(No Model.)

J. R. MACMILLAN.

SUSPENDER BUCKLE.

No. 422,088. Patented Feb. 25, 1890.

Fig. 1.

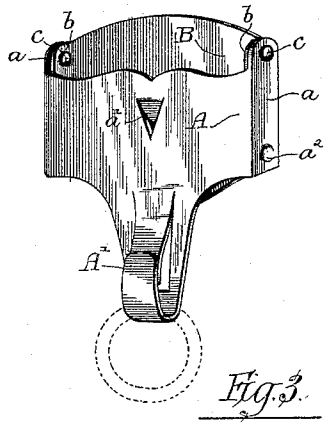


Fig. 2.

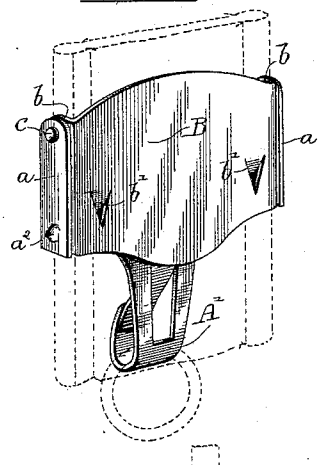


Fig. 3.

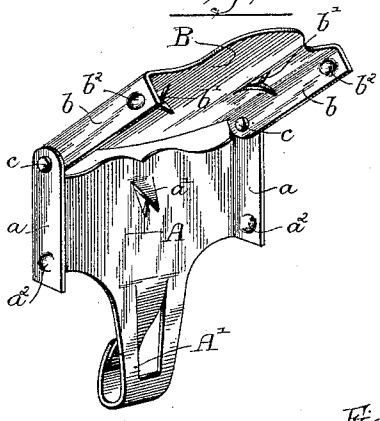


Fig. 4.

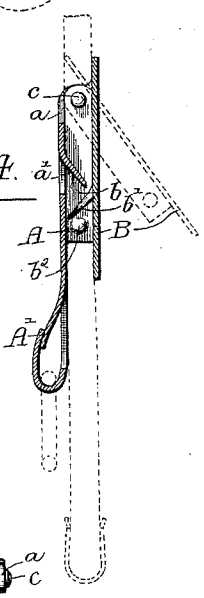
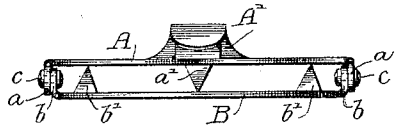


Fig. 5.



Witnesses:-
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UNITED STATES PATENT OFFICE.

JAMES R. MACMILLAN, OF CHICAGO, ILLINOIS.

SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 422,088, dated February 25, 1890.

Application filed January 24, 1889. Serial No. 297,418. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. MACMILLAN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Suspender-Buckles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a novel buckle or clasp more particularly intended for adjustably connecting the lower straps of a suspender with the main strap thereof; and it consists in the matters hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of a buckle embodying my invention as seen from the front side. Fig. 2 is a perspective view of the same as seen from the rear. Fig. 3 illustrates the buckle when open and disengaged from the suspender-strap. Fig. 4 is a central vertical section of the same. Fig. 5 is a plan or end elevation of the buckle.

The buckle comprises as its principal parts two plates A and B, one of which A has attached to it a loop A′, by which it is connected with the lower straps of the suspender. The plates A and B constitute a clasp adapted for adjustable connection with the upper strap of the suspender. The plate A is provided with two inwardly-turned flanges *a a* at its side margins, and the plate B with similar flanges *b b*. The plates are connected with each other by pivots *c c*, passing through the upper ends of the said flanges. The plate A is provided with one or more inwardly and downwardly extended sharpened prongs *a′*, and the plate B with similar inwardly and downwardly extending sharpened prongs *b′ b′*. These prongs are so arranged that when the plates are closed together or brought parallel with each other, as shown in Figs. 1, 2, 4, and 5, the prongs penetrate the web or strap inserted between the plates, so that when the strap is drawn upwardly the prongs pass into or through the strap, and by their opposite inclination tend to draw the opposite plates toward each other. It follows that after the plates have been closed on the strap and the prongs engaged with said strap, in the manner described, the parts will remain in engagement, and upward strain upon the strap will tend to hold the plates close together and carry the prongs farther into the strap. It will of course be obvious, however, that if the buckle is pushed upwardly upon the strap the prongs will become disengaged from the same and allow the buckle to slide easily upward along the strap, thereby enabling the suspender to be easily shortened or tightened. To lower the buckle or lengthen the suspender, it is of course necessary to open or separate the plates A and B by the hands, so as to free the prongs from the strap before the buckle can be slid down upon the said strap.

The prongs *a′* and *b′* are herein shown as struck from the sheet metal of which the plates are composed. This construction is obviously a cheap and convenient one, but is not essential, inasmuch as the said prongs may be otherwise formed upon or attached to the said plates. At its upper margin the plate A is cut away or terminated some distance below the pivots *c c*, in order to prevent the upper edges of the plates binding upon the strap when the plates are opened or spread apart, as indicated in dotted lines in Fig. 4, it being entirely obvious that by shortening one of said plates at its upper edge, in the manner described, a slot or opening is left for the free passage of the strap when the plates are opened or at an angle with each other, as clearly shown in the drawings.

It may sometimes be found desirable to provide a means for holding the plates together to prevent their too easy separation after they are closed upon the strap; and to this end I have provided interlocking projections and recesses upon the ends of the flanges *a b*, remote from the pivots *c*, such projections and depressions being arranged to engage with each other by the springing or yielding of the flanges themselves, the parts of the buckle, in case this construction is used, being made of thin brass or other metal having sufficient resiliency to allow the necessary yielding of the flanges.

In the particular construction illustrated in the drawings the flanges *b* are provided with projections b^2 b^2 upon their outer surfaces, formed by bending or striking out the metal

from the inner side of the flanges, while the flanges *a* are provided with depressions a^2 a^2, similarly formed by bending or striking out the metal of which they are composed. It will of course be understood that interlocking recesses and projections adapted for engagement by the springing or resiliency of the parts of the buckle may be made in a great variety of different forms or shapes; and I do not therefore wish to be limited to a construction in this respect of the particular kind herein shown.

I claim as my invention—

1. A buckle comprising two plates provided with inwardly-bent marginal flanges and having inwardly-extending inclined prongs, pivots for uniting the plates inserted through said flanges, one of said plates being provided with an eye or loop for the attachment of the buckle to a strap or other article, substantially as described.

2. A buckle consisting of two plates provided with inwardly-bent flanges, pivots connecting the said plates inserted through said flanges, said plates being provided with inwardly-extending inclined prongs, and the flanges being provided in their parts remote from the pivots with interlocking projections and recesses, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

JAMES R. MACMILLAN.

Witnesses:

C. CLARENCE POOLE,

TAYLOR E. BROWN.