

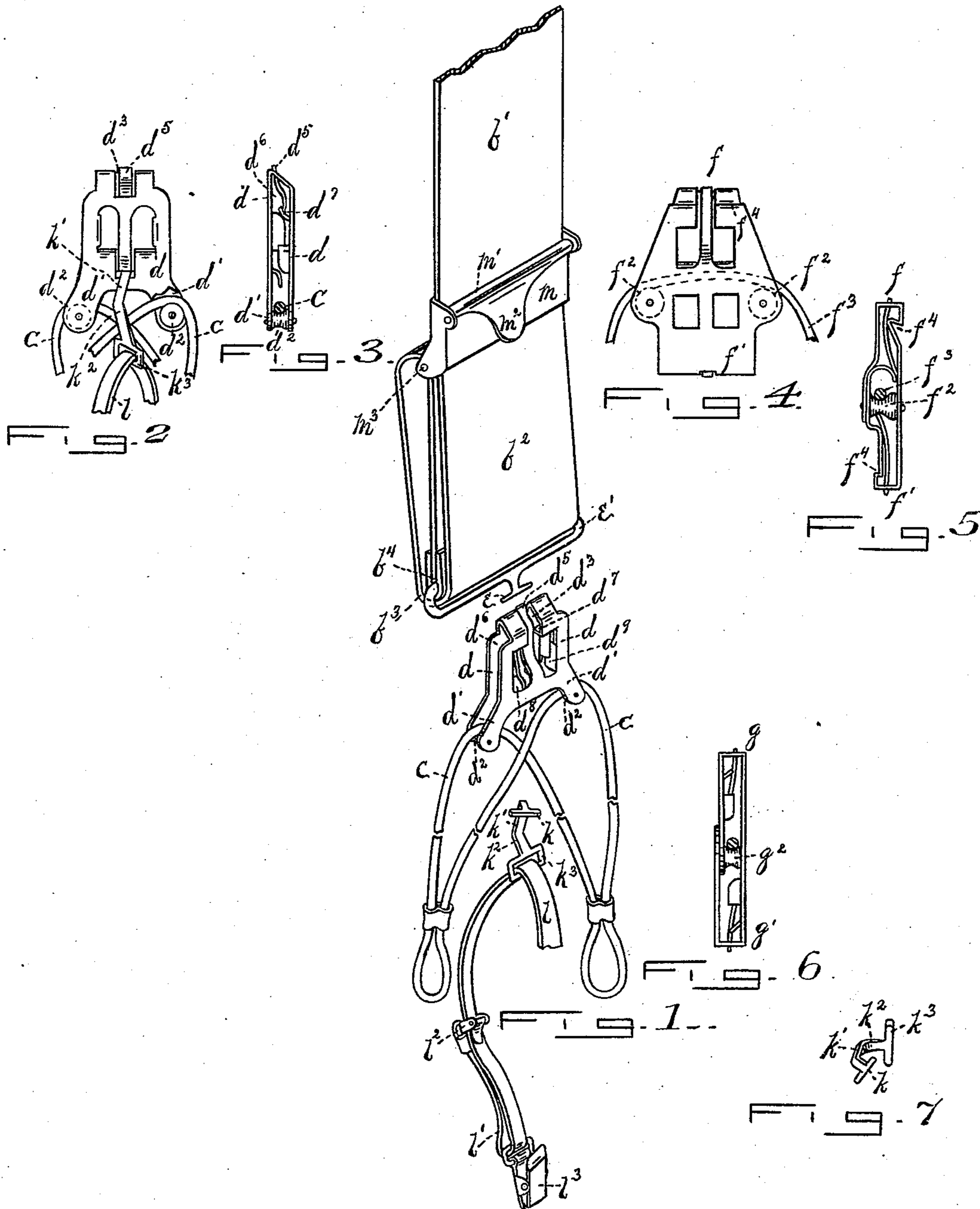
(No Model.)

J. T. BUDD.

SUSPENDERS.

No. 352,969.

Patented Nov. 23, 1886.



Witnesses:

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UNITED STATES PATENT OFFICE.

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SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 352,969, dated November 23, 1886.

Application filed August 31, 1885. Serial No. 175,705. (No model.)

To all whom it may concern:

Be it known that I, J. TALMAN BUDD, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Suspenders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention consists in certain improvements in the form of clasps for suspenders, &c., covered by my Letters Patent No. 329,434, granted Nov. 3, 1885.

In the drawings, Figure 1 shows a front perspective view of my improved cast-off, &c. Fig. 2 shows a back elevation of the cast-off shown in Fig. 1. Fig. 3 is a side elevation of Fig. 2. Figs. 4 and 5 are respectively front and side views of a modified form of cast-off. Fig. 6 is a side view of another modified form of cast-off; and Fig. 7 is a perspective of the hanger for drawer-supports, shown also in Fig. 1.

In Fig. 1 I have shown my improved cast-off adapted for the front suspender-ends, in which d is a metallic plate bent over upon itself at the top and having on each side of the lower portion the double wings d' d' , between which are loosely pivoted the friction-rollers d^2 d^2 , over which are passed the double-looped pants-supports c c .

In the central top portion of the plate is the slot d^3 , and extending from the lower part of the plate d and up into and under the slot d^3 is the spring-strip d^5 . Between the front and back portions of the plate is the recess d^6 . Within this recess d^6 , and on either side of the slot d^3 , are the shoulders d^7 d^7 , which are cut from the front face of the plate d and bent inwardly and, preferably, upwardly.

d^8 is a centrally-located opening in the plate d , and is formed by the cutting and bending inwardly of the spring-strip d^5 , the shoulders d^7 , and the wings d^9 , which, when bent inwardly, as shown, form guides for the T-shaped hanger e upon the loop e' . In connecting the T-shaped hanger with the clasp portion of the plate d it

is passed into the opening d^8 , over the spring-strip d^5 , and past the shoulders d^7 into the slot d^3 , the wings of the T-shaped hanger resting in the recess d^6 on either side of the slot d^3 . The spring action of the strip d^5 serves to hold the hanger behind the shoulders d^7 against accidental disengagement.

Upon the back portion of the plate d is constructed another clasp similar in construction to the one just described, and clearly shown in Fig. 2, such clasp being adapted for the reception of the drawers-support hanger.

A modification of the device just described is shown in Figs. 4 and 5, in which there is the upper front clasp, f , and lower back clasp, f' , and between which, and on either side, are located the friction-rollers f^2 f^2 , adapted to receive a single-looped pants-support, f^3 . This construction also shows a modified form of the shoulder d^7 in Fig. 1, it being made in this instance by bending in the plate on either side of the slot in the form of a right or acute angle, as clearly shown in Fig. 5 at f^4 .

Fig. 6 shows another modification of Fig. 1, in which is shown the combination of a cast-off with a single roller. In this figure g is the upper front clasp, g' is the lower back clasp, and g^2 is the roller located between them.

My improved hanger for attaching the drawers-supports is shown in different positions in Figs. 1 and 7, in which k is the T-shaped upper end, which is adapted for engagement with the clasp located upon the lower portion of the rear side of the different cast-off devices shown. This end k occupies a horizontal position when in engagement with the clasp. From it projects downwardly and at an angle the extension k' , and extending from this portion k' is another angular portion, k^2 , at the lower end of which is the loop k^3 , through which the drawers-support loosely passes. These angular extensions are so arranged that they cause the loop k^3 to assume a position substantially at right angles to the cast-off device, and at a point below the crossing of the cords c c of the double-looped pants-support, as clearly shown in Fig. 2, in which position the drawers-support l is free to move back and forth in the loop k^3 without friction against the sides of the loop. This drawers-support l is adjustable as to length on one side only by

means of the loop l' , which is made longer or shorter by the adjustment of the sliding clasp l'' at the end of the strap l . At the end of the loop l' and at the other end of strap l are the spring-clasps l^3 , for grasping the band of the drawers.

My improved construction for adjusting the end of the suspender proper is shown in the upper part of Fig. 1; and it consists in a variation of the form shown in my application filed April 6, 1885, and hereinbefore referred to. m is a frame, in the upper front portion of which is pivoted the clamp m' , with operating-lever m^2 . In the lower back portion of the frame is a roller, m^3 . The shoulder-strap b' passes down between the clamp m' and the frame m , by means of which it can be secured at any point. The portion b^2 below the clamp is turned up, forming the loop or bend b^3 , and is carried over the roller m^3 and down again to the upper bar of the loop e' , where its end b^4 is permanently secured. In my previous application, above referred to, the end b^4 was secured to the portion b^2 of the suspender-end.

My present arrangement I deem much more preferable, although the adjustment is substantially the same in both cases.

I claim—

1. A clasp for suspender-ends, &c., consisting of a frame having a slot or slots, on either side of which is a shoulder, and a spring-strip operating within or under the slot and shoulders, in combination with a T-shaped hanger adapted to co-operate with such slotted frame, substantially as shown and described.

2. The clasp having the spring-strip d^5 , the slot d^3 , and recess d^6 , and the shoulders d^7 within the recess d^6 , and on either side of the slot d^3 , in combination with a T-shaped hanger, substantially as shown and described.

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

J. TALMAN BUDD.

Witnesses:

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