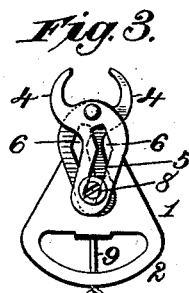
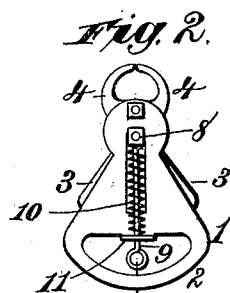
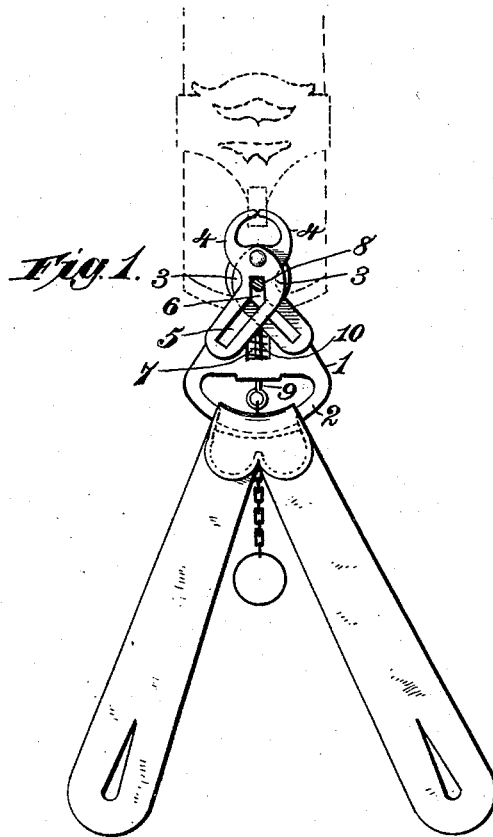


(No Model.)

D. L. DURAND.
SUSPENDERS.

No. 307,028.

Patented Oct. 21, 1884.



Witnesses
Robert Emmett
Jo L. Coombs

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UNITED STATES PATENT OFFICE.

DAVID L. DURAND, OF DERBY, ASSIGNOR TO THE OSBORNE & CHEESMAN
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SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 307,028, dated October 21, 1884.

Application filed July 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. DURAND, a citizen of the United States, residing at Derby, New Haven county, Connecticut, have invented new and useful Improvements in Suspenders, of which the following is a specification.

My invention relates to suspenders of that pattern wherein the suspender-ends are detachable from the buckle, and the purpose thereof is to provide a cast-off attachment for such articles that shall be cheap, simple, durable, and easily operated.

My invention consists in the several novel features of construction and combinations of parts hereinafter described, and definitely pointed out in the claims.

Referring to the drawings, Figure 1 is a front elevation illustrating my invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a front view showing the clip opened.

In the said drawings, the reference-numeral 1 denotes a metallic plate of any suitable shape and size to receive the suspender-ends, which are attached to the loop 2 in the usual manner. To the upper portion of said plate are pivoted, upon a common pivot-pin, two metallic pieces, 3 3, each having an extremity, 4, which projects above the pivot and above the end of the plate, and is curved to form part of a circular clip, as shown in Fig. 1. Below the pivot the plates are curved in opposite directions, so that they cross each other, and in each is cut a slot, 5, parallel with the longer portion of the plate, and its upper end having a portion, 6, at an angle with the main portion of said slot.

In the plate 1 is cut a vertical slot, 7, through which passes a pin, 8, which extends through the slots 5 in the plates 3 3. To the rear end of this pin is attached a rod or wire, 9, having coiled around it a spring, 10, which has its lower end resting upon a lug, 11, projecting from the plate 1. The wire 9 passes through this lug, and to its lower end is attached a cord, chain, or similar device, by which traction may be exerted upon the wire. By drawing the wire 9 down against the tension of the spring 10 the pin 8 is caused to traverse the slots 5 in the plates 3 3, thereby causing their lower ends to approach each other and opening the clip 4 4 above. By re-

leasing the wire the elasticity of the spring instantly returns the parts to their former position, closing the clip, as shown in Fig. 1. While in this position the actuating-pin 8 lies in the angular portions 6 6 of the slots 5, and, as will be seen in Fig. 1, these portions of said slots are, when the clip is shut, parallel with each other and with the vertical slot 7 in the plate 1. It is evident that with such arrangement it will not be possible to open the clip by force exerted upon the parts 4 4 to drive them apart, since the slots 6 6 merely act upon the actuating-pin at right angles and cannot move it in either direction.

In use the buckle-loop is placed in the clip 4 4, and is instantly cast off by pulling the chain or cord which depends from the lower end of the wire 9.

Having thus described my invention, what I claim is—

1. A cast-off attachment for suspender-ends, consisting of two metallic pieces pivoted upon a suitable plate, the ends above the pivot forming a separable clip, and the parts below being curved to cross each other, and provided with slots parallel with said pieces to a point near the pivot, and thence cut at an angle to the main portion, a pin running in said slots, and a spring to throw it upward and close the clip, substantially as described.

2. In a cast-off attachment for suspenders, the combination, with two crossed and slotted arms, of a pin running in said slots and in a guide-slot in the supporting-plate, said pin operating to open and close a separable clip formed by the extension of said arms above their pivotal point, substantially as described.

3. In a cast-off attachment for suspenders, the combination of a plate having a vertical guide-slot, two metallic strips pivoted together and to said plate, slots cut longitudinally in each plate, each slot having an angular portion at its upper end, and a pin running in the guide-slot in the plate and in the slots of the pivoted strips, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID L. DURAND.

Witnesses:

W. F. OSBORNE,
H. W. CHEESMAN.