

(No Model.)

J. A. ADAMSON.
Suspenders.

No. 232,664.

Patented Sept. 28, 1880.

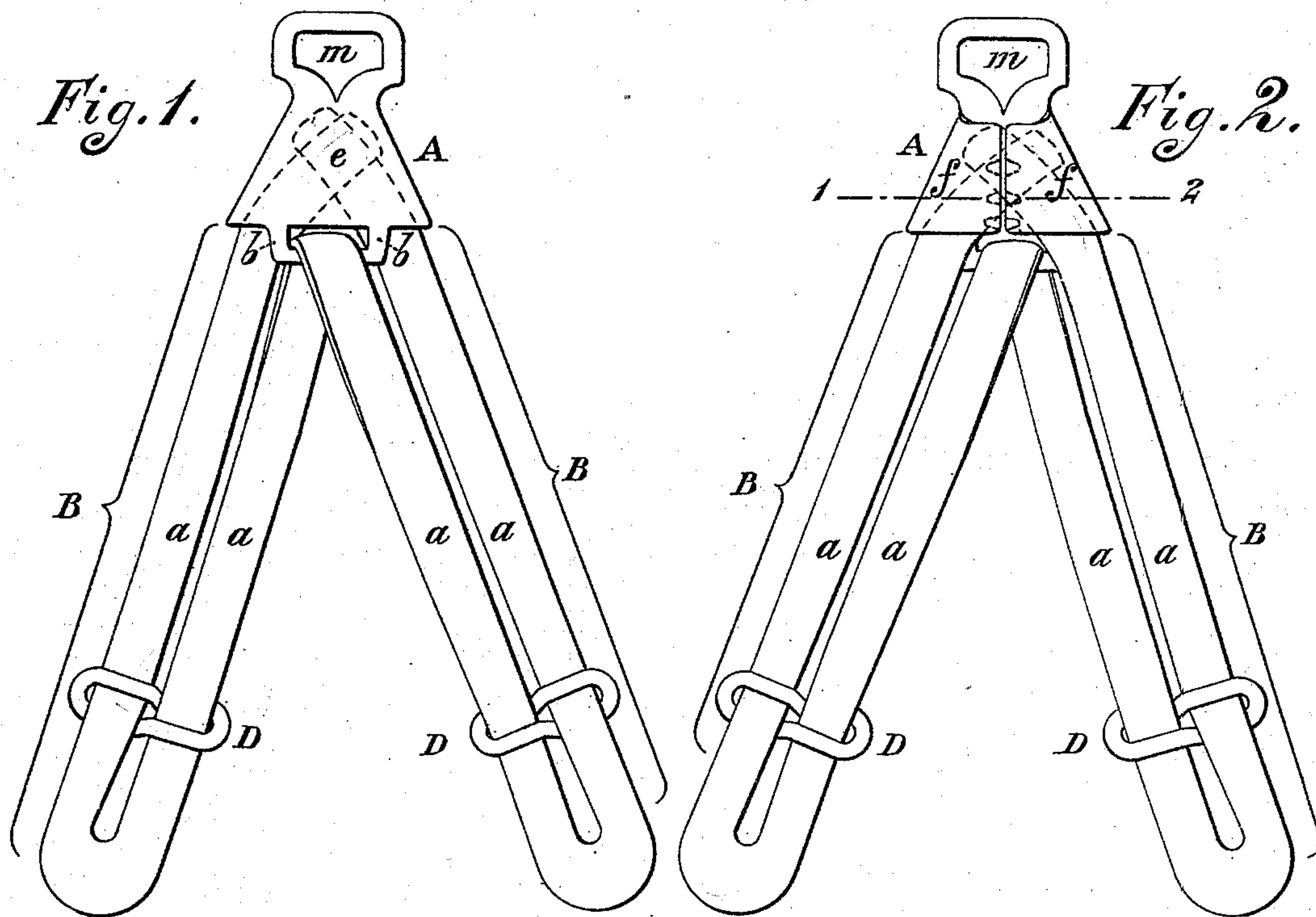


Fig. 3.

Fig. 4.

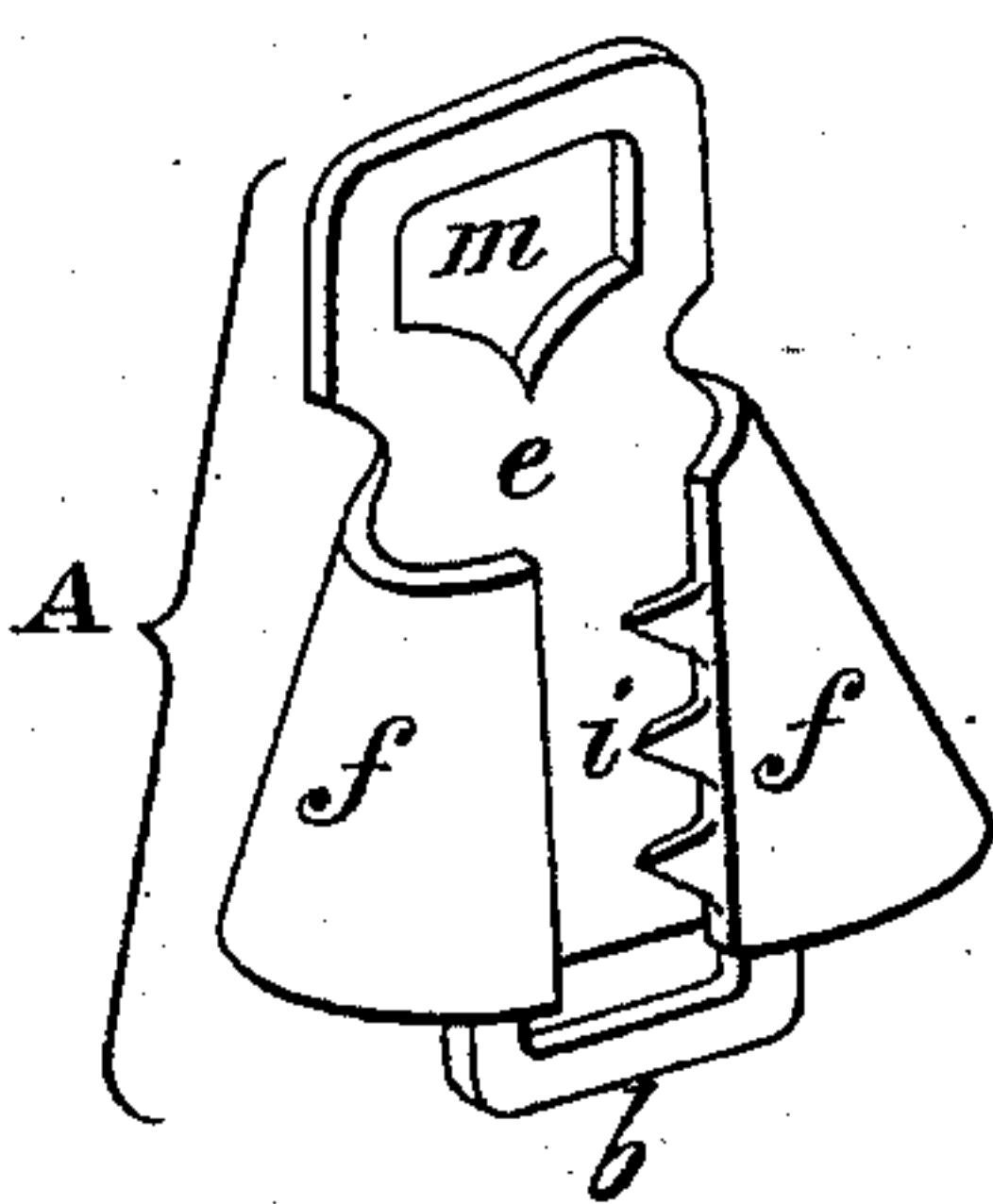
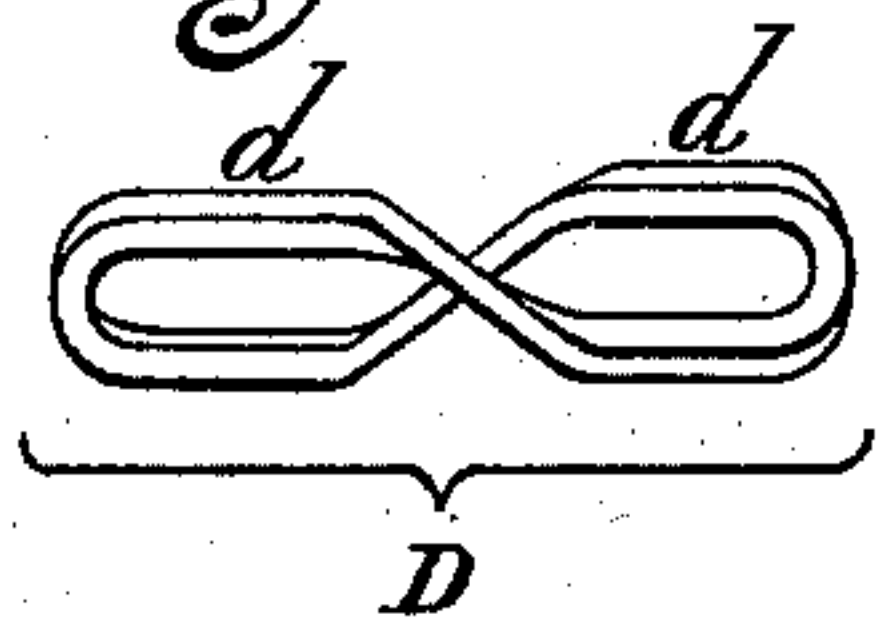


Fig. 5.

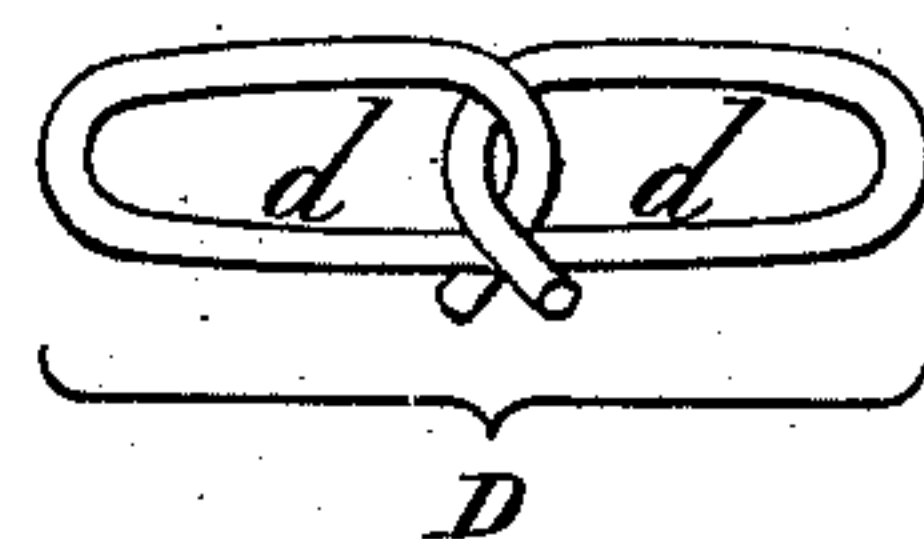
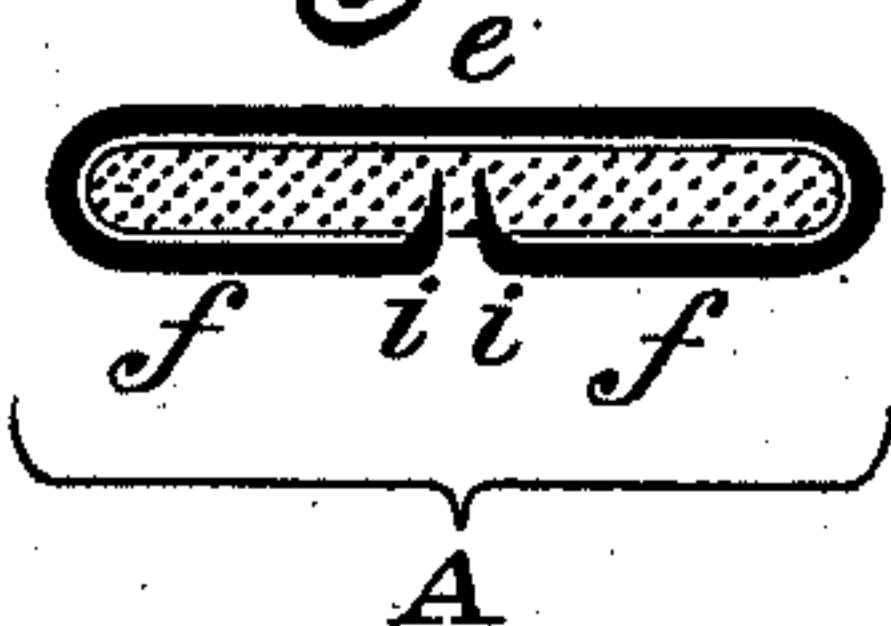


Fig. 6.



Witnesses:
Robert H. Hox.
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UNITED STATES PATENT OFFICE.

J. ARTHUR ADAMSON, OF PHILADELPHIA, PENNSYLVANIA.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 232,664, dated September 28, 1880.

Application filed July 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, J. ARTHUR ADAMSON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented an Improvement in Suspenders, of which the following is a specification.

My invention relates to certain improvements in that class of suspenders in which double waist-straps are combined with a clip on the body of the suspenders in such a manner that the straps can yield to accommodate themselves to the figure or movements of the wearer, my improvements relating to the construction of the clip and waist-straps, and to the means employed for varying the size of the button-hole on each of said waist-straps.

In the accompanying drawings, Figure 1 is a front view of one of the waist-straps of a pair of suspenders and the retaining-clip therefor made according to my invention; Fig. 2, a rear view of the same; Figs. 3, 4, and 5, detached views of parts of the device; and Fig. 6, a section on the line 1 2, Fig. 2.

The waist-strap consists of a flat tape or strip, *a*, of textile fabric, leather, or other suitable material, the opposite ends of which are secured to a clip, *A*, adapted for attachment to the web forming the body of the suspenders, or to the buckle or fastening with which said web is usually provided.

The clip *A* has a loop, *b*, through which the strip *a* is passed, as shown in Figs. 1 and 2, so that each of the portions *B B* of the waist-strap is doubled, the loop at the lower end of each portion *B* being adapted to one of the buttons on the waist of the pantaloons. By this means a compensating strap is formed, the strip *a* being drawn through the loop *b* in one direction or the other, so as to permit the lengthening of one or the other of the portions *B B* of the strap as said portion is subjected to strain, owing to changes in the position of the suspenders, due to the wearer's movements or to the set of the suspenders upon the wearer's shoulders, the strain upon the buttons of the pantaloons being thus equalized and the objections arising from rigid straps overcome.

To the doubled strip *a*, forming each of the portions *B B* of the strap, is adapted a link, *D*, having two loops, *d d*, for receiving said

doubled strip, the loops being such as not to interfere with the movements of the strip in equalizing the strain, as above set forth. By adjusting these links *D* the size of the button-hole formed by the loop of the doubled strip *a* may be enlarged or diminished at pleasure to suit buttons of different sizes, or the link may be adjusted after the loop has been applied to the button, so as to prevent the accidental detaching of the strap therefrom.

The link may be made in different ways. For instance, a simple link may be twisted laterally in the center, as shown in Fig. 4, so as to form the two loops; or it may be made by doubling a strip of wire and twisting the ends, as shown in Fig. 5.

The clip *A*, whereby the ends of the strip *a* are secured, consists of a plate, *e*, having two wings, *f f*, each of which is furnished on the edge with teeth *i*, the plate *e* also having at the lower end the loop *b*, and at the upper end a loop, *m*, whereby it is attached to the suspenders or to the hook of the buckle or clasp thereon. (See Fig. 3.)

The strip *a* having been passed through the loop *b* and folded so as to form the portions *B B*, the ends of the strip are confined to the plate *e* by bending over and pressing down upon the said ends the wings *f f*, the teeth *i* of which penetrate the ends of the strip and effectually prevent the release of the same from the clip, as shown in Fig. 6.

I am aware that compensating waist-straps have been heretofore combined with suspenders; but such straps have been made of cord, and the loop through which the strap plays has also been made of cord, whereas by forming the loop on the clip *A* and independent of the strap I am enabled to make the same of such a shape as to permit the use of a flat strip for the waist-strap, the construction also enabling me to use an anti-friction roller on the loop, if desirable.

I claim as my invention—

1. The combination of a waist-strap consisting of a strip, *a*, folded to form the doubled portions *B B*, with the clip *A*, having a loop formed thereon, said loop being independent of but adapted for receiving the strip *a*, and the ends of the latter being adapted to and confined by the clip *A*, all as set forth.

2. The combination of the doubled strip forming one of the portions B of the waist-strap with a sliding link having two loops, *d d*, as set forth.

5 3. The within-described clip, consisting of a plate, *e*, having an upper loop, *m*, a lower loop, *b*, and wings *ff*, with teeth *i*, as set forth.

4. The combination of the clip A, consisting of a plate, *e*, with loop *b* and toothed wings
10 *ff*, with the waist-strap consisting of a doubled

strip, *a*, adapted to the loop, and having its ends secured by the toothed wings *ff*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

J. ARTHUR ADAMSON.

Witnesses:

JAMES F. TOBIN,
HARRY SMITH.