

F. ARMSTRONG.

BUCKLE ATTACHMENTS FOR ELASTIC BANDS OR STRAPS.  
No. 188,330. Patented March 13, 1877.

Fig. 1.

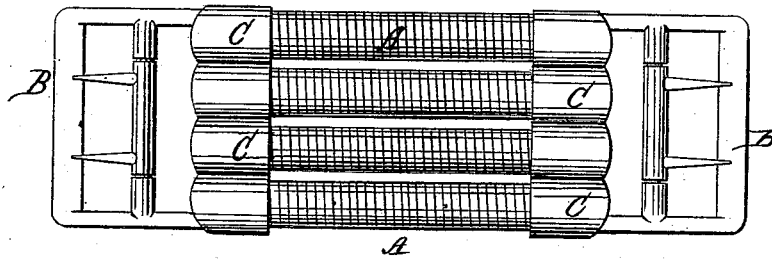


Fig. 2.

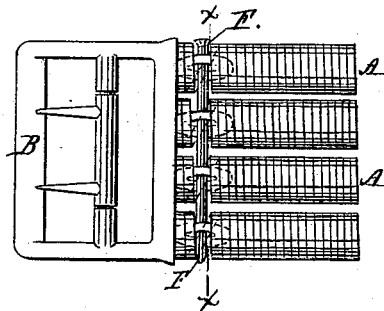
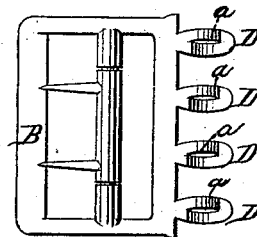


Fig. 3.



Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

FRANK ARMSTRONG, OF BRIDGEPORT, CONNECTICUT.

## IMPROVEMENT IN BUCKLE ATTACHMENTS FOR ELASTIC BANDS OR STRAPS.

Specification forming part of Letters Patent No. 158,330, dated March 13, 1877; application filed February 9, 1877.

*To all whom it may concern:*

Be it known that I, FRANK ARMSTRONG, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Elastic Adjustable Straps; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to certain improvements in elastic metallic adjusting-straps. It has for its object to provide a simple and durable means of securing the ends of metallic coils forming the straps to the buckles or loops; and consists in forming that portion of the buckle or loop which enters the coils with slots or openings, to receive a securing needle or pin, as will be hereinafter more fully set forth.

Previous to my present invention it has been customary to secure the coils to the buckle or band in one or the other of two ways, either by turning over the ends of the penetrating-shanks to form a hook, and then passing through the same and the coils a securing-pin, as shown in Letters Patent No. 145,160, dated December 2, 1873, or by forming that portion of the buckle or loop which enters the coils with a hook on one edge of each shank, as shown and described in Letters Patent No. 109,737, dated November 29, 1870.

The disadvantage attending the former construction rests in the liability of the hooked ends of the shanks being drawn or straightened out when the band is stretched, resulting in the disconnection of the coils from the loop or buckle, and also the further disadvantage of difficulty and expense of manufacture of the hook-shanks; and the disadvantage of the construction shown and described in the latter Letters Patent consists in the liability of disengagement of the hooks from the coils, resulting, in a measure, from the fact that the hooks are secured directly to only one side of the coils.

My present invention overcomes all of these objections, and renders the connection between the buckle and bands simple, economic, and durable.

To enable others skilled to more readily understand my invention, I will describe the same, referring by letters to the accompanying drawing, in which—

Figure 1 is a plan view of an elastic band, with double buckle secured according to my invention. Fig. 2 is a similar view broken away at or near the center, and with the concealing or finishing cap removed, and exposing the method of securing the parts together. Fig. 3 is a vertical section at the line *x x* of Fig. 1; and Fig. 4 is a plan view of the buckle, showing more fully the entering-shanks by which the same is secured to the coils.

Similar letters indicate like parts in the several figures.

A represents the coils forming the elastic band, and B B the buckles or buckle and loop, as desired. C C are metallic finishing-caps, which are pressed in place, forming a finish to and concealment of the connection between the buckles and band. The buckle or loops A are formed with projecting shanks D, equal in number to the number of strands of coiled wire forming the band, and adapted to enter the ends of the same, as clearly shown in Fig. 2 of the drawings. These shanks D are each formed with a slot or hole, *a*, the metal each side of said slot being stretched or distorted in opposite directions, as illustrated by the shade-lines at Fig. 4, and in section at Fig. 3.

This construction may readily be effected at one and the same operation with the stamping out and formation of the buckle-blank.

The shanks D, having been formed with the slots *a* therein, are inserted within the ends of the several strands of coiled wire forming the band, and a pin, F, is passed between the coils of the several strands, and through the slots or eyes *a* in the shanks D, thus firmly securing the parts together, as clearly seen at Fig. 2.

After the parts have been thus secured, the well-known finishing and concealing caps C are secured in position, and the structure is complete.

What I claim as new, and desire to secure by Letters Patent, is—

In elastic adjusting-straps, the buckle or

loop formed with a series of shanks adapted to enter the several stands of coiled wire, said shanks being provided with eyes, and having the surrounding metal distorted in opposite directions, as described, to receive the securing-pin, substantially as set forth.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

FRANK ARMSTRONG. [L. S.]

Witnesses:

JNO. J. BONNER,

ARTHUR L. MCINTIRE.