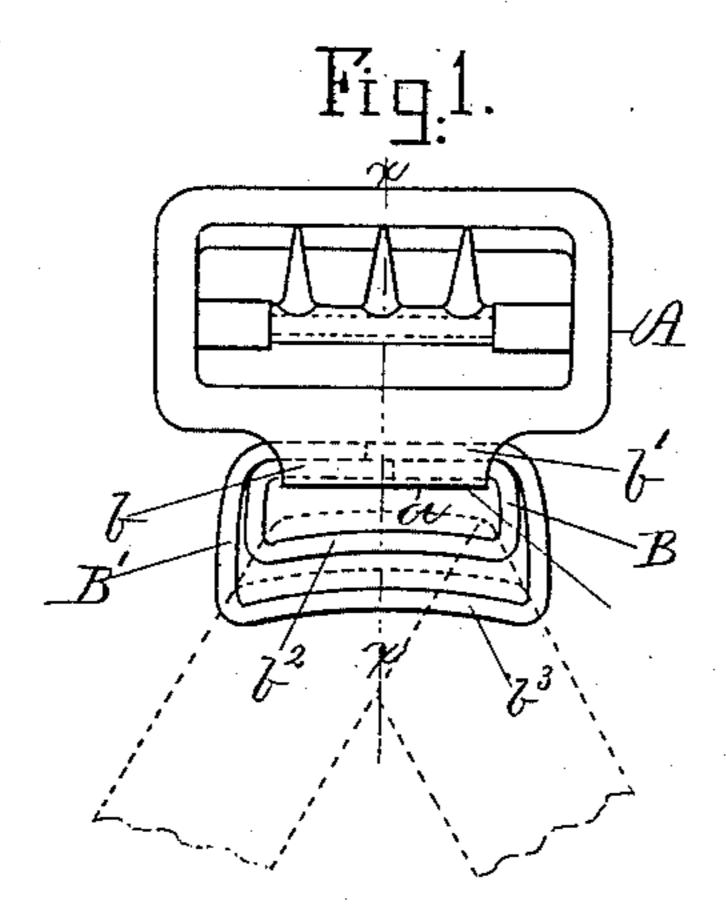
(No Model.)

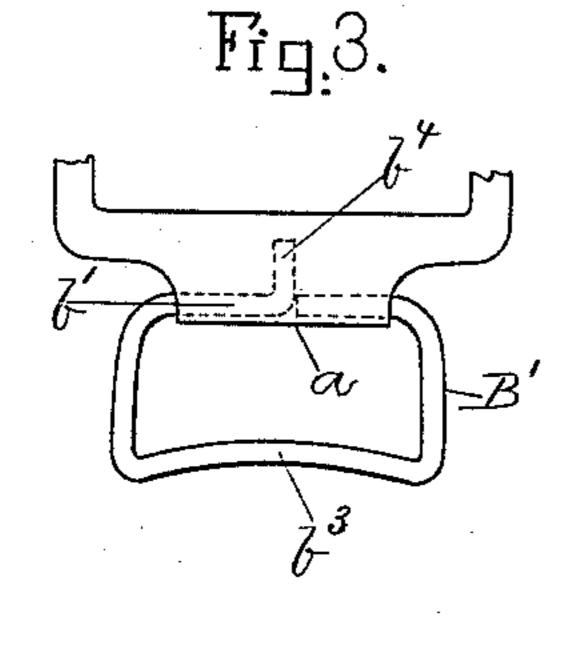
## J. W SMITH.

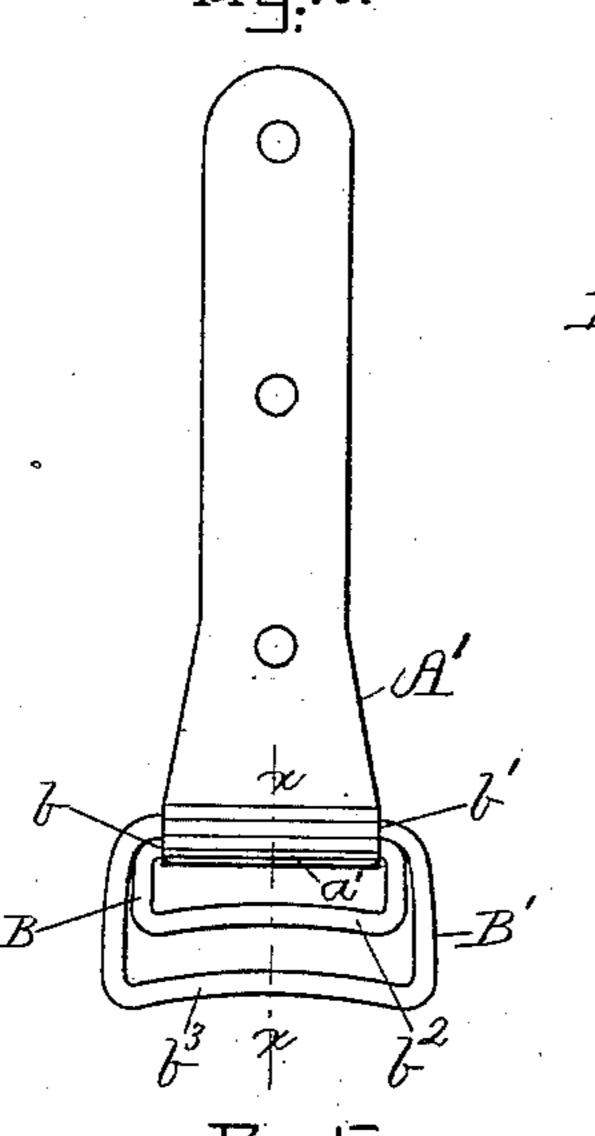
LOOP FOR SUSPENDER ENDS.

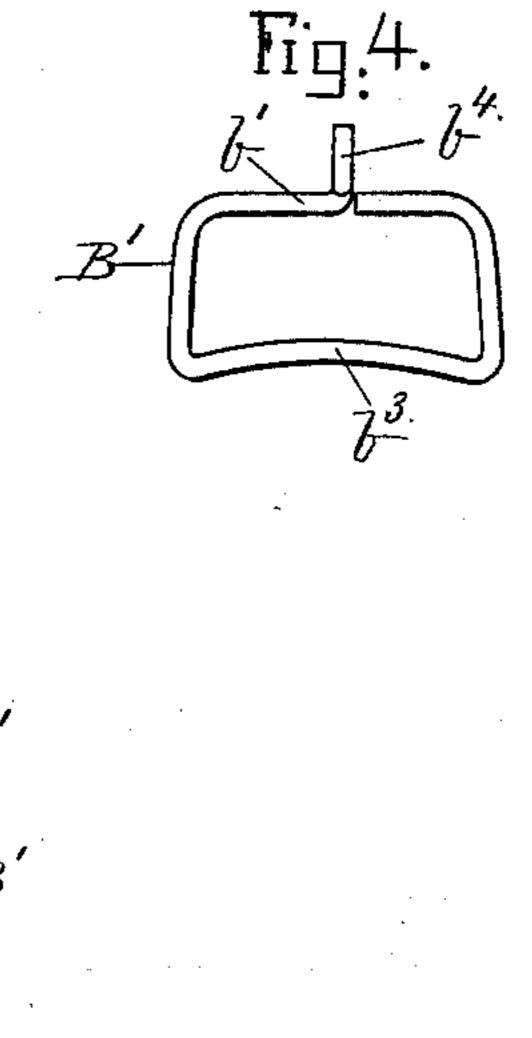
No. 317,231.

Patented May 5, 1885.









Wilgesses. Lawritz M. Möller. John R. Snow. A a 3

Joseph Wmv. Smith by his attorney, J. E. Magnedia

## United States Patent Office.

JOSEPH WILLIAM SMITH, OF NEWTON, MASSACHUSETTS.

## LOOP FOR SUSPENDER-ENDS.

SPECIFICATION forming part of Letters Patent No. 317,231, dated May 5, 1885.

Application filed March 14, 1885. (No model.)

To all whom it may concern:

Beitknown that I, Joseph William Smith, of Newton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improved Loop for Suspender-Ends, of which the following is a specification.

The main feature of my invention consists in a wire loop or a pair of wire loops, each having one of its cross-bars curved inward, and having its other cross-bar, which is formed by bringing together the ends of the short piece of wire forming the loop, covered by a piece of sheet metal, which also covers and connects together the two loops, if a pair be used.

A minor feature of my invention consists in turning up the wire, as fully described below.

In the drawings, Figure 1 shows a buckle with my invention forming a part of it, the suspender-ends being shown in dotted lines. Fig. 2 shows my invention in connection with the clasp shown in my patent of March 19, 1878, No. 201,458. Fig. 3 illustrates the second feature of my invention, and Fig. 4 is a detail of Fig. 3. Fig. 5 is a section on line x x of Figs. 1 and 2, the suspender-end being shown in full lines.

A represents a buckle of any suitable construction, except that one of its cross-bars is formed with a projection, a. This projection is bent around the cross-bars b b' of the loops BB', and thereby connects those loops securely to the buckle.

A' represents a metallic fastening, such as is described in my patent above named, the part a' forming the loop-holder, which constitutes one element of my present invention.

The cross-bars  $b^2 b^3$  of each of the loops B B' are inwardly curved.

- My improved loop is designed to receive 40 suspender-ends, which render over the loops in a well-known manner, and the loops are of wire, because of its smooth rounded surface, and the cross-bar over which the suspender-ends render is inwardly curved, to prevent undue wear on the edges of the straps forming the suspender-ends, the inward curve tending always to keep the edges of each strap out of contact with the end pieces of the loops.

A minor feature of my invention is applicable whether two loops or but one be used with the metal sleeve a or a', and whether the cross-bar of the loop be straight or curved inwardly or outwardly, and consists in bending up one or both ends of the loop, so that the 55 loop will be prevented from turning in the sleeve, which is very desirable in many cases. This is so fully shown in Figs. 3 and 4 as to need no further description, except that I prefer to flatten the bent-up portion  $b^4$ , as it makes 60 a better job.

What I claim as my invention is—

1. The wire loop or loops B B', in combination with a loop - holder of sheet metal, and each loop having its cross - bar  $b^2$  inwardly 65 curved, all substantially as set forth.

2. The metallic loop-holder, in combination with a wire loop or loops having the projection  $b^4$  held by the loop-holder, as set forth.

JOSEPH WM. SMITH.

Witnesses:

W. A. COPELAND, J. R. SNOW.