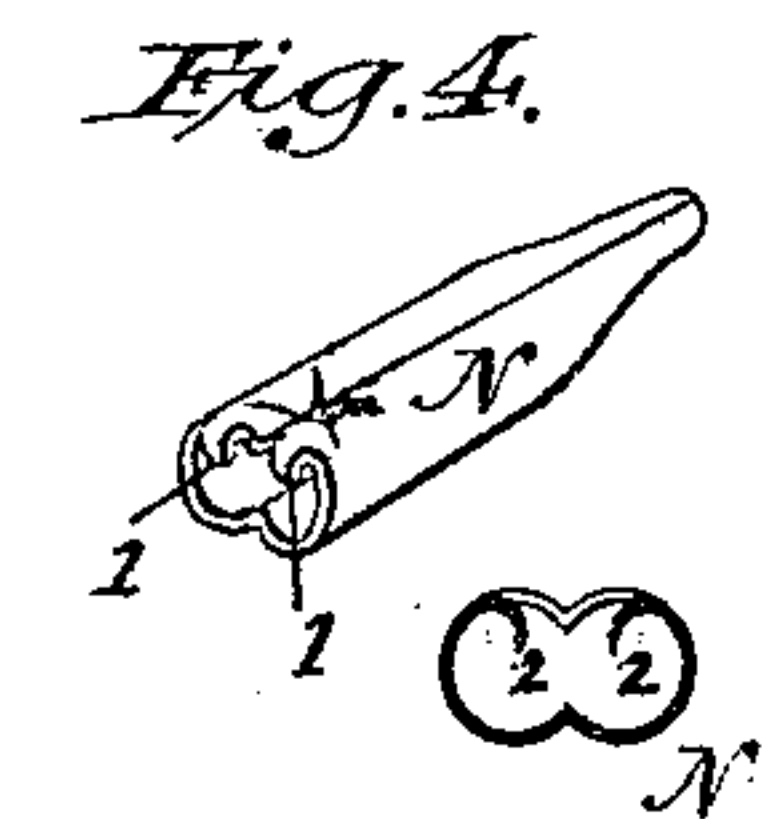


SUSPENDERS.

Patented Nov. 1, 1881.



John Tyler
Arthur L. Moore

INVENTOR

his ATTORNEY

UNITED STATES PATENT OFFICE.

THOMAS O. POTTER, OF BOSTON, MASSACHUSETTS.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 249,089, dated November 1, 1881.

Application filed February 12, 1879.

To all whom it may concern:

Be it known that I, THOS. O. POTTER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and
5 useful Improvements in Suspenders; 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 application.

10 My invention relates to certain improvements in suspenders as shown and described in Letters Patent granted to me August 28, 1877, and a pending application filed by me January 3, 1878.

15 It has for its objects to provide a more perfect fastening-clamp for securing the end of the cord to form the button-holes, and also to provide a cheap and practical housing for the pulleys, capable of ready attachment to and
20 removal from the ends of the web; and with these ends in view my invention consists, first, in forming the clamp from sheet metal, so as to have, when applied, the form of a double hollow cylinder at one end and a single hollow
25 cylinder at the other, and adapted to conceal and confine the end of the cord, and provided with internally-projecting barbs formed in the sides and ends of the cylinders, as will be hereinafter more fully set forth.

30 My invention further consists in the peculiar metallic housing for the sheaves secured to the front ends of the webs, as will be presently explained.

35 Figure 1 is a plan view of a pair of suspenders embodying my invention. Fig. 2 is a cross-section at the line *x x* of Fig. 1; Fig. 3, a similar view at the line *y y*, Fig. 1. Fig. 4 is a perspective and cross-section of the metallic clasp-
40 ing device or binder.

A is the ordinary web, provided with the usual adjusting buckles or slides, *B B*.

45 *C* represents a metallic housing for the sheaves *F*. This housing *C* is composed of sheet metal, having its lower end embracing (completely shielding) the sheave *F*, and secured thereto in such manner as to enable the sheave to be readily rotated, and the upper end or ends per-
50 forated or cut away to form an opening, *G*, to pass over the hook *D* or else turned down to form a hook, *K*, as clearly shown in Fig. 2, as will be presently again referred to. This hous-

ing is made of a single piece and secured to the pulley through the medium of an eyelet-journal, *b*.

Fig. 3 illustrates a housing such as is spe- 55
cially described and shown in my patent of August 28, 1877, before referred to, and designed to be practically permanently secured to the rear ends of the webs.

It will be observed that the housing for the 60
front ends of the webs may be readily attached and detached from the hook or slotted hanger, as the case may be, on the ends of the said web.

The cords *L*, forming the suspender ends, 65
are returned to form a button-hole and are secured in position by metallic clasps substantially like those described in my application hereinbefore referred to, with the exception that they are formed with barbs 1 1 and 2 2, 70
as clearly shown more particularly at Fig. 4 of the drawings accompanying this specification. These barbs, when the clasp is pressed into position, as clearly shown at Fig. 1 of the drawings, penetrate the cords *L* and securely 75
hold the same in position. The barbs 1 1 are formed on the end of the metal, and the barbs 2 2 are cut and turned in from the side of the clasp, so that the cord within the clasp is con-
80 fined by barbs at points distant from each other sufficiently to make practically double hold-
fasts.

The hook *D* is slotted at *a*, so that it may be readily secured to the web *A*, as clearly shown, and instead of forming a hook to be secured 85
to the end of the web, a metallic link, *I*, may be used with a slot through its lower end to receive the hook *K*, formed on the housing *C*. I prefer, however, to use the connection shown at *C D*, Fig. 1. Wherever the slots are cut in 90
either the hangers or the housings the metal may be cut on three sides only, and the tongue thus formed turned up so as to give a double or quadruple thickness for the bearing-surface. The turning of the metal will of necessity pro- 95
duce a curved or rounding surface and thus prevent abarsion.

I do not wish to claim a clasp having when applied the form of a double hollow cylinder at one end and a single hollow cylinder at the 100
other, broadly, as that forms the subject-matter of another application now pending in the

Patent Office; nor do I wish to claim, broadly,
a metallic housing for the sheaves or pulleys;
but

What I do claim as new, and desire to se-
5 cure by Letters Patent, is—

1. A metallic clasp for securing the cord to
form a button-hole, which when applied shall
have the form of a double hollow cylinder at
its lower end and a single hollow cylinder at
10 its upper end, and provided with barbs 1 1
and 2 2, substantially as and for the purposes
set forth.

2. The sheet-metal housing C, having its

lower end open and extending down to cover
the sides of the pulley, and its upper end formed 15
with a slot or hook, as described, whereby a
shield is afforded for the pulley and the strain
upon the upper end of the housing shall tend
to hold it in position, as hereinbefore set forth.

Witness my hand and seal this 8th day of 20
February, A. D. 1879.

THOMAS O. POTTER. [L. S.]

In presence of—

WILLIAM H. PREBLE,
A. S. DINSMORE.