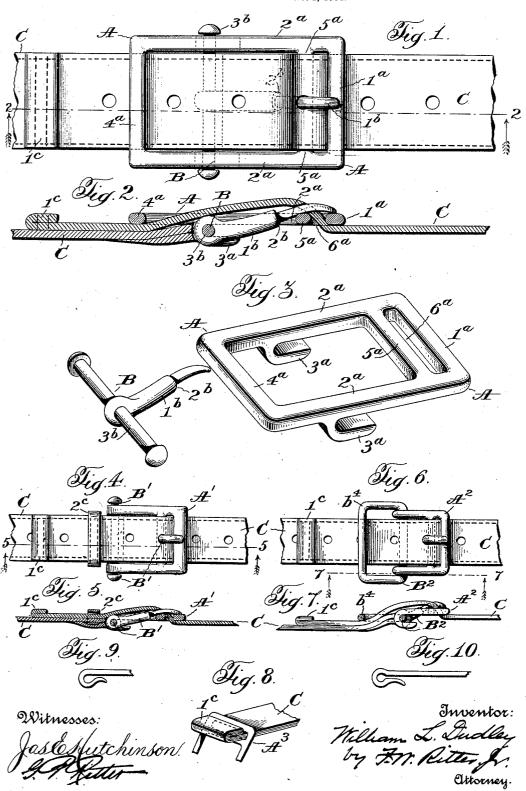
## W. L. DUDLEY. SEPARABLE BUCKLE. APPLICATION FILED DEC. 1, 1904.



## UNITED STATES PATENT OFFICE.

WILLIAM L. DUDLEY, OF NASHVILLE, TENNESSEE.

## SEPARABLE BUCKLE.

SPECIFICATION forming part of Letters Patent No. 788,194, dated April 25, 1905.

Application filed December 1, 1904. Serial No. 235,026.

To all whom it may concern:

Be it known that I, WILLIAM L. DUDLEY, a citizen of the United States, residing at Nashville, in the county of Davidson, State of Tennessee, have invented certain new and useful Improvements in Separable Buckles; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

-10 which-Figure 1 is a plan view of a separable buckle embodying my invention, a portion of a strap or belt being illustrated in connection therewith. Fig. 2 is a vertical section on the 15 line 2 2, Fig. 1, looking in the direction of the arrows. Fig. 3 is a perspective view of the component parts of the buckle shown in Figs. 1 and 2. Fig. 4 is a plan view of a modified form of the separable buckle, showing its rela-20 tion to a strap or belt, that portion of the frame which extends beyond the hooks 3<sup>a</sup> 3<sup>a</sup> and serves as a keeper for the free end of the strap or belt being omitted. Fig. 5 is a vertical section on the line 5 5, Fig. 4, looking in the di-25 rection of the arrows. Fig. 6 is a plan view of a modified form of the separable buckle shown as applied to a portion of a belt or strap and illustrating a form wherein the keeper for the free end of the strap is attached to the 30 tongue member of the buckle. Fig. 7 is a view on the line 77, Fig. 6, looking in the direction of the arrows. Fig. 8 is a perspective view of a portion of a strap or belt and that portion of the tongue check member which is slidable 35 thereon, illustrating one means of preventing

the disengagement of the slidable member from such strap or belt. Figs. 9 and 10 are fragmentary views of a portion of the side bars of the separable buckle shown in Figs. 4, 5, 6, 40 and 7; but the same construction of the bill member of the hooks is applicable also to Figs. 1, 2, and 3, such fragmentary views showing modified forms of the hooks by means of which the component parts of the buckle are con-45 nected.

Like symbols refer to like parts wherever they occur.

My invention relates to the construction of buckles for straps, belts, or the like, and has 5° for its object the production of a simple,

strong, and efficient fastening device which will permit a facile and complete disengagement of the buckle-connected portions of the strap.

Generally stated, my invention embraces a 55 construction wherein the frame or component part of the buckle which is adapted to form a check or stop for the buckle-tongue is provided with means whereby it may be separably or detachably connected to a buckle-tongue 60 member, which forms the other or component member of the buckle, the latter being adapted to be attached to a strap and being also provided with means adapted to connectingly engage the said frame member.

A further feature of my invention resides in so forming the frame or component part of the buckle which is adapted to form a stop or abutment for the buckle-tongue that it may be slidingly mounted upon a strap or 70 belt.

A further feature of my invention resides in so forming the buckle-tongue as to prevent the accidental disengagement of the component members of the buckle.

A further feature of my invention resides in so forming one of the component members of the buckle that it may serve as a guard or keeper for the free end of the strap.

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There are other minor features of invention 80 residing in particular combinations and elemental construction, all as will hereinafter more fully appear.

I will now proceed to describe my invention more fully, so that others skilled in the art to 85 which it appertains may apply the same.

In the drawings chosen to illustrate my invention, the scope whereof is pointed out in the claims, A is one of the complementary or component members of the separable buckle, 90 comprising a buckle-tongue check, stop, or abutment portion 1°, preferably in the form of an end bar of the frame A, and means, preferably in the form of the side bars 2° 2° having the hook members 3° 3° on the under 95 side thereof, for detachably or separably connecting said buckle-tongue check portion with the other component part B of the buckle. The side bars 2° 2° of the member A are preferably extended beyond the hooks 3° 3° there-

of and connected by an end bar 4°, which is adapted to act as a keeper for the free end 1° of the strap or belt C, to which the buckle is applied, and said side bars 2ª 2ª are also pref-5 erably connected by a bar 5° intermediate the end bars 1<sup>a</sup> 4<sup>a</sup> to form a suitable slot or guide 6°, by means of which the member A may be slidably mounted upon the said strap or belt C, the said member A being, if desired, pre-10 vented from complete withdrawal from the strap by folding the free end 1° thereof and sewing the same or in other suitable manner.

The buckle-tongue member B or other complementary or component part of the separa-15 ble buckle, which is attached to one end of the strap or belt C, is provided with a tongue 1<sup>b</sup>, preferably consisting of portions of different widths or diameters, forming an annular or other shoulder 2<sup>b</sup>, whereby the distance 20 which the said tongue may project through the holes of the strap C is limited for a purpose which will hereinafter appear. The said member B is also provided with means for detachably or separably engaging the com-25 plementary member A of the buckle, said means preferably consisting of the headed bar 3b, which is connected either loosely or rigidly to the tongue 1b and which is adapted to engage the hooks 3° 3° of the said tongue-30 check member A.

As shown in Figs. 4, 5, 6, and 7, it is obvious that the end bar 4°, forming the keeper for the free end of the strap C, may be omitted from the member A as unessential to the

In the modification shown in Figs. 4 and 5 the component member B' of the buckle is similar in all respects to the corresponding member B, heretofore described, and its complementary member A' is the same as the buckle-tongue-check member A, except that the end or keeper bar 4° and the extensions of the side bars 2ª 2ª beyond the hooks 3ª 3ª are omitted, the free end 1° of the strap C pass-45 ing under the usual keeper 2°, with which the strap is provided.

In Figs. 6 and 7 is shown a modification in which the buckle-tongue check member A<sup>2</sup> is of the same form and construction as the cor-50 responding member A in the principal figures of the drawings, except that the end or keeper bar 4<sup>a</sup> and the portions of the side bars 2<sup>a</sup> 2<sup>a</sup> thereof between such end bar 4° and hooks 3° 3ª are omitted, the member B², which corre-55 sponds to the member B of Figs. 1, 2, and 3, being the same in construction as, the latter member in respect of the tongue portion, but having the bar member to which said tongue portion is attached so constructed as to form 60 a keeper b4 for the free end 1° of the belt or strap C.

In Fig. 8 is illustrated a loop showing the manner in which the folded end 1° of the strap or belt C prevents the complete disengage-65 ment of a buckle-tongue check member A<sup>3</sup>,

which is slidable upon the strap in the same manner as the corresponding members A, A'and A<sup>2</sup> and which is adapted to be substituted therefor.

Figs. 9 and 10 show specific modifications 7° of the hooks 3° 3° of the member A, the same being designed to be of resilient character to be sprung over the bar 3<sup>b</sup> of the member B. With hooks of the character of either of those shown in Figs. 9 and 10 the annular shoulder 75 2<sup>b</sup> of the buckle-tongue may be omitted, if desired, as the resilient character of the hooks serve to prevent the accidental disengagement of the component parts of the buckle should the strap be slightly loose.

It will be noted that the complementary members of each of the forms of construction illustrated in the drawings constitute when assembled a separable buckle or buckle composed of separable members having side bars, 85

end bars, and a tongue.

The construction being substantially such as hereinbefore pointed out, the buckle-tongue member B is secured to one end of the strap C by means of the bar 3b, and the buckle- 90 tongue check member A is slidably mounted on the strap C, the end 1° of the latter being preferably folded and secured to prevent the loss of the member A, as heretofore noted. Thereafter when it is desired to buckle the 95 strap or belt C the buckle-tongue check member A and the buckle-tongue member B are caused to engage each other by means of the hooks 3° 3° passing around the bar 3°. The strap or belt is drawn tight, the buckle-tongue 100 1<sup>b</sup> is inserted in one of the holes provided for it in the strap, and the free end of the strap or belt is then passed under the bar 4° or equivalent keeper member. In this fastened position of the buckle the separable members 105 are prevented from accidental disengagement by reason of the annular shoulder 2<sup>b</sup> of the buckle-tongue 1b coming in contact with the strap C whenever there is a loosening of the latter without first withdrawing the said IIC buckle-tongue from one of the holes thereof. If, however, either of the forms of resilient hooks shown in Figs. 9 and 10 are used in lieu of the form of the hooks 3ª 3ª, the annular shoulder 2<sup>b</sup> of the buckle-tongue may be 115 omitted, as its purpose is subserved by such resilient hooks, which are strong enough to counteract the rigidity of the strap tending to disengage them. When the strap is fastened by the buckle and it is desired to re- 120 lease the same, it may be accomplished by first withdrawing the free end of the said strap from engagement with the buckle-tongue in the usual manner, whereupon the unfastening may be fully completed by disengaging the 125 hooks of the member A from the member B without the necessity of drawing the free end of the strap entirely through the buckle.

It will be noted that the buckle-tongue member and buckle-tongue check member form- 130

ing the component or complementary parts of the separable buckle are engaged and disengaged by a relative movement of the parts in a direction parallel to each other and that by 5 such construction, as well as by the shoulder upon the buckle-tongue, accidental disengagement of the hook-and-bar connection is prevented, such accidental disengaging tendency entailing a substantial tightening of the at-10 tached strap, which is manifestly impossible when the fastening is in use. By connecting the parts of the separable buckle by a relative movement in a direction parallel to each other the parts are more readily engaged and dis-15 engaged than is the case when such attaching and disconnecting operations are performed in a direction transversely thereof, and the interference of contiguous portions of the attached strap or belt is avoided.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is-

1. In a separable buckle, the combination with a tongue member provided with a bar, of 25 a tongue check member provided with hooks and having a slot extending transversely therethrough, said hooks and said bar being adapted to be engaged and disengaged by a relative movement in a direction parallel to said tongue 30 check member.

2. In a separable buckle, the combination with a tongue member having a shoulder on the tongue thereof, of a tongue check member, and means for detachably connecting said

35 members.

3. In a separable buckle, the combination with a tongue member comprising a tongue and a bar, of a tongue check member, means for detachably connecting said members, and means on the tongue of said tongue check 40 member for preventing accidental disengagement of said members.

4. In a separable buckle, the combination with a tongue member comprising a tongue portion and a headed bar, of a tongue check 45 member provided with hooks engaging the bar and having a slot extending transversely

therethrough.

5. A separable buckle comprising detachably-connected complementary members one 5° of which is a tongue check member having side bars, end bars, an intermediate bar and hooks and the other of which is a tongue member provided with a bar detachably engaging the hooks.

6. In a separable buckle, the combination with a tongue member, of a tongue check member provided with hooks on the under side thereof, one of said members being provided with a keeper for the free end of a 60 strap or the like, and the keeper having means adapted to engage said hooks for detachably connecting said members.

In testimony whereof I affix my signature, in presence of two witnesses, this 28th day of 65

November, 1904.

WILLIAM L. DUDLEY.

Witnesses:

Frederick W. Moore, J. H. Kirkland.