

H. KERNGOOD.
SLIDING TONGUE BUCKLE.
APPLICATION FILED OCT. 19, 1910.

987,576.

Patented Mar. 21, 1911.

Fig. 1.

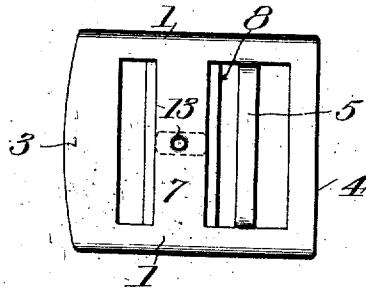


Fig. 2.

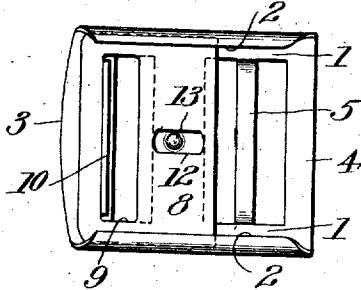


Fig. 3.

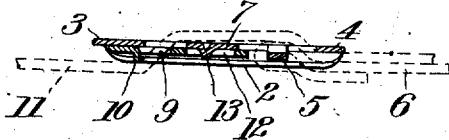
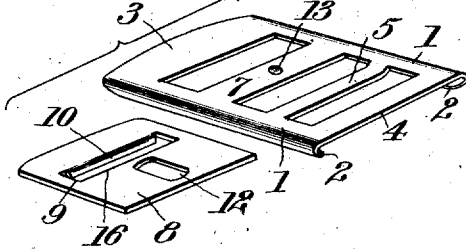


Fig. 4.



Witnesses
C. Walker.
Lillie M. Perry.

Fig. 5.

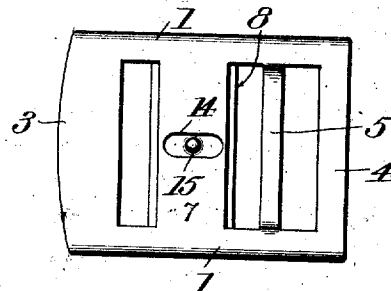


Fig. 6.

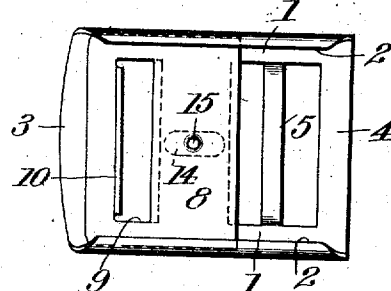


Fig. 7.

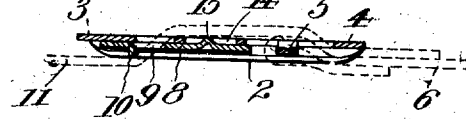
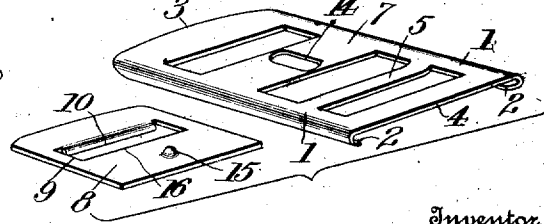


Fig. 8.



Inventor
Herman Kerngood
Wm. H. Luedel
Attorney

UNITED STATES PATENT OFFICE.

HERMAN KERNGOOD, OF BALTIMORE, MARYLAND, ASSIGNOR TO ALMA MANUFACTURING COMPANY OF BALTIMORE CITY, OF BALTIMORE, MARYLAND, A CORPORATION OF MARYLAND.

SLIDING-TONGUE BUCKLE.

987,576.

Specification of Letters Patent.

Patented Mar. 21, 1911.

Application filed October 19, 1910. Serial No. 587,956.

To all whom it may concern:

Be it known that I, HERMAN KERNGOOD, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented a certain new and useful Improvement in Sliding-Tongue Buckles, of which the following is a full, clear, and exact description.

The object of this invention is to provide a substantially flat buckle, no part of which projects beyond the top and bottom planes and sides of the buckle, and in which a sliding tongue, instead of a rigid or pivoted tongue or lever, is used for engaging and holding a strap end in adjusted position.

The invention consists of a buckle having sides which form guideways and supports for a sliding tongue, the tongue being further connected with the frame by a slot and boss connection, which, in addition, serves to limit the sliding movement of the tongue with relation to the frame, all as hereinafter more fully set forth and finally claimed.

In the accompanying drawings, illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a top plan view, Fig. 2 is a bottom plan view, Fig. 3 is a longitudinal section, and Fig. 4 is a perspective view, parts detached, illustrating one form of the invention in which the slot is in the sliding tongue and the boss on the cross-bar of the frame. Fig. 5 is a top plan view, Fig. 6 is a bottom plan view, Fig. 7 is a longitudinal section and Fig. 8 is a perspective view, parts detached, illustrating another form of the invention in which the slot is in the cross-bar of the frame and the boss is on the sliding tongue. In Figs. 3 and 7 the strap ends are shown by dotted lines.

In both forms of the invention illustrated respectively in Figs. 1 to 4 and Figs. 5 to 8, the frame and the sliding tongue are of essentially the same construction, excepting in the matter of the location of the slot and boss, as already indicated.

The frame comprises side bars 1, the edges 2 of which are turned down and in to form guideways and supports for the sliding tongue, end bars 3 and 4, a depressed cross-bar 5, to receive the looped end of the attaching strap 6, as indicated by dotted lines in Figs. 3 and 7, and a relatively wide cross-bar 7 located in the plane of the face of the buckle frame.

As shown in Figs. 4 and 8, the sliding tongue 8 is provided with a cross slot 9, one edge of which is formed with a lip 10, which serves as a finger-hold in operating the slide, and also serves to put a bight in the strap end 11. As shown in Figs. 1 to 4 the sliding tongue may have a longitudinal slot 12. The sliding tongue is inserted in the guideways formed by the turned down sides of the frame so as to be capable of a longitudinal movement in the frame, and in order to prevent the escape of the tongue and to limit its movement, a boss 13 is struck down from the face of the cross-bar 7 so as to project into the slot 12 of the tongue. Or, as shown in Figs. 5 to 8, the cross-bar 4 may be provided with a slot 14 running lengthwise of the frame, and the sliding tongue may have formed in it the boss 15, which enters the slot 14 after the tongue has been put in place in the frame.

The frame is made, usually of soft steel, struck up in dies, case-hardened and highly polished, and where, as in the form shown in Figs. 1 to 4, the boss is on the frame, this boss is made while the metal is still soft and before case-hardening and polishing; and so also, in the form shown in Figs. 5 to 8 the slot 14 is made while the metal is still soft and before case-hardening and polishing. The tongue need not be case-hardened or highly finished and preferably is not, since it is bowed slightly and sprung into the guideways 2 and then flattened out within the frame; or in other words, the hard-finished and polished frame is not distorted in applying the tongue to it. In this way its slot or boss is brought into engagement with the boss or slot, respectively, of the frame. Since the sliding tongue is almost entirely concealed by the frame, the fact that it is not as highly finished as the frame is of no consequence, either from an esthetic or utilitarian view-point.

As will be observed, a sliding tongue buckle is provided in which there are no projections extending beyond the face or back of the buckle or beyond its sides, and a very flat and inconspicuous buckle may be produced. It will be observed that the sliding tongue does not embrace or hug the frame of the buckle for its support and guidance, but travels freely within the turned-down edges of the side bars.

As sufficiently indicated in Figs. 3 and 7, 110

and from the foregoing description, the buckle is applied to the strap end 6 by looping said strap around the depressed cross-bar 5 so as to avoid any considerable hump in the strap within the buckle, and this strap 6 serves to secure the buckle or attach it to a garment. The free strap end 11 is passed up from beneath through the slot 9 in the tongue, and the opening between the end bar 3 and the cross-bar 7, and over such cross-bar and the loop of the strap 6, and then down through the slot or opening between the cross-bar 5 and the end bar 4, and then when opposed strains are placed upon the strap ends, the sliding tongue is drawn toward the end bar 3 and the strap is clamped between the edge 16 of the slot 9 and the adjacent inner edge of the end bar 3. To release the strap, the strain is relieved and the sliding tongue may be moved inwardly on the frame toward its end bar 4, thus permitting the strap end 11 to be re-adjusted or moved. By having the cross-bar 5 depressed below the face of the buckle frame, the loop of the strap end 6 is so far below the level of the face of the buckle frame that when the free end of the strap is passed over this loop and then down below the end bar 4, there is practically no obstruction to such passage, and thus a very flat and inconspicuous result is obtained.

Variations in details of construction and arrangement are within the principle of the invention as particularly pointed out and distinctly claimed in the claims following.

What I claim is:—

1. A sliding tongue buckle, having a thin, flat, frame provided with side bars, end bars connecting said side bars, a depressed cross bar to receive the looped end of a strap, the side bars having their edges turned down

and in to form guideways and support for the sliding tongue, a second cross bar, and a flat sliding tongue arranged in a plane parallel to said second cross-bar and in said guideways and supports and thereby held against escape from the frame in the direction of the face and back of the frame, the second cross-bar and the sliding tongue having an integral boss and slot connection to connect the tongue with the frame and to limit the sliding movement of the tongue with relation to the frame and prevent its escape lengthwise of the frame, the construction being such that there are no projections beyond the face, back and sides of the frame.

2. A sliding tongue buckle, having a hardened and polished frame provided on its sides with guideways and supports for a sliding tongue, and having a cross-bar arranged substantially in the plane of its face, a soft metal sliding tongue adapted to be positioned in said guideways and supports without distorting the frame and thereby connected with the frame against escape in the direction of the face and back of the frame, and an integral boss and slot connection between the tongue and the said cross-bar to limit the movement of the tongue in the direction of the length of the frame and to prevent its escape lengthwise of the frame, the parts of the tongue lying within the dimensions of the frame and the combined frame and tongue presenting a thin, flat, projectionless buckle structure.

In testimony whereof I have hereunto set my hand this 17th day of October A. D. 1910.

HERMAN KERNGOOD.

Witnesses:

A. H. GREENLAW,
NELLIE DOYLE.