

(No Model.)

G. E. ADAMS.  
CAST OFF FOR SUSPENDER ENDS.

No. 489,596.

Patented Jan. 10, 1893.

Fig. 1.

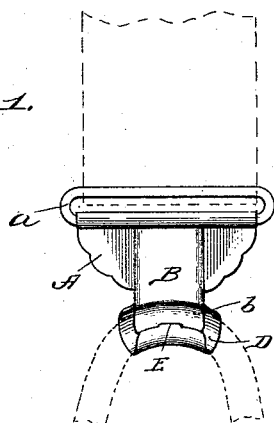


Fig. 2.

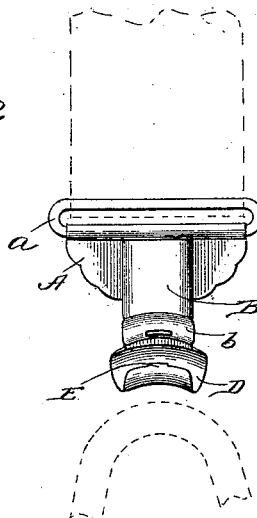


Fig. 3.

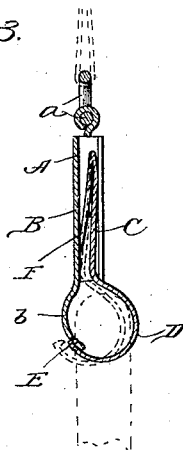
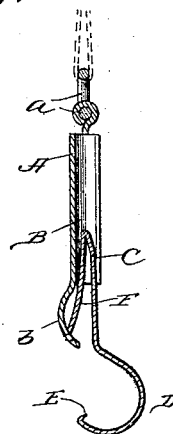


Fig. 4.



Witnesses:

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Inventor:

George E. Adams,

By *Chas. E. Smith*  
his Attorney

# UNITED STATES PATENT OFFICE.

GEORGE E. ADAMS, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE  
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## CAST-OFF FOR SUSPENDER-ENDS.

**SPECIFICATION** forming part of Letters Patent No. 489,596, dated January 10, 1893.

Application filed November 19, 1892. Serial No. 452,575. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE E. ADAMS, of New Britain, in the county of Hartford and State of Connecticut, have invented certain  
5 new and useful Improvements in Cast-Offs for Suspender-Ends; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of  
10 this specification, and to the letters of reference marked thereon.

This invention relates to improvements in devices for permitting of the ready detachment of a suspender end and has for its object  
15 to provide a device of this character of simple and unique design and which shall be particularly applicable to that class of suspenders employing a suspender end of leather or other material substantially round in cross  
20 section at the center and working through a loop or curved hook carried by the suspender.

Referring to the accompanying drawings: Figure 1 is a front elevation of a cast-off embodying my invention with a section of a suspender end in dotted lines. Fig. 2 is a similar view with the cast-off open and the suspender end removed. Fig. 3 is a vertical section through the center of the device with the hook in dotted lines in the position it assumes  
30 when being opened. Fig. 4 is a similar view with the hook open or lowered.

Like letters of reference in the several figures indicate the same parts.

The body A of the present device is adapted  
35 for attachment to the suspender by means of a loop a and has formed upon it or integral with it a guide way or a substantially tubular portion B terminating at the lower end in a slightly curved or rounded lip or extension b. Working longitudinally in this guide way is the substantially straight shank C of the suspender end hook D, the latter as is usual being rounded or shaped to fit the body of the suspender end quite accurately without, how-  
45 ever, binding upon the same so as to interfere with free longitudinal movement, and at each side is flanged outward to prevent unnecessary wear of the end. When in its elevated position the mouth or opening of the  
50 hook is adapted to be closed by the depend-

ing lip or extension b on the body and the parts are held in this position under normal circumstances by a catch or other suitable device, preferably such as hereinafter described and the escape of the suspender end  
55 is thereby prevented. With the parts in this position, when it is desired to disengage the suspender end, the catch or lock is released and the body and hook moved longitudinally with relation to each other to open the mouth  
60 of the hook and allow the end to pass out as will be readily understood.

In the preferred construction, the catch for holding the parts in closed position consists of a catch projection or lip E on the end of the hook itself and a recess or opening in the  
65 downwardly projecting tongue or lip b on the body, said parts being adapted to engage automatically when the hook is elevated and to be disengaged by a transverse or forward  
70 movement of the hook when it is desired to lower the hook and release the suspender end.

It is obvious that the shank of the hook and lip or extension b may have sufficient spring to hold the catch in engagement, however, I  
75 prefer to provide an independent spring F secured to the upper end of the shank and projecting down to a point slightly above the top of the hook. By terminating the spring F at this point it is well adapted to perform  
80 the important function of preventing the entire separation of the hook from the body of the device, for by coming in contact with the depending lip or projection on said body it resists the downward movement of the hook  
85 as shown clearly in Fig. 4.

For the sake of strength the aperture or recess in the tongue or projection b and the catch or projection E are preferably elongated somewhat and the portion of the projection  
90 or elongation b is inclined to facilitate the entry of the catch projection when the hook is pushed up.

In use the suspender end may be quickly and easily released, for by simply pressing  
95 one finger on the back of the hook with the thumb on the tongue or extension of the body and body itself, the catch is easily disengaged and the natural pressure will throw the hook open to the fullest extent allowing the end to  
100

pass out without obstruction, and in again attaching the end it is only necessary to replace it in the hook and move the hook upward until the catch snaps into place and holds the parts in normal position.

5 Having thus described my invention what I claim as new is:—

1. In a suspender end cast-off, the combination with the body provided with a loop or  
10 equivalent means for attachment to a suspender end, and having the centrally arranged guide way therein, of the hook having the shank working in said guide way and a catch for holding the hook elevated, the end of the  
15 hook being bent to lie in proximity to or in contact with the body portion when elevated; whereby the opening to the hook is closed; substantially as described.

2. In a suspender end cast off the combination  
20 tion with the body portion having the guide way therein and the downward extension or lip, of the hook having the shank working in said guide way and a catch for holding the hook elevated with the downward extension

of the body bridging the opening of the hook; 25 substantially as described.

3. In a cast off for suspender ends, the combination with the body portion having the guide way therein, and downwardly projecting extension or lip provided with a recess, of  
30 the hook having the shank working in the guide way and the catch projection on the hook co-operating with the recess in the lip or extension on the body; substantially as described.

4. In a suspender end cast off, the combination with the body having the guide way therein and lip provided with a recess, of the hook having the shank journaled in the guide way, the spring tongue carried by the shank  
40 and the catch projection on the end of the hook co-operating with the recess in the lip for holding the hook in elevated position; substantially as described.

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Witnesses:

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