

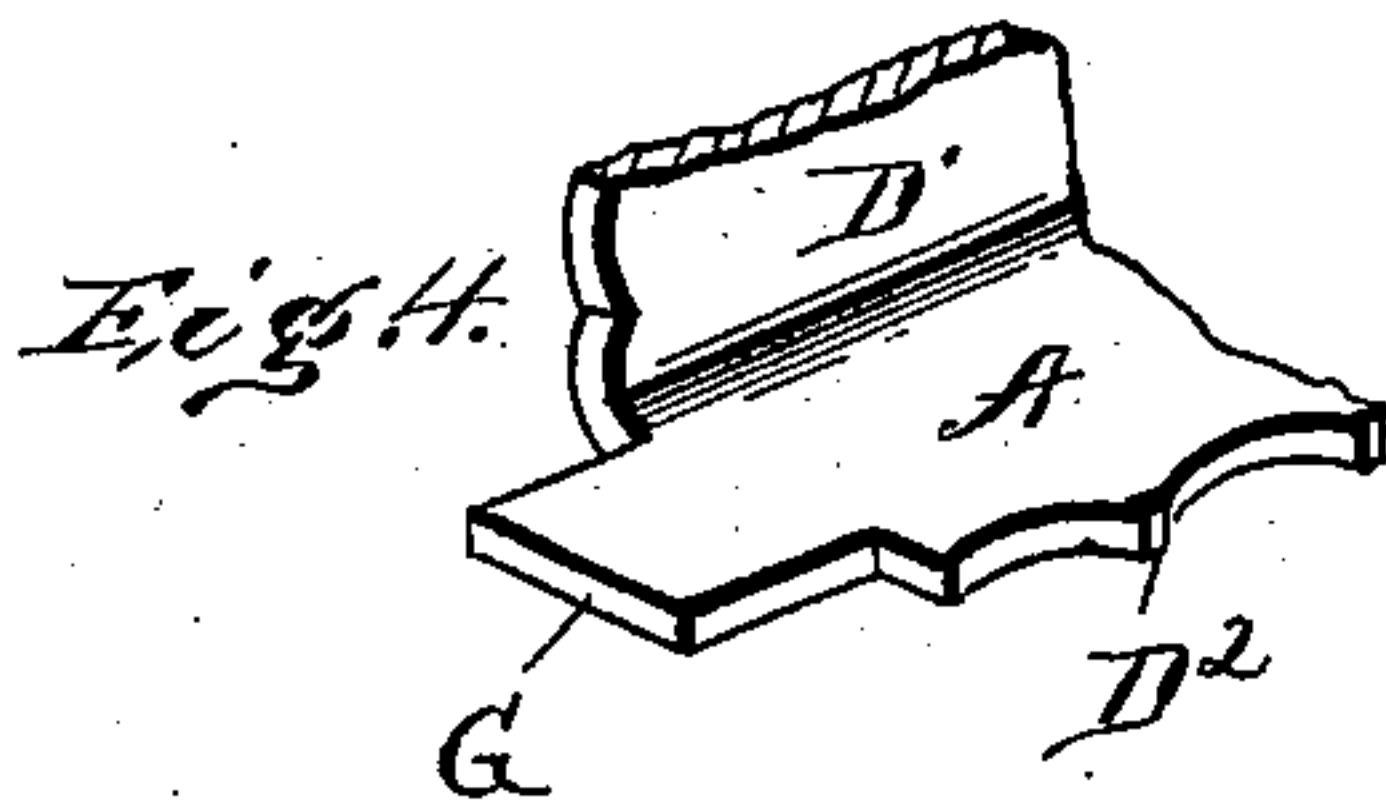
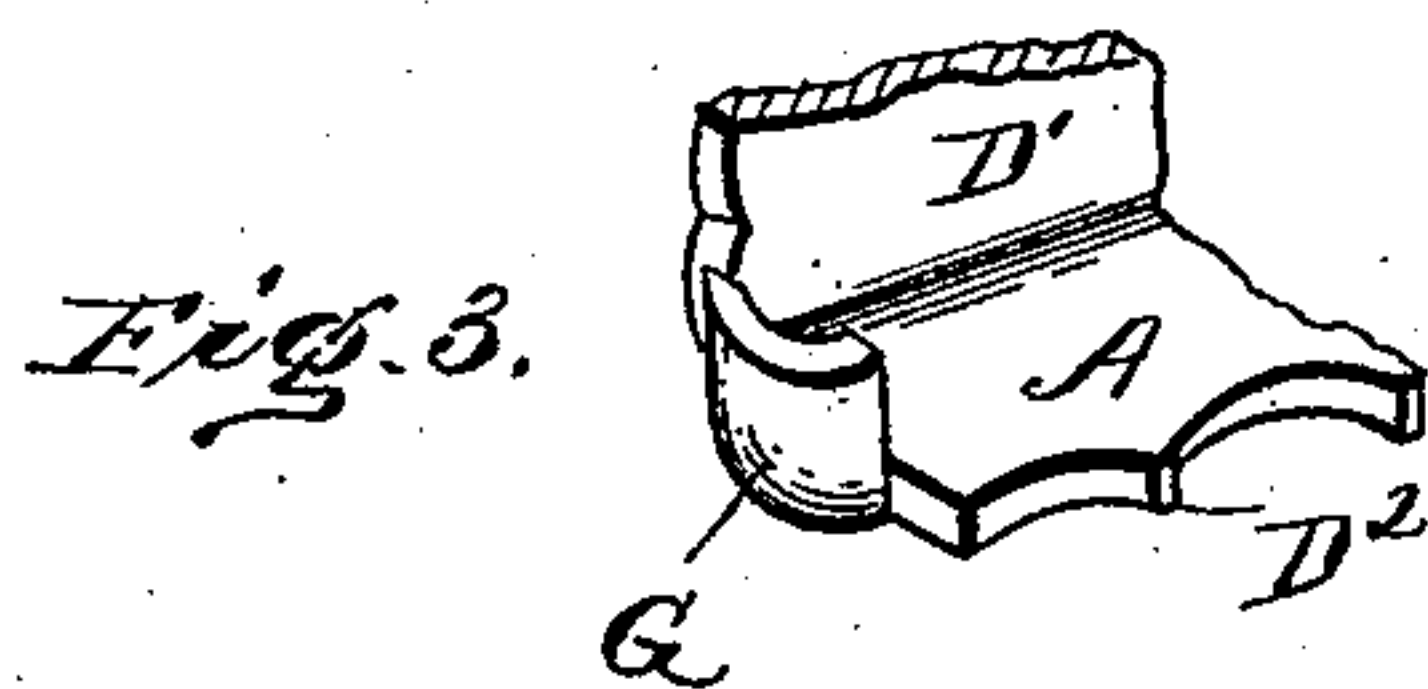
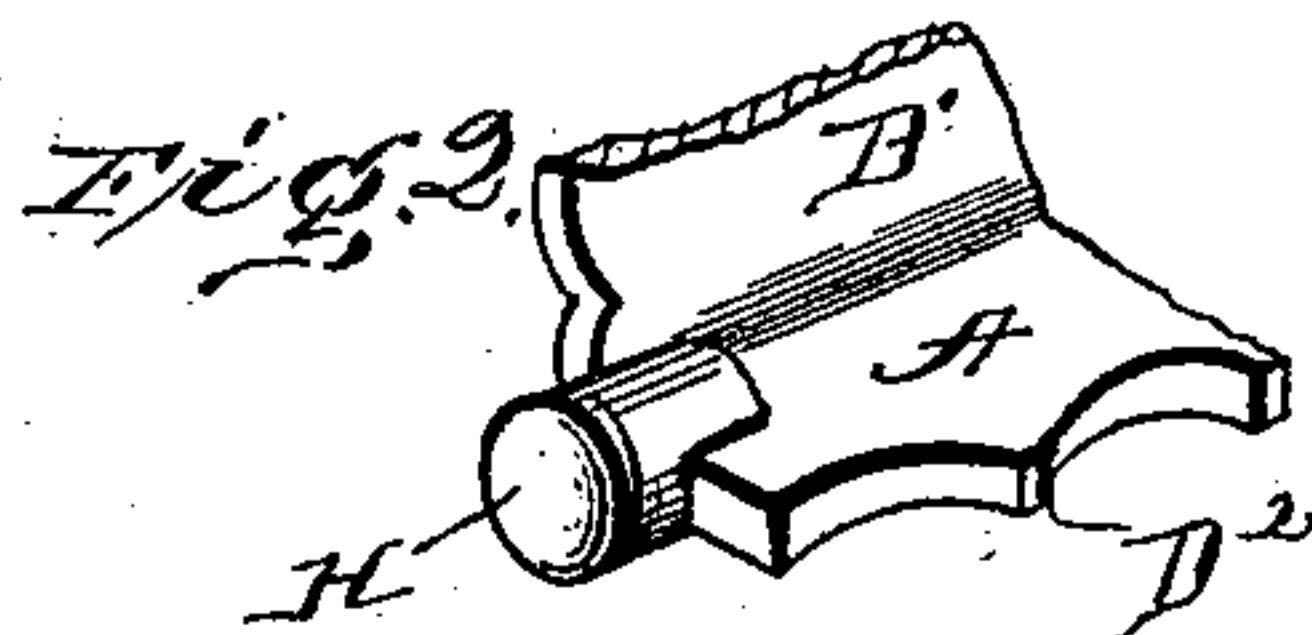
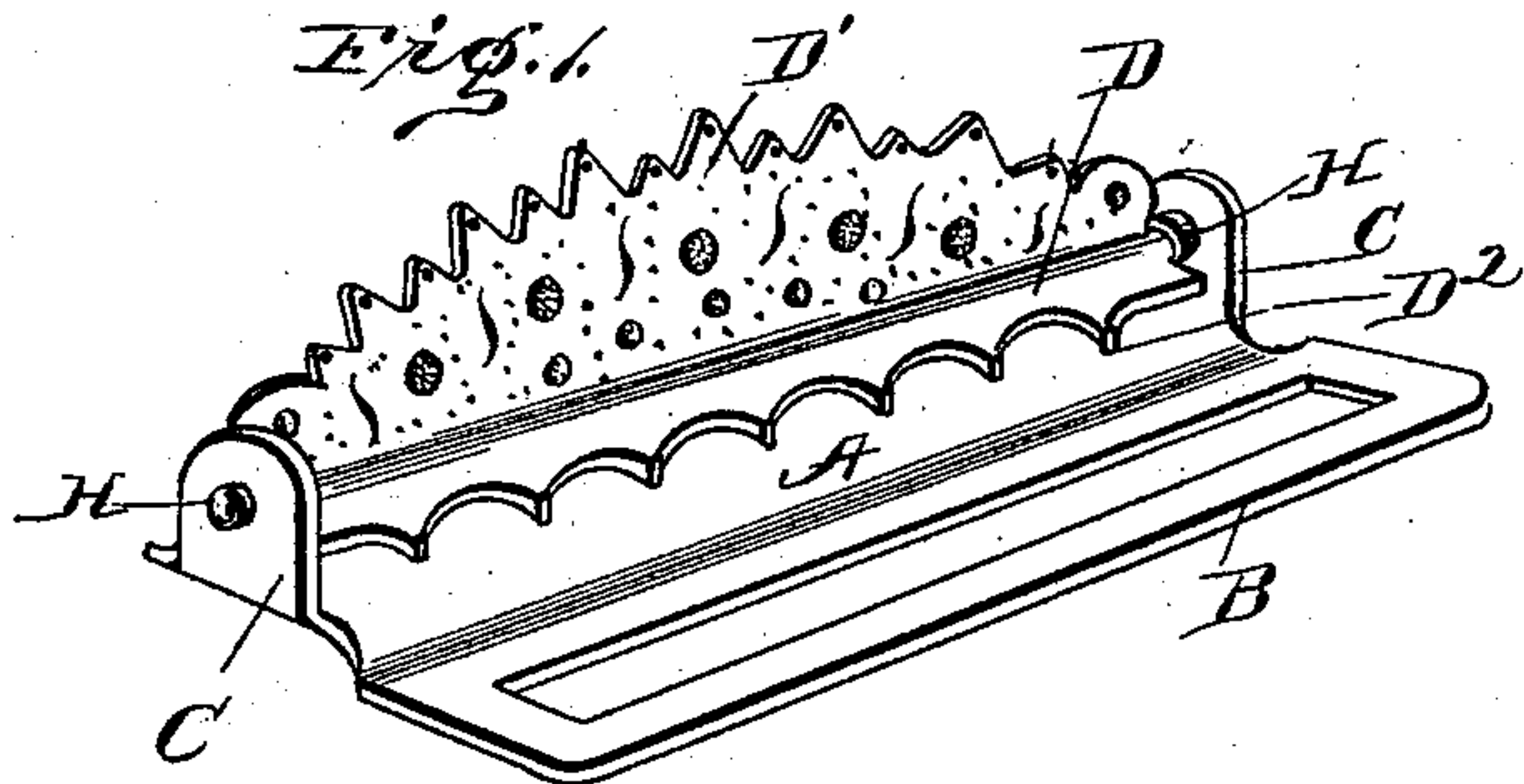
(No Model.)

G. E. ADAMS.

MANUFACTURE OF SHEET METAL SUSPENDER BUCKLES.

No. 528,625.

Patented Nov. 6, 1894.



Witnesses:  
J. M. Fowler Jr.  
Aly. J. Stuart.

Inventor:  
George E. Adams.  
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# UNITED STATES PATENT OFFICE.

GEORGE E. ADAMS, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE  
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## MANUFACTURE OF SHEET-METAL SUSPENDER-BUCKLES.

SPECIFICATION forming part of Letters Patent No. 528,625, dated November 6, 1894.

Application filed May 14, 1894. Serial No. 511,204. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE E. ADAMS, of New Britain, in the county of Hartford and State of Connecticut, have invented certain  
5 new and useful Improvements in the Manufacture of Sheet-Metal Suspender-Buckles; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying  
10 drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to improvements in the manufacture of buckles which are struck up from sheet metal and designed more particularly for personal wear, the objects of the  
15 invention being to provide an improved method of forming the pivots of the locking lever, whereby a smoothly operating and strong device is produced which will not  
20 catch or wear the clothing.

Referring to the accompanying drawings: Figure 1 is a perspective view of a buckle embodying my invention. Fig. 2 is a similar  
25 view of one end of the locking lever. Fig. 3 is a view of the locking lever with the pivots partially formed. Fig. 4 is a similar view before the formation of the pivots are started.

Like letters of reference in the several figures indicate the same parts.

30 In carrying this invention into practice, the style of configuration of the sheet metal body portion of the buckle is quite immaterial and for convenience I have illustrated a plain simple form lettered A in the accompanying  
35 drawings having a cross bar B at the bottom for the attachment of the suspender web and ears C C, at each side turned up at right angles and provided with circular bearings or apertures for the reception of the pivots or  
40 pintles of the locking lever.

The locking lever D which is also struck up of sheet metal preferably has an ornamental front piece D', by means of which it may be operated, and a toothed edge D<sup>2</sup> for  
45 co-operating with, and clamping the fabric against, the body portion to hold the parts in adjusted position. As ordinarily constructed, a simple projection of the thickness of the metal constituting the body of the lever is  
50 left at each end thereof, which being passed through the apertures in the ears on the body

portion would constitute the pivotal connection between the two; but this form of pivotal connection is open to many objections and a number of more or less efficient expedients have been devised for overcoming  
55 these objections, among which may be mentioned cap pieces on the lever itself which extend over the ends of the pivots outside of the ears and the ears themselves instead of  
60 being provided with apertures have been formed with bearings struck out from the inside and forming simple projections on the outside. All such arrangements, however, have been objectionable because of the cost  
65 incident to the manufacture, or the assembling of the parts, or to the fact that the clothing of the wearer was liable to be caught or worn. In my present construction, I propose to overcome these difficulties by doubling  
70 back the end of the pivot projections shown at G in Fig. 4 into the form of cylindrical, rounded end, pivots, as shown clearly at H in Fig. 2, which rounded pivots fit accurately into the apertures in the ears, prevent all  
75 looseness or wobbling of the lever and present a smooth, even contour on the outside which cannot catch or wear the clothing of the wearer and which, because of the extended, smooth bearing surfaces will not wear  
80 loose or allow the buckle to become rickety. I prefer to form these cylindrical round ended pivots H by first, striking the metal up to the shape indicated in Fig. 3 and then to the shape indicated in Fig. 2, that is to say, the  
85 metal of the projections at the ends of the lever is first bent into semi-cylindrical shape at right angles to the length of the pivots and is then set down by dies so as to form projections which will constitute the axis of the  
90 lever.

A buckle constructed in accordance with the described invention will present a neater appearance, be stronger because of the additional strength imparted to the pivots, where-  
95 by very much thinner sheet metal may be employed in the manufacture, and when formed, the pivots will not catch or wear the clothing of the wearer.

Having thus described my invention, what I claim as new is—

1. The herein described improvement in

manufacturing sheet metal locking levers for  
buckles for personal wear consisting in strik-  
ing the locking lever up from sheet metal  
with lateral projections G and subsequently  
5 doubling said projections back in the form of  
cylindrical round ended pivots; substantially  
as described.

2. The herein described improvement in  
manufacturing sheet metal locking levers for  
10 buckles for personal wear, consisting in strik-  
ing the locking lever up from sheet metal

with lateral projections, bending said projec-  
tions into semi-cylindrical form at right  
angles to the axis of the lever and finally  
bending the said semi-cylindrical projections 15  
down to form oppositely projecting cylindri-  
cal round ended pivots; substantially as de-  
scribed.

GEORGE E. ADAMS.

Witnesses:

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