W. F. OSBORNE.

Strap-Pulley Support for Suspender-Buckles.

No. 221,856. Patented Nov. 18, 1879.

Fig. 1.

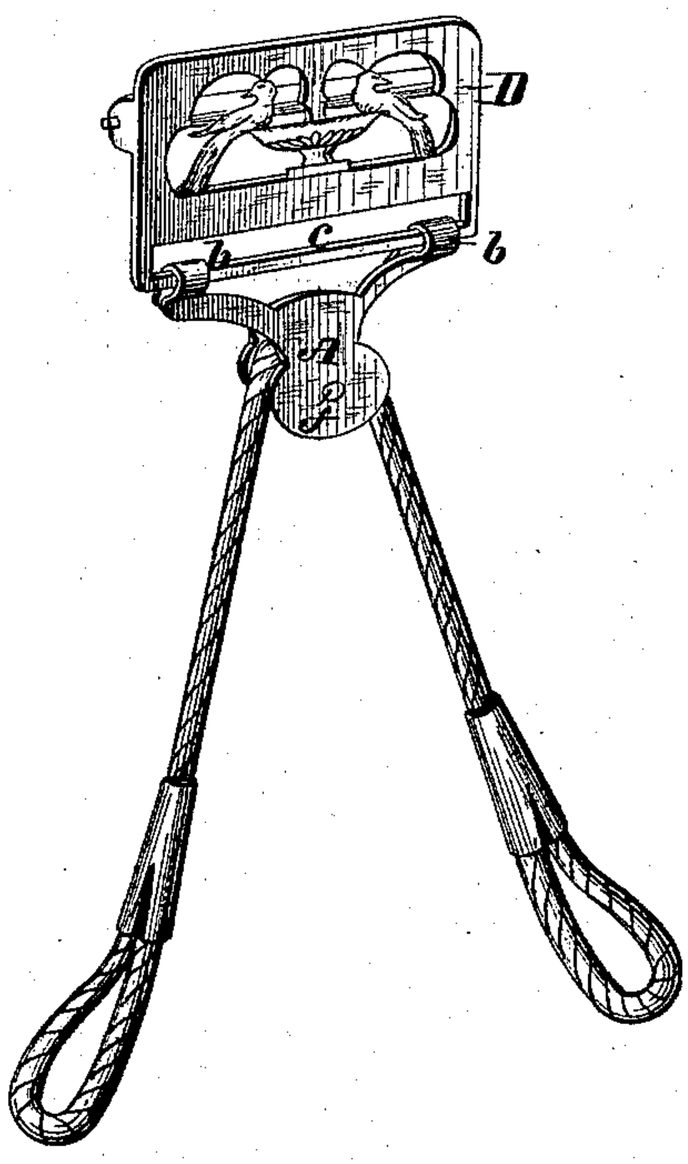


Fig. 2.

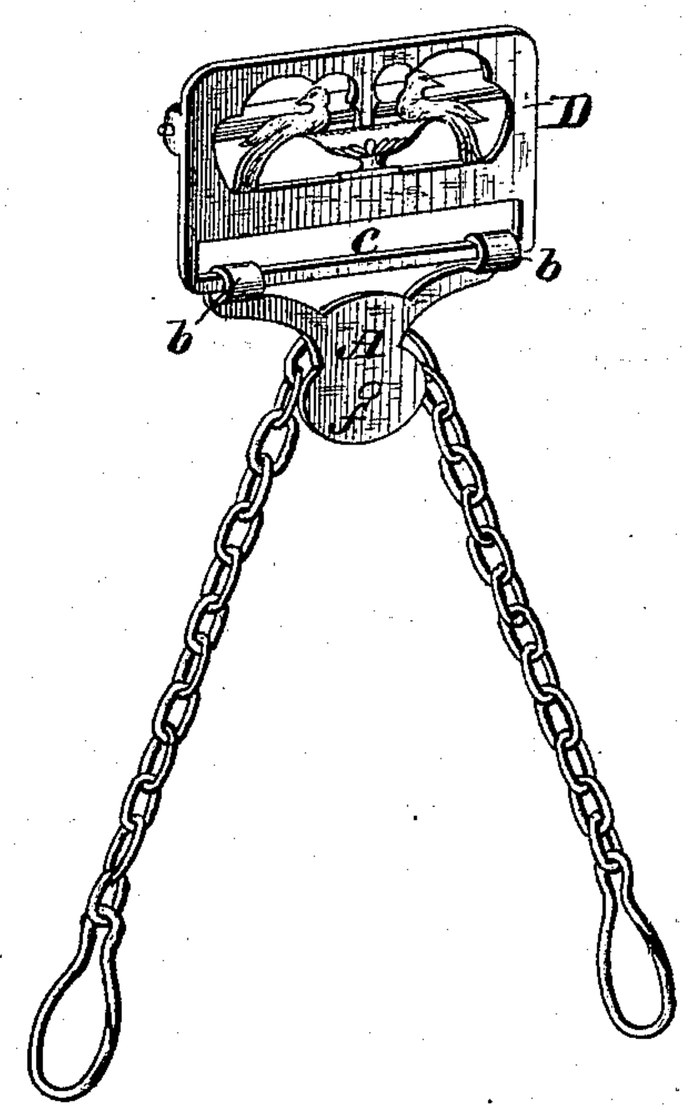


Fig. 3.

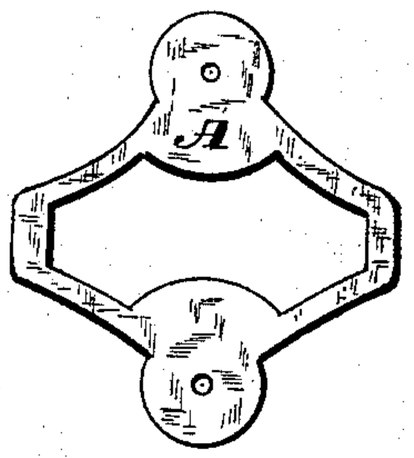
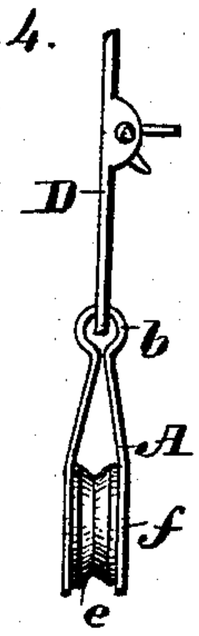


Fig. 4.



Attest

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UNITED STATES PATENT OFFICE.

WILBUR F. OSBORNE, OF ANSONIA, CONNECTICUT.

IMPROVEMENT IN STRAP-PULLEY SUPPORTS FOR SUSPENDER-BUCKLES.

Specification forming part of Letters Patent No. **221,856**, dated November 18, 1879; application filed October 8, 1879.

To all whom it may concern:

Be it known that I, WILBUR F. OSBORNE, of Ansonia, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Strap-Pulley Supports of Suspender-Buckles, of which the following is a specification.

My invention relates to an improvement in the strap-pulley supports of suspender-buckles; and its object is to secure a strong flexible attachment of the said support to the buckles, to reduce the cost, and to increase the facility of manufacture of said supports.

To this end the invention consists in a buckle-pulley support formed of a single piece of sheet metal folded double, having its free ends provided with bearings for a pulley-pivot, and its middle or creased portion formed into one or more tubular bearings, which embrace the lower horizontal or cross bar of a buckle-frame, provided with a top clamping-lever for holding the suspender.

The pulley-supports thus constructed have no soldered or other joints which are liable to give way and open under the strain to which suspenders are subjected. They are formed from blanks cut to a uniform size by a die, are manufactured wholly without the use of heat, and are attached to the buckle without the use of tools, and by a single and very slight manipulation, all of which will be more fully hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view of a suspender-buckle provided with a strap-pulley support according to my invention, showing an ordinary button-hole strap or cord passing over the pulley. Fig. 2 is a similar view, showing a metallic button-hole chain passing over the pulley. Fig. 3 is a view of the blank from which the pulley-support is formed; and Fig. 4 is an edge view of the buckle-pulley support and pulley.

The letter A indicates the pulley-support, formed of a single piece or blank of sheet metal, folded to form tubular bearings *b* at its middle portion to embrace the lower horizontal or cross bar, *c*, of the buckle-frame D. Between the depending and free ends of the support A is journaled a strap-pulley, *e*, the pivot *f* of which has its bearings in said ends.

Being formed of a single piece, the pulley-support is not liable to be broken, as there are no joints or seams to weaken any portion of its structure. It is manufactured without the use of heat, and may be made entirely by automatic machinery. When fully formed, as shown in Fig. 3, it may be attached to the frame, without the use of tools, by simply passing one end through the slot above the lower buckle-bar, so that the support will straddle said bar, which may then be easily sprung into the tubular bearings. These bearings are held closed by the elasticity of the metal, and the bar is thus prevented from escaping; and even should it become released from these bearings by any extraordinary strain, the pulley will still prevent the support from becoming entirely detached from the buckle-frame.

I am aware that a pulley attachment for shoulder-braces has been heretofore constructed of a blank folded at the middle portion and attached at the free ends to the straps or bands of the brace, the pulley being pivoted between the intermediate portion; and that a pulley-support has been formed of a blank bent up to form a recess for the pulley, and formed with a loop at one of its free ends, to be secured to the lower bar of the buckle. The first-mentioned device, however, lacks the necessary flexibility, which can only be secured by the loop attachment, while in the last-mentioned device any strain upon the loop will be liable to force the parts asunder, unless they are united by rivets, solder, or otherwise.

What I claim is—

A buckle-pulley support formed of a single piece of sheet metal folded double, having its free ends provided with bearings for a pulley-pivot, and its middle or creased portion formed into one or more tubular bearings for embracing the lower horizontal bar of a buckle-frame, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

WILBUR F. OSBORNE.

Witnesses:

C. D. CHEESMAN,

FRANKLIN BURTON.