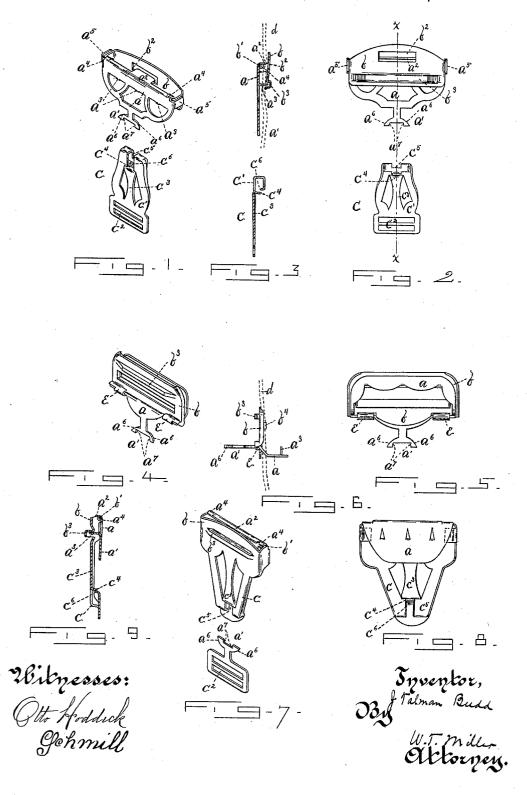
## J. T. BUDD.

## SUSPENDER BUCKLE.

No. 390,280.

Patented Oct. 2, 1888.



## UNITED STATES PATENT OFFICE.

J. TALMAN BUDD, OF BUFFALO, NEW YORK.

## SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 390,280, dated October 2, 1888.

Application filed December 30, 1887. Serial No. 259,360. (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 Attachments for Suspenders and other Articles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled 10 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 relates more particularly to that class of buckles which are provided with teeth or clamping edge for engagement with the webbing or other material; and it consists in certain improvements therein, and also in 20 improved construction in clasp and hanger

adapted to co-operate therewith.

I will now proceed to describe the manner in which I have carried out my invention.

In the drawings, Figure 1 is a front perspective of my improved buckle and attachment. Fig. 2 is a rear view of Fig. 1. Fig. 3 is a vertical central section taken in the line x x, Fig. 2. Fig. 4 is a front perspective of a modified form of buckle. Fig. 5 is a rear view of Fig. 4.

30 Fig. 6 is a side view of Fig. 4, with buckle shown in open position. Fig. 7 is a front perspective of another modified form of buckle with hanger. Fig. 8 is a back view of buckle shown in Fig. 7, and Fig. 9 is a central verti35 cal section of Fig. 8.

Referring to the drawings, a is a front plate or frame having the hanger a' at the lower end. The upper edge of the frame is turned inwardly, having a central projecting tongue,  $a^2$ .

a are teeth or prongs (one or more) formed from the metal of the frame and turned inwardly, as shown.

 $a^4$   $a^4$  are strips at each side of the frame, curved inwardly and downwardly to form the 45 eyes of the hinge.

a<sup>5</sup> are protecting-flanges turned inwardly from the frame a.

b is the back plate of the buckle hinged to the frame a by means of turned-in lugs or 50 pivots b'.

 $b^2$  (see Fig. 3) is a slot cut in the plate b, the lower edge of which co-operates with the tongue a2 upon the frame to form a frictionbearing to prevent accidental disengagement of the teeth a from the material which they 55 secure.

 $b^3$  is a recess struck up from the plate b across its lower portion to form a receptacle adapted for the reception of the points of the teeth  $a^3$ after they have passed through the material, 60 thus forming a guard for the protection of the person of the wearer and enabling the teeth to be of sufficient length to pass through the material and extend beyond the same, and also forming a support or bearing for the protrud- 65

ing points of the teeth when under strain. The hanger a' is an improvement on that shown in Patents Nos. 355,133 and 355,134, This imgranted to me December 28, 1886. provement consists in forming the turned-up 70 or turned down points or ends with the outside surfaces curved or slanted, as at  $a^6$   $a^6$ , so as to pass easily under the frame of the clasp with which it engages, and having the inside surfaces, a a, perpendicular, or nearly so, to 75 guide the hanger along the spring into engagement with the clasp.

The clasp c in Figs. 1, 2, and 3 embodies improvements in the clasps shown in Patent No. 329,434, issued to me November 3, 1885, 80 and No. 352,969, issued to me November 23, 1886. In this clasp e' is the frame having at one end the bar or bars  $c^2$  for attachment to the material.  $c^3$  is a spring-strip cut from the frame, having its free end  $c^4$  turned inwardly 85at right angles and playing within the slot co of the frame. The slotted end of the frame is bent around, as clearly shown in Fig. 3, thus adapting it to receive and hold the hanger a'. At the end of the under part of the frame is 90 the shoulder co, turned in to meet the turned end  $c^4$  of the spring and act in conjunction therewith to prevent the hanger passing under

In the clasp as originally constructed the 95 shoulder  $c^6$  did not exist, and the turned portion c4 of the spring extended to the back of the frame, causing injurious contact with the material. The improved construction just described avoids the difficulty.

100

The buckle shown in Figs. 4, 5, and 6 is a modification of the buckle previously described, and differs therefrom in that the lever for engaging and disengaging the teeth is upon the opposite side of the material and extends beyond the hinges on the side opposite from the teeth, the webbing passing through the frame a, which is hinged in front of the material at e, while in the buckle shown in Fig. 1 to the lever is on the same side of the material and hinges as the teeth. In this construction the strip b<sup>t</sup> is struck up from the frame to form with ita loop through which the material, d, passes (see Fig. 6) in order to hold the frame in contact with the material.

Figs. 7, 8, and 9 show another modified form of buckle, differing from the one first described in the reversal in position of the frame a and plate b, the top edge of the plate b with 20 the portion a forming the friction-bearings. The recess  $b^3$ , in this instance, is open on the lower side; and it is apparent in lieu of this construction a slot could be formed with one edge of the metal forming a shoulder or bear-25 ing for the points of the teeth. The clasp ctakes the place of the hanger a' upon the buckle, the hanger a' being separately arranged with supporting bars, as shown in Fig. The clasp in this modification differs from 30 that shown in Fig. 3 in that the back of the frame is formed by the metal cut from the slot on which is the shoulder  $c^6$ , as in the other clasp.

The friction-bearing, such as shown in Figs. 35 1 and 7 at  $a^2$ , operates more particularly to hold the teeth in engagement when the buckle is not under strain.

I claim-

1. In a buckle for suspenders and other articles, the combination, with a plate or frame provided with a prong or prongs which extend inwardly and penetrate the material to which the buckle is attached, with their ends protruding beyond the material, of a plate or 45 frame provided with a shoulder or slot which extends across its face to form a space for the reception of the protruding ends of the prong or prongs, the frame of the shoulder or slot forming a rest or support for the same, the 50 two plates being hinged together and one of them provided with a suitable hanger or clasp.

2. In a buckle for suspenders and other articles, the combination, with a plate or frame 55 provided with a prong or prongs which extend inwardly and penetrate the material to which the buckle is attached, with their ends protruding beyond the material, of a plate or frame provided with a recess or slot which 60 extends across its face and has a covering or guard to prevent injury to the person or clothing and which forms a space for the reception of the protruding ends of the prong or prongs, the frame of the recess or slot forming a rest 65 or support for the same, the two plates being

hinged together and one of them provided with a suitable hanger or clasp.

3. In a buckle for suspenders and other articles, the combination, with a plate or frame provided with a prong or prongs which extend 70 inwardly and penetrate the material to which the buckle is attached, with their ends protruding beyond the material, and the plate having an operating-lever extending beyond and on the same side of the hinges as the 75 prong or prongs, of a plate or frame provided with a shoulder slot or recess extending across its face, which forms a space for the reception of the protruding ends of the prong or prongs, the frame of the shoulder slot or re- 80 cess forming a rest or support for the same, the two plates being hinged together and one of them provided with a suitable hanger or

4. In a buckle for suspenders and other ar- 85 ticles, the combination, with a plate or frame provided with a prong or prongs which extend inwardly and penetrate the material to which the buckle is attached, with their ends protruding beyond the material, and the plate 90 having an operating lever extending beyond and on the opposite side of the hinges from the prong or prongs, of a plate or frame provided with a shoulder slot or recess extending across its face, which forms a space for the re- 95 ception of the protruding ends of the prong or prongs, the frame of the shoulder slot or recess forming a rest or support for the same, the two plates being hinged together and one of them provided with a suitable hanger or 100 clasp.

5. In a buckle for suspenders and other articles, the combination of a plate or frame provided with a prong or prongs extending inward, with a plate provided with a shoulder slot or recess, which co-operates with the prong or prongs in securing the material through which the prong or prongs penetrate, with their ends protruding and resting within the slot or on the frame of the shoulder recess or slot, the two plates being hinged together and having friction-bearings to prevent accidental disengagement, one of the plates being provided with a suitable hanger or clasp and hanger.

6. In a buckle for suspenders and other articles, the combination of the plate or frame a, provided with prongs or teeth  $a^3$ , with the plate b, having recess  $b^3$ , the two plates being hinged together at  $a^4b'$ , and one of them being 120 provided with a hanger or clasp and hanger.

7. The combination of a clasp having the spring and frame on the same plane with a hanger having downturned or upturned ends or points, with their outside surfaces curved or slanting, so as to pass easily under the frame of clasp, and the inside surfaces perpendicular, or nearly so, to guide the hanger along the spring into engagement with the clasp.

8. The combination of a hanger with a 130

390,280

spring clasp, consisting of a frame having a slot or slots, and a spring, the end of which has a turned in portion, and having on the under part of the frame or lip of the clasp a small portion or shoulder turned in to meet the spring and prevent the hanger passing under it.

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

J. TALMAN BUDD.

Witnesses:

OTTO HODDICK, W. T. MILLER.