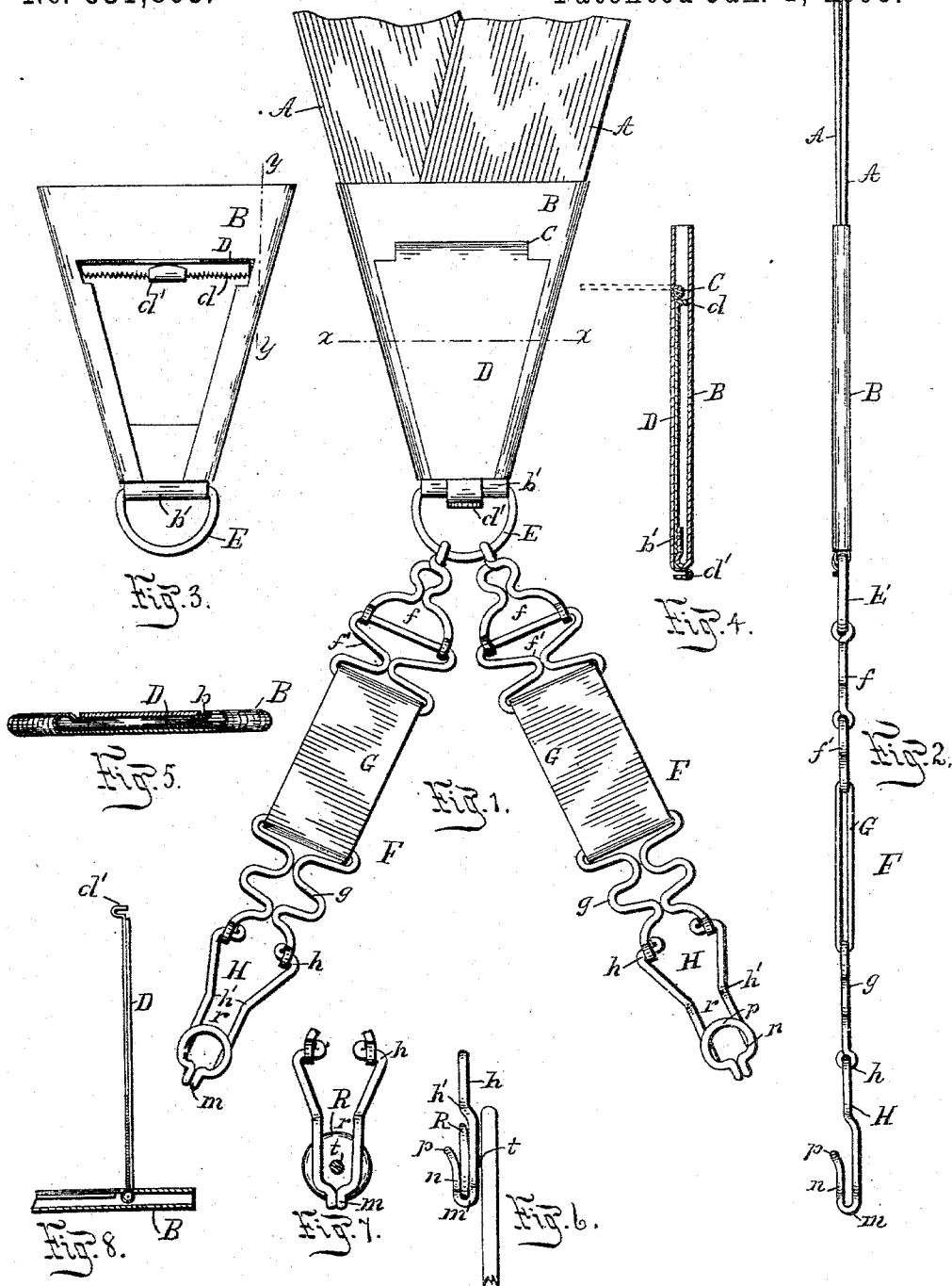


(No Model.)

J. B. RUSSEL.
SUSPENDERS.

No. 531,863.

Patented Jan. 1, 1895.



Witnesses
D. M. Rothmeyer.
Ella L. Gerhart

Inventor
Jacob B. Russel
By Attorney *Wm. R. Gerhart*

UNITED STATES PATENT OFFICE.

JACOB B. RUSSEL, OF LANCASTER, PENNSYLVANIA.

SUSPENDER.

SPECIFICATION forming part of Letters Patent No. 531,863, dated January 1, 1895.

Application filed May 2, 1893. Serial No. 472,687. (No model.)

To all whom it may concern:

Be it known that I, JACOB B. RUSSEL, a citizen of the United States, residing in Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain improvements in Suspenders, of which the following is a specification.

My invention relates to improvements in that class of garment supporters known as "suspenders," which consist of two independent straps passing, respectively, over the shoulders of the wearer, and which are termed shoulder straps, the front ends of which are separately secured to the garment, the rear or back ends being together attached by the same device to the garment behind; and it applies more particularly to shoulder-straps consisting of a flat web, strip, or strap of canvas, webbing, ribbon, tape, leather, kid or any other preferred flat elastic or inelastic material of suitable breadth for bearing comfortably on the shoulders of the wearer.

Heretofore, the rear or back ends of such shoulder-straps have been permanently united and, generally, permanently connected with the device by which they were secured to the garment. This construction is objectionable, as the wearing out or damaging of one strap destroys the usefulness of the other, so that to preserve that other the useless strap must be replaced at the cost of much time and labor; or, again, the device connecting the united ends of the straps with the garment wears out before either one or both of the straps, resulting in the discarding of the whole or great inconvenience in replacing the useless parts.

The object of my invention is to overcome these objections. With this end in view I do not form the shoulder-straps in one piece or permanently attach the back or rear ends thereof directly to each other, but keep them separate and removably secure them to the device through which they are connected with the garment.

The invention consists in the construction of a clasp or buckle for detachably securing the rear or back ends of both the shoulder-straps of a pair of suspenders.

In the accompanying drawings, which form a part of this specification, Figure 1 is

an outer face view of the united back ends of the shoulder-straps, the clasp, and the tabs connecting the clasp with the garment. Fig. 2 is a side or edge view of the same. Fig. 3 is an outer face view of the clasp, shown detached and having the flap thereof opened out. Fig. 4 is a longitudinal vertical section of the clasp, and Fig. 5 a similar transverse section thereof taken on the line $x-x$ of Fig. 1. Fig. 6 is a side view of the eye-link of a tab, showing the same engaged with a button, and Fig. 7 a rear view of the same. Fig. 8 is a vertical section on line $y-y$ of Fig. 3.

Similar letters indicate like parts throughout the several views.

Referring to the details of the drawings, A indicates the back or rear ends of the shoulder-straps. The extremity of these ends are, preferably, not united, as they usually are, but are inserted in the open end of clasp B without being bound together, as shown in Fig. 1, and there secured. This clasp comprises a hollow V-shaped metallic case, having the upper and flaring end open and the lower end closed, and a flap D having a toothed jaw for securing the ends of the shoulder-straps in the case.

In the center of the front plate of the case there is formed an opening conforming with the general outline thereof, the longitudinal sides of the opening being depressed to form bearing lips, b , for the flap D when closed. This flap is hinged at C, at the end of the central opening adjacent to the open end of the case, and has that end bent inward at an approximate right angle thereto and teeth, d , cut in the bent in edge.

On the swinging end of flap D there is a spring catch d' , bent so as to take over and below a loop b' , formed by turning up the narrow end of the back-plate of the case, which turned up end also forms a lower wall for the case to prevent the strap from passing through should it be of less width than the lower end of said case. Before the ends of the shoulder-straps are introduced into the clasp the swinging end of the flap is raised, as shown in Figs. 3 and 8, and as those ends are inserted the side walls of the clasp serve to guide the edges thereof so as to preserve said straps in their proper relative positions. In the case, the

shoulder-straps lap each other diagonally, so that, from their ends, they may extend in a direct line up through the case and out of the same to the shoulders of the wearer.

- 5 The lapping of spring-catch *d'* around and below loop *b'* reinforces said loop and prevents it from being pulled or straightened out by the strain put upon it through the tabs connected therewith, as hereinafter explained.
- 10 Lips *b* form a continuous bearing for the sides of the flap and strengthen it against distortion from outward pressure, the depression of those lips permitting the flap to be so countersunk that its outer face lies flush with
- 15 that of the body of the case and prevents the cutting or fraying by the edges of the flap of the garment worn over the suspenders.

- In loop *b'* is engaged a ring *E*, to which are attached the tabs *F*. Each of these tabs is
- 20 composed of upper wire links *f* and *f'*, the latter being connected with a lower wire link *g* by an endless band *G*. The lower ends of link *g* are spread apart and have their extremities turned over and formed into loops,
- 25 in which are hooked the ends of a button-link *H*.

- The upper ends *h* of link *H* are spread apart, leaving a space through which the button *R* is inserted. From the ends *h* the sides
- 30 of this link approach each other to a point *h'*, from which they are extended vertically, leaving between them a space, *r*, through which passes the thread *t*, uniting the button with the cloth. Below spacer *r* the arms of the wire
- 35 are bent together and turned outward and then upward for a short distance, as shown at *m*, when the wire is curved to form a circle, the body *n* which bears against the button, the upper part *p* flaring outward to facilitate
- 40 the introduction of said button.

I do not limit myself to the precise construction herein shown and described, as many al-

terations may be made therein without departing from the spirit of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A clasp comprising a hollow V-shaped case open at the flaring end and having an opening in a side thereof, a flap hinged in the end of the side opening and adapted to close the same and inwardly projecting teeth on the hinged end of said flap, the edges of the side opening being depressed and forming bearings for the flap, substantially as and for the purpose specified.

2. A clasp comprising a V-shaped case open at the flaring end and having an opening in the side thereof, the back of the case being struck up at its narrow end to form a loop, a flap hinged in the side opening adjacent to the flaring end of the case and adapted to close said side opening, inwardly projecting teeth on the hinged end of said flap, and a spring-catch on the swinging end of the flap constructed to take beneath said loop, substantially as and for the purpose specified.

3. A clasp comprising a V-shaped case open at the flaring end and having an opening in the side thereof, the back of the case being struck up at its narrow end to form a loop, a flap hinged in the side opening adjacent to the flaring end of the case and adapted to close said side opening, inwardly projecting teeth on the hinged end of said flap, and a spring-catch on the swinging end of the flap constructed to take beneath said loop, the edges of the side opening being depressed and forming bearings for the flap, substantially as and for the purpose specified.

J. B. RUSSEL.

Witnesses:

GEO. A. LANE,
WM. R. GERHART.