Jan. 6, 1959 P. R. PUTNAM 2,867,023

EXTENSION BELT BUCKLE

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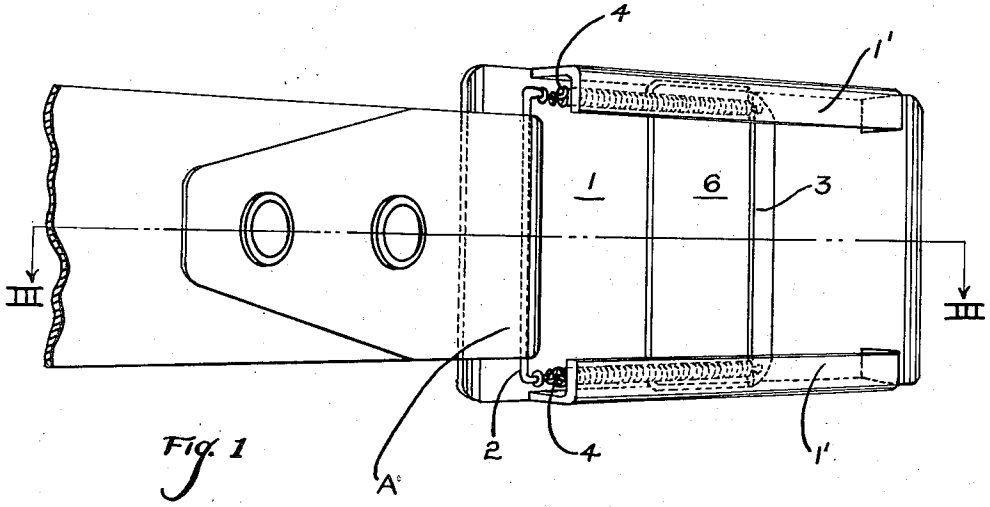


Fig. 1

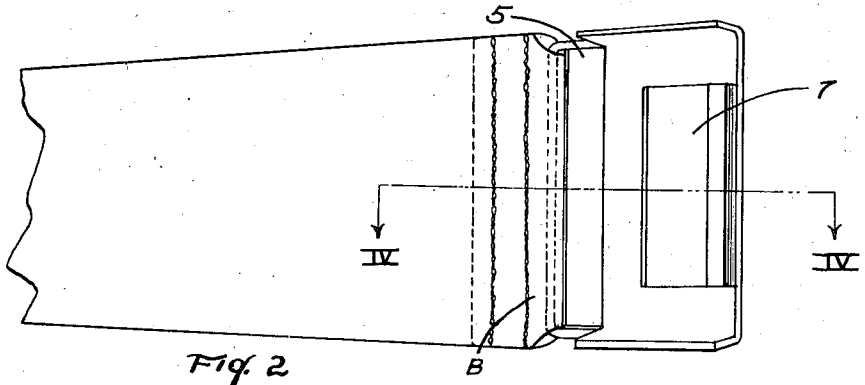


Fig. 2

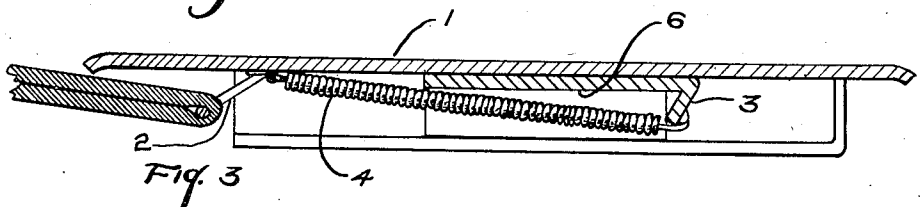


Fig. 3

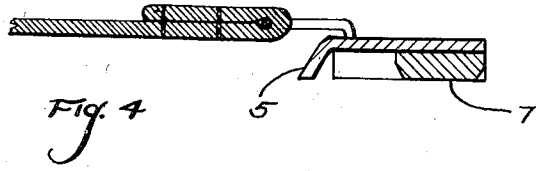


Fig. 4

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EXTENSION BELT BUCKLE

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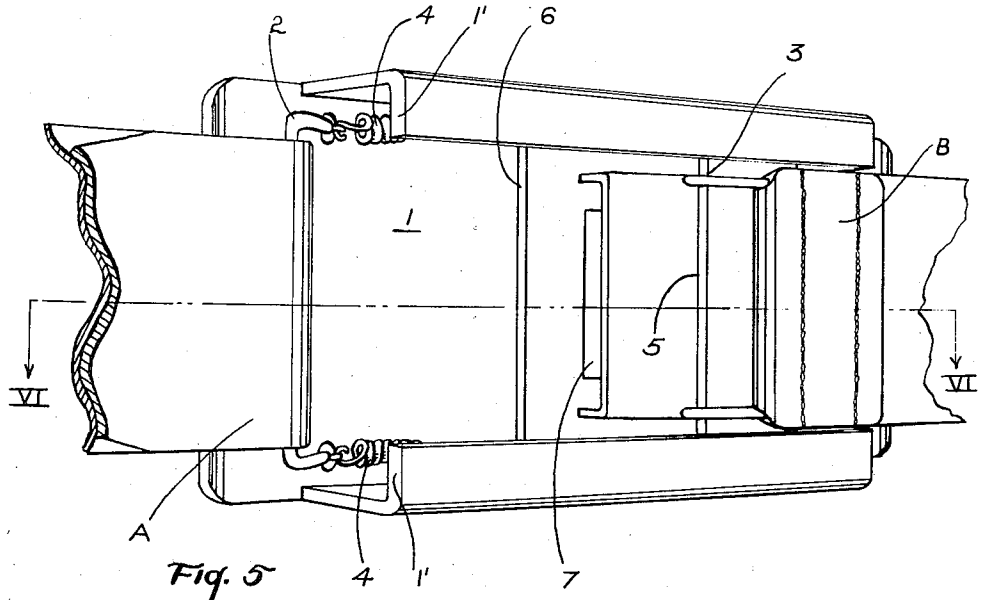


Fig. 5

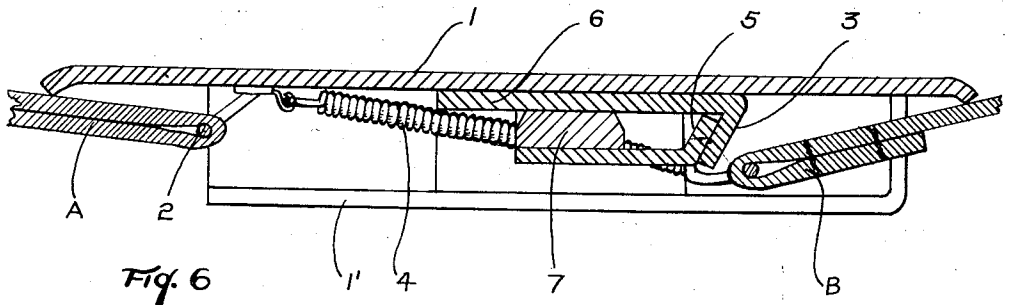


Fig. 6

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EXTENSION BELT BUCKLE

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Application August 15, 1955, Serial No. 528,389

4 Claims. (Cl. 24—163)

The present invention relates to the buckle art, and more particularly, it relates to an extension belt buckle, which, in the present specifically illustrated form is so constructed as to effectively cooperate for attachment to belt regions (not necessarily parts of the same belt) whereby to effectively render the fastened belt regions capable of extension as a result of tension applied to the belt.

Generally speaking, one illustrative form of the extension belt buckle of the present invention may include: a belt buckle body member having a front surface a rear surface and opposed first and second ends, said belt buckle body member being cooperable for attachment with respect to a belt at a first region thereof. Also included is a first catch member slidably mounted closely adjacent to said belt buckle body member for reciprocation between said opposed first and second ends thereof, biasing spring means normally biasing said first catch member toward the attachment of said first region of said belt with respect to said belt buckle body member, and a second catch member selectively removably engageable with said first catch member and cooperable for attachment with respect to a belt at a second region thereof.

In one preferred form of the present invention, the belt buckle may be an expansion belt buckle cooperable for attachment to opposite ends of a belt (although not necessarily the same belt) whereby to effectively render the fastened belt capable of expansion as a result of tension applied to the belt and buckle. This preferred form may include a belt buckle body member having a front surface, a rear surface and opposed first and second ends, said first end being provided with engaging means cooperable for attachment with respect to a first end of a belt. Also included is a first catch member slidably mounted closely adjacent to said rear surface of said belt buckle body member for reciprocation between said opposed first and second ends thereof, and biasing spring means normally biasing said first catch member toward said first end of said belt buckle body member, and a second catch member selectively removably engageable with said first catch member and cooperable for attachment with respect to a second end of a belt.

Another preferred form of the present invention may also include magnetic retaining means on said first or second catch members (or, in certain cases, both), said magnetic retaining means causing said first and second catch members to be magnetically retainingly cooperable with each other to prevent said first and second catch members from becoming inadvertently disengaged except when said first and second catch members are selectively manually removably disengaged.

From the above description of basic and preferred generic forms of the present invention, it will be apparent to those skilled in the art that virtually all of the disadvantages of prior art belt buckles are virtually entirely eliminated and overcome in and through the use of the present invention.

With the above points in mind, it is an object of the

present invention to provide an extension (or expansion) belt buckle apparatus of cheap, simple, novel, easy-to-operate and easy-to-maintain construction cooperable for attachment to belt regions whereby to effectively render the fastened belt capable of extension (or expansion) as a result of tension applied to the belt.

Other and allied objects will become apparent to those skilled in the art after a careful perusal, examination and study of the accompanying illustrations, the present specification and the appended claims.

To facilitate understanding, reference will be made to the hereinbelow-described drawings, in which:

Fig. 1 is a perspective view of the rear surface of a first portion of the belt buckle member—this view showing the first catch member slidably mounted therein;

Fig. 2 is a perspective view of the front surface of a second portion of the belt buckle member—this view showing the second catch member mounted therein;

Fig. 3 is a horizontal sectional view of the first portion of the belt buckle shown in Fig. 1 in the direction of the arrows III—III in Fig. 1;

Fig. 4 is a horizontal sectional view of the second portion of the belt buckle shown in Fig. 2 in the direction of the arrows IV—IV in Fig. 2;

Fig. 5 is a perspective view of both of the belt buckle portions—this view showing the catch members of Figs. 1–2 hooked in engaged position; and

Fig. 6 is a horizontal sectional view taken in the direction of the arrows VI—VI in Fig. 5.

In a preferred form of the present invention, specifically illustrated in Figs. 1–6, a first end of the extension belt buckle body member 1 is provided with belt-engaging means 2 cooperable for attachment with respect to a first end of a belt A. A first catch member 3 is slidably mounted, by top and bottom channel-defining edge flanges 1', closely adjacent to the rear surface of said belt buckle body member 1 for reciprocation between said first end and an opposed second end thereof. Biasing spring means 4 connect between said first catch member 3 and said belt buckle body member 1 and normally bias said first catch member 3 toward said first end of said belt buckle body member 1.

Also, a second catch member 5 is selectively removably engageable with said first catch member 1 and cooperable for attachment with respect to a second end of a belt (not necessarily parts of the same belt) B.

In the specifically illustrated preferred form of the present invention, said first catch member 1 includes a small flat ferromagnetic platform 6 and said second catch member 5 includes magnetic retaining means 7 (such as a permanent magnet, for example), magnetically retainingly cooperable with each other to prevent said first and second catch members 1 and 5 from becoming inadvertently disengaged except when said first and second catch members are selectively manually removably disengaged.

Numerous modifications and variations of the present invention will occur to those skilled in the art after a careful study hereof. All such, properly within the basic spirit and scope of the present invention are intended to be included and comprehended herein as fully as if specifically described, illustrated and claimed herein.

For example, the face (or front, not illustrated) of the extension belt buckle of the present invention may take any of a number of shapes and/or decorative treatment. Also the catch means may be modified in any number of ways.

For further example, in that form of the present invention including magnetic retaining means, the magnetic means may include a ferromagnetic platform and magnetic means on the opposing catch members (as illustrated), or their positions may be reversed. In still an-

other preferred form, both catch members may be permanently magnetized.

The exact compositions, configurations, constructions, relative positionings, and cooperative relationships of the various component parts of the present invention are not critical, and can be modified substantially within the spirit of the present invention.

The embodiments of the present invention specifically described and illustrated herein are exemplary only, and are not intended to limit the scope of the present invention, which is to be interpreted in the light of the prior art and the appended claims only, with due consideration for the doctrine of equivalents.

I claim:

1. An extension belt buckle cooperable for attachment to belt regions whereby to effectively render the fastened belt capable of extension as a result of tension applied to the belt, comprising: a belt buckle body member having a front surface, a rear surface and opposed first and second ends, said first end being cooperable for attachment with respect to a belt at a first region thereof; a first catch member including a first plate member slidably mounted closely adjacent to said rear surface of said belt buckle body member for reciprocation between said opposed first and second ends thereof and also including a rearwardly directed first lip member carried by said first plate member adjacent the end thereof most remote from said first end of said belt buckle body member and extending angularly rearwardly therefrom in a direction inclined toward said first end of said belt buckle body member; biasing spring means connected between said first catch member and said belt buckle body member and normally biasing said first catch member toward said first end of said belt buckle body member; and a second catch member including a second plate member positionable behind said first plate member when in engaged position and also including a second forwardly directed lip member positioned adjacent the end of said second plate member most remote from said first end of said belt buckle body member and projecting angularly forwardly therefrom and inclined toward said second end of said belt buckle body member, said second lip member being cooperable to lie immediately adjacent to and in abutting contact with said first lip member and on the side of said first lip member nearest to said first end of said belt buckle body member when said second catch member is engaged with said first catch member, said second catch member being cooperable for attachment with respect to a belt at a second region thereof; said first and second catch members including magnetic retaining means magnetically retainingly cooperable with each other to prevent said first and second catch members from becoming inadvertently disengaged except when said first and second catch members are selectively manually removably disengaged said magnetic retaining means comprising a permanent magnet carried by one of said plate members between said first and second plate members and also comprising a ferromagnetic portion carried by the other of said plate members and magnetically retainingly abuttingly cooperable with said permanent magnet to constrain said first and second plate members toward each other and to constrain said first and second lip members from becoming inadvertently disengaged except when said first and second lip members are selectively manually removably disengaged.

2. An expansion belt buckle cooperable for attachment to opposite ends of a belt whereby to effectively render the fastened belt capable of expansion as a result of tension applied to the belt and buckle, comprising: a belt buckle body member having a front surface, a virtually flat rear surface and opposed first and second ends, said first end being cooperable for attachment with respect to a first end of a belt; a first catch member including a first virtually flat plate member slidably mounted closely adjacent to said rear surface of said belt buckle body member for reciprocation between said opposed first and second ends thereof and also including a rearwardly directed first lip member carried by said first plate member adjacent the end thereof most remote from said first end of said belt buckle body member and extending angularly rearwardly therefrom in a direction inclined toward said first end of said belt buckle body member; biasing spring means connected between said first catch member and said belt buckle body member and normally biasing said first catch member toward said first end of said belt buckle body member; and a second catch member including a second virtually flat plate member positionable behind said first plate member when in engaged position and also including a second forwardly directed lip member positioned adjacent the end of said second plate member most remote from said first end of said belt buckle body member and projecting angularly forwardly therefrom and inclined toward said second end of said belt buckle body member, said second lip member being cooperable to lie immediately adjacent to and in abutting contact with said first lip member and on the side of said first lip member nearest to said first end of said belt buckle body member when said second catch member is engaged with said first catch member, said second catch member being cooperable for attachment with respect to a second end of a belt; said first and second catch members including magnetic retaining means magnetically retainingly cooperable with each other to prevent said first and second catch members from becoming inadvertently disengaged except when said first and second catch members are selectively manually removably disengaged said magnetic means comprising a permanent magnet carried by the forward side of said second plate member between said first and second plate members and also comprising a ferromagnetic portion carried by the rear surface of said first plate member and magnetically retainingly abuttingly cooperable with said permanent magnet to constrain said first and second plate members toward each other and to constrain said first and second lip members from becoming inadvertently disengaged except when said first and second lip members are selectively manually removably disengaged.

3. An extension belt buckle cooperable for attachment to belt regions whereby to effectively render the fastened belt capable of extension as a result of tension applied to the belt, comprising: a belt buckle body member having a front surface, a rear surface and opposed first and second ends, said first end being provided with belt engaging means cooperable for attachment with respect to a belt at a first region thereof; a first catch member including a first plate member slidably mounted closely adjacent to said rear surface of said belt buckle body member for reciprocation between said opposed first and second ends thereof and also including a rearwardly directed first lip member carried by said first plate member adjacent the end thereof most remote from said first end of said belt buckle body member and extending angularly rearwardly therefrom in a direction inclined toward said first end of said belt buckle body member; biasing spring means connected between said first catch member and said belt buckle body member and normally biasing said first catch member toward said first end of said belt buckle body member; and a second catch member including a second plate member positionable behind said first plate member when in engaged position and also including a second forwardly directed lip member positioned adjacent the end of said second plate member most remote from said first end of said belt buckle body member and projecting angularly forwardly therefrom and inclined toward said second end of said belt buckle body member, said second lip member being cooperable to lie immediately adjacent to and in abutting contact with said first lip member and on the side of said first lip member nearest to said first end of said belt buckle body member when said second

catch member is engaged with said first catch member, said second catch member being cooperable for attachment with respect to a belt at a second region thereof; said first and second catch members including magnetic retaining means magnetically retainingly cooperable with each other to prevent said first and second catch members from becoming inadvertently disengaged except when said first and second catch members are selectively manually removably disengaged said magnetic retaining means comprising a permanent magnet carried by one of said plate members between said first and second plate members and also comprising a ferromagnetic portion carried by the other to said plate members and magnetically retainingly abuttingly cooperable with said permanent magnet to constrain said first and second plate members toward each other and to constrain said first and second lip members from becoming inadvertently disengaged except when said first and second lip members are selectively manually removably disengaged.

4. An expansion belt buckle cooperable for attachment to opposite ends of a belt whereby to effectively render the fastened belt capable of expansion as a result of tension applied to the belt and buckle, comprising: a belt buckle body member having a front surface, a virtually flat rear surface and opposed first and second ends, said first end being provided with belt engaging means cooperable for attachment with respect to a first end of a belt; a first catch member including a first virtually flat plate member slidably mounted closely adjacent to said rear surface of said belt buckle body member for reciprocation between said opposed first and second ends thereof and also including a rearwardly directed first lip member carried by said first plate member adjacent the end thereof most remote from said first end of said belt buckle body member and extending angularly rearwardly therefrom in a direction inclined toward said first end of said belt buckle body member; biasing spring means connected between said first catch member and said belt buckle body member and normally biasing said first catch member toward said first end of said belt buckle body member; and a second catch member including a

second virtually flat plate member positionable behind said first plate member when in engaged position and also including a second forwardly directed lip member positioned adjacent the end of said second plate member most remote from said first end of said belt buckle body member and projecting angularly forwardly therefrom and inclined toward said second end of said belt buckle body member, said second lip member being cooperable to lie immediately adjacent to and in abutting contact with said first lip member and on the side of said first lip member nearest to said first end of said belt buckle body member when said second catch member is engaged with said first catch member, said second catch member being cooperable for attachment with respect to a second end of a belt; said first and second catch members including magnetic retaining means magnetically retainingly cooperable with each other to prevent said first and second catch members from becoming inadvertently disengaged except when said first and second catch members are selectively manually removably disengaged said magnetic means comprising a permanent magnet carried by the forward side of said second plate member between said first and second plate members and also comprising a ferromagnetic portion carried by the rear surface of said first plate member and magnetically retainingly abuttingly cooperable wtih said permanent magnet to constrain said first and second plate members toward each other and to constrain said first and second lip members from becoming inadvertently disengaged except when said first and second lip members are selectively manually removably disengaged.

References Cited in the file of this patent

UNITED STATES PATENTS

389,037	Wilkinson	Sept. 4, 1888
1,389,459	Rosenthal et al.	Aug. 30 1921
1,659,705	Roehr	Feb. 21, 1928
1,752,414	Burnett	Apr. 1, 1930

FOREIGN PATENTS

1,020,735	France	Nov. 19, 1952