C. E. SMITH.

LEVER BUCKLE.

APPLICATION FILED MAR. 25, 1909.

940,829. Patented Nov. 23, 1909.

Fig. 1.

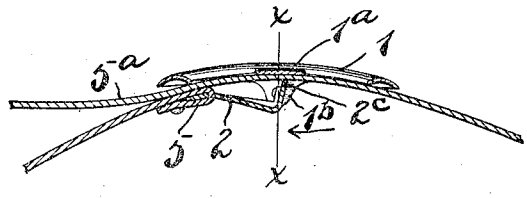


Fig. 2.

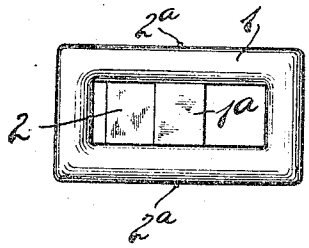


Fig. 3.

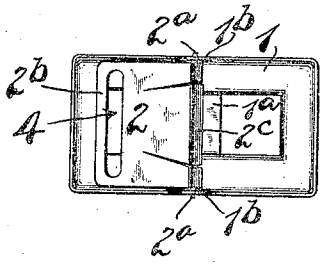


Fig. 4.

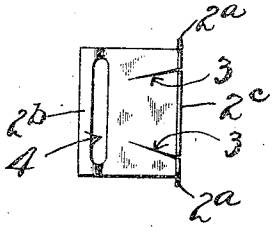
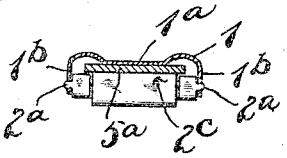


Fig. 5.

Fig. 6.



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LEVER-BUCKLE.

940,829. Specification of Letters Patent. Patented Nov. 23, 1909.

Application filed March 25, 1909. Serial No. 485,688.

To all whom it may concern:

Be it known that I, CLARENCE E. SMITH, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Lever-Buckles, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of buckles used on belts and provides a means whereby straps of varying thicknesses may be held, thus doing away with the unsatisfactory and expensive plan of furnishing special buckles to suit each particular case.

In the accompanying drawings, I have illustrated my invention in connection with a buckle of the cam lever type, and in said drawings, Figure 1 is a longitudinal section of the buckle showing the strap connected therewith and in operative position. Fig. 2 is a front elevation of the buckle with the strap detached. Fig. 3 is a rear elevation. Fig. 4 is a detailed view of the cam lever. Fig. 5 is an edge elevation of the same detail. Fig. 6 is a cross section of the frame on the line X—X Fig. 1, looking in the direction of the arrow, and showing the cam lever in end elevation.

1 represents the frame or body of the buckle, the same being of any suitable shape and capable of any desired ornamentation, this being the exposed part of the buckle. In the particular form shown, the frame 1 is of rectangular outline and is provided with the intermediate cross-bar 1^a.

2 is the cam lever. This cam lever is suitably hinged to the back of the frame. In the particular form shown, pivot lugs 2^a are provided at opposite sides of the cam lever, said lugs being arranged to take into perforated ears 1^b—1^b at the back of the buckle frame 1. The cam lever may be struck up from sheet metal and is bent into angular form, as best seen in Fig. 5, to provide the tail portion 2^b and the gripping portion 2^c.

3—3 are slits formed in the forward part of the cam lever, said slits entering at each end of the gripping edge 2^c.

4 is a transverse slot at the rear operating end of the cam lever, which is preferably provided whereby one end 5 of a belt may be permanently secured thereto.

Having thus described in a general way the preferred form of my invention, the operation will be readily seen. When it is desired to fasten the belt, the free end 5^a of the belt is passed through the space between the cross bar 1^a and the cam lever 2, the latter being swung back in such a position as to afford free clearance between the gripping edge of said lever and the under side of said cross-bar 1^a. The free end 5^a of the belt is likewise passed between the rear of the frame and the end 5 of the belt. As soon as the desired tension has been applied, the lever 2 is swung into the position indicated in Fig. 1, wherein the clamping edge 2^c will pinch the belt between it and the inside of the cross-bar 1^a. Inasmuch as the clamping edge 2^c is carried by a yielding portion of the cam lever between the pivots 2^a—2^a, it is clear that belts of varying thickness may be employed. The clamping edge may be plain, as shown, or of the well-known serrated form. The pull of the end 5 of the belt serves to keep the clamping edge of the cam lever in operative position, preventing accidental disengagement. The back of the cross-bar 1^a may be smooth, as shown, or may be roughened or provided with well-known serrations, if desired. The cam lever should be made of sufficiently rigid material to properly clamp and hold the belt. The elasticity of the clamping edge may be varied by varying the depth of the slits 3.

The bar 1^a operates as a strap clamping abutment to cooperate with the clamping portion 2^c of the cam lever.

What I claim is:

1. In a buckle of the cam lever type, a frame, a pivotally mounted cam lever having slits therein, and a yielding strap clamp-

ing tongue between said slits and substantially in line with the axis of rotation of said pivotally mounted cam lever.

2. In a buckle of the cam lever type, a frame having a strap clamping abutment, a lever having slits therein and pivoted to said frame, a yielding strap clamping portion between said slits coöperating with said abutment substantially as described.

3. In a buckle of the character described, a sheet metal cam lever having slits therein and having a yielding strap clamping portion between said slits.

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