward the construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the mechanical changes to which the device is susceptible, the invention being defined and limited only by the terms of the appended claims.

I claim:

1. A belt buckle comprising a body having side walls, each provided with an inclined guide slot, a belt-gripping plate being adapted to grip one end of the belt against the inner surface of said body and the opposite edge thereof being inclined so that when in operative position it rests against said inner face of said body to guide the incoming opposite belt-end thereover, said plate being provided with trunnions mounted in said slots to both slide and tip therein and so lift its belt-engaging edge clear of the belt to completely release the same.

2. A belt buckle comprising a body having side walls, each provided with an outwardly inclined guide slot having its upper portion directed inwardly at an angle to its lower portion, a belt-gripping plate having side bearing members extending into said slots, one portion of said plate being provided with teeth whereby an outward sliding movement of said plate in said slots first raises the plate and then tips it to withdraw its teeth from the belt.

In testimony whereof I affix my signature.

DANIEL S. BEARS.