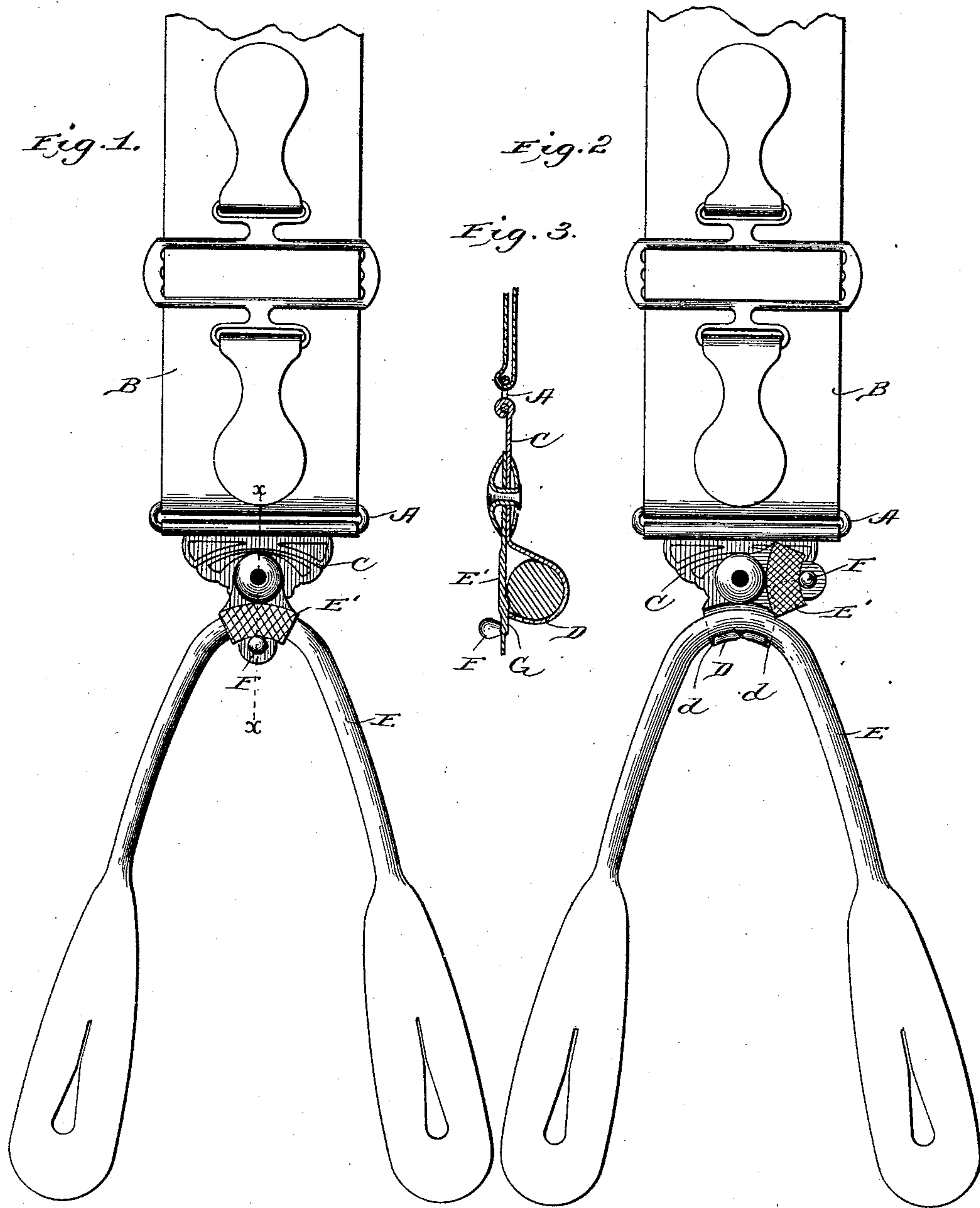


(No Model.)

G. E. ADAMS.  
SUSPENDER END CAST-OFF.

No. 489,445.

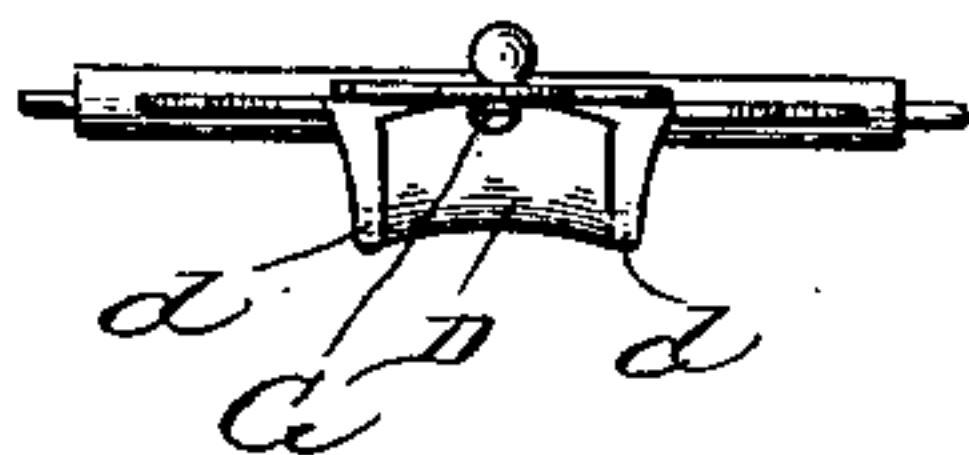
Patented Jan. 10, 1893.



witnesses:

Harry S. Rohrer.

Thomas Durant.



Inventor:

George E. Adams

By *Clum & Clum*  
Attorneys.



# UNITED STATES PATENT OFFICE.

GEORGE E. ADAMS, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE  
TRAUT & HINE MANUFACTURING COMPANY, OF NEW BRITAIN, CON-  
NECTICUT.

## SUSPENDER-END CAST-OFF.

SPECIFICATION forming part of Letters Patent No. 489,445, dated January 10, 1893.

Application filed October 14, 1892. Serial No. 448,876. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE E. ADAMS, of Providence, in the county of Providence and State of Rhode Island, have invented certain  
5 new and useful Improvements in Suspender-End Cast-Offs; 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 this  
10 specification, and to the letters of reference marked thereon.

This invention relates to devices for facilitating the release and attachment of suspender ends to the body of the suspender web,  
15 and has for its object to provide a neat, simple and cheap device co-operating directly with the suspender end, and from the nature of its construction not liable to be broken by strains or released by accident, and further a  
20 device adapted for application to that class of suspender in which the web forms a loop at the ends with a slide or metal loop for the attachment of the end itself.

Referring to the accompanying drawings:  
25 Figure 1 is an elevation of one end of a suspender constructed in accordance with my invention. Fig. 2 is a similar view with the keeper swung open. Fig. 3 is a sectional view on the line  $x-x$ , Fig. 1. Fig. 4 is a view looking  
30 at the lower edge to show the catch.

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

As shown in the drawings the invention is applied to a loop or slide A, such as is adapted  
35 to hang in the loop of a suspender web such as B, although it will be understood that so far as this particular point is concerned, any of the well known forms of buckles or other attaching means may be employed if desired.  
40 Below the loop A, is formed a body portion C preferably a plate, the lower portion or an extension of which is formed into a hook D having a transversely curved or arc-shaped channel with flared or smooth downwardly  
45 flanged edges  $d$ . The curvature of the channel, or what is more important, of the lower lip of the hook, preferably conforms approximately to the curvature of the top of the suspender end affording a wide, smooth and ex-  
50 tended bearing for the suspender end E, which

latter is passed through the hook. The end of the hook extends well forward and slightly upward so as to counteract any tendency of the suspender end to pull out when the pressure is downward or in the direction of the  
55 normal strain, but at the same time leaving sufficient space between the end and body of the hook to allow the suspender end to pass out when moved directly forward. A cover or keeper E' is pivoted to the body C of the  
60 hook, and swings down over the hook end, completely closing the opening through which the body of the suspender end may pass, thus holding the end securely within the hook un-  
65 til the keeper is swung up to one side as shown in Fig. 2. The body of the keeper preferably partakes of the transverse curvature of the hook so as to present a symmet-  
70 rical appearance. On the top or outside it is provided with a knob F by which it is moved, and on the under side with a projection G co-  
operating with a notch in the hook end, forming a lock to retain it in closed position. The  
75 hook and keeper will spring sufficiently to form a reliable catch, yet a catch which will yield readily when the keeper is positively  
pushed to one side or the other, hence requiring no special movement to release the same. The curved portion of the hook, it will be  
80 noted from Fig. 3 lies in rear of the plane of the flat body above the same, and the extreme point terminates just in line with said upper portion, the result of which is that a straight  
or flat keeper may be employed and the tendency of the hook is to move forward when  
85 strain is put on the suspender end, thereby keeping the catch more securely fastened.

Although the device is particularly adapted for use with leather suspender ends in which the body is rounded as shown in the draw-  
90 ings, yet it will be understood that any ordinary form of end may be employed, the hook being shaped to correspond therewith, if found necessary.

The device presents a neat appearance; is  
95 free from all complicated parts, and in fact, is a device having all the advantages of the ordinary coupling including its simplicity of construction and design, with the addition of the cast off feature.  
100

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

In a cast-off for suspender ends, the combination with the flat body provided with the  
5 wide hook having the transverse arc shaped channel through the same with downwardly flanged edges, affording an extended bearing as described for preventing the chafing of the  
10 end notched and bent into substantially the same plane as the flat body, of the laterally

swinging substantially flat and transversely curved keeper pivoted to the body and having the projection on the under side co-operating with the notched end of the hook to  
15 lock the keeper in closed position and the projection on the upper side for a handle to release the keeper; substantially as described.

GEORGE E. ADAMS.

Witnesses:

V. B. CHAMBERLAIN,  
G. W. TRAUT.