

G. H. PALMER.
BUCKLE.

No. 174,844.

Patented March 14, 1876.

Fig: 1.

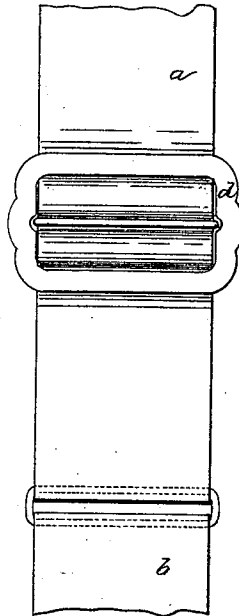


Fig: 3.

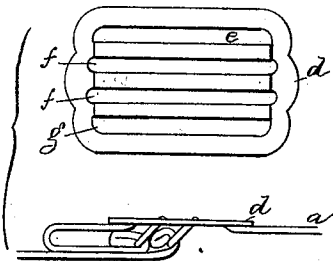


Fig: 2.

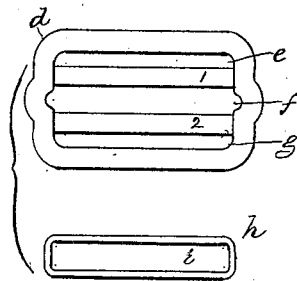


Fig: 4.

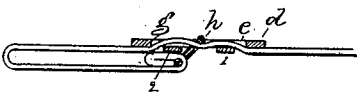


Fig: 5.



Witnesses:

L. H. Batimer.

W. J. Pratt.

Inventor.

George H. Palmer

per Henry Gregory atty

UNITED STATES PATENT OFFICE.

GEORGE H. PALMER, OF SOMERVILLE, MASSACHUSETTS.

IMPROVEMENT IN BUCKLES.

Specification forming part of Letters Patent No. **174,844**, dated March 14, 1876; application filed December 21, 1875.

To all whom it may concern:

Be it known that I, GEORGE H. PALMER, of Somerville, in the county of Middlesex and State of Massachusetts, have invented an Improved Buckle, of which the following is a specification:

This invention relates to buckles for use on suspenders or other straps of webbing; and consists of a slotted frame and a slotted loop, constructed as hereinafter described. The suspender or other strap passes through the slots in the plate and the slot in the loop. The loop extends through a slot in the plate, and to the loop is connected a second strap, as hereinafter set forth.

Figure 1 is a view of a suspender-end with a buckle attached; Fig. 2, a view of the frame and rectangular loop removed; Fig. 3, a modification thereof, showing a double buckle; Fig. 4, a longitudinal section of the buckle-loop and strap; and Fig. 5, an edge view, with the strap folded at its end and not sewed to the bar-loop.

On the drawing, *a* is the main or suspender strap, and *b* the second or auxiliary strap for the usual button-engaging end pieces of the suspender. The frame *d* of the buckle is slotted at *e f g*, and the loop *h* is slotted at *i*, and is of such size and shape as to pass readily through the opening *f*.

In Figs. 1 and 5 the strap *a* is inserted through slot *e* from the under side, then through the opening *i* in the loop *h*, the latter being passed up through the slot *f*; and then the web *a* is passed down through the slot *g*, and the end of the web, folded, as shown in Fig. 5, is passed into the loop *h*, and in this condition strain on strap *b* draws loop *h* and strap *a* down into slot *f*; (see Fig. 4,) biting and holding the same firmly between the bars 1 2; but by drawing the loop *h* up so that its slot *i* is level with the surface of the frame *d*, the web or strap *a* may be easily drawn in either direction through the frame, so as to adjust the length of the suspender.

In some suspenders, instead of connecting the end of the web *a* with the loop *h*, as shown in Fig. 5, I may employ a second strap, connected directly with loop *h*, and at the other end of this second strap I may use a wire loop,

to which I may attach button-pieces; or the loop may be made of a shape to engage a button.

In Fig. 3 I show a frame provided with two center slots, like *f*, and a strap, *a*, passes through slots like *e* and *g*, and through the slots in two loops, *h*, placed in slots *f*, affording additional security, and to permit the attachment and adjustment of an additional strap on a single web.

It will be noticed that the loop *h* is made rectangular in form, and is small enough to readily pass entirely through the slot *f*; and the bars are placed such a distance apart, and the loop is made of such a size with reference to the slot *f* and the thickness of the web, as to hold and nip the web between the two bars on the one side, and the loop on the upper side, the full force of the strain applied to the loop acting at all times, when under strain, on the upper surface of the web across its entire width, and not against the side of the buckle-frame, and the application of the loop to the web in this way creases or bends, and effectually holds the web, and as the strain on the loop is increased the holding power and pressure on the web are correspondingly increased.

With my arrangement the top of the loop is but little above the surface of the buckle-frame and the under side of the loop. The loop, being narrow, does not make an uncomfortable bunch to bear against the person. The frame and loop are struck from sheet metal, or cast or made of wire.

I claim—

The slotted frame *d*, in combination with the rectangular loop, adapted to be applied to a suspender-web, and to engage and press the web between the bars, and to pass entirely through the slot in the frame, and to operate as and for the purpose set forth.

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

GEORGE H. PALMER.

Witnesses:

S. B. KIDDER,

GEO. L. ROBERTS.