

E. N. HUMPHREY.
 SUSPENDER CAST-OFF.
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Fig. 1.

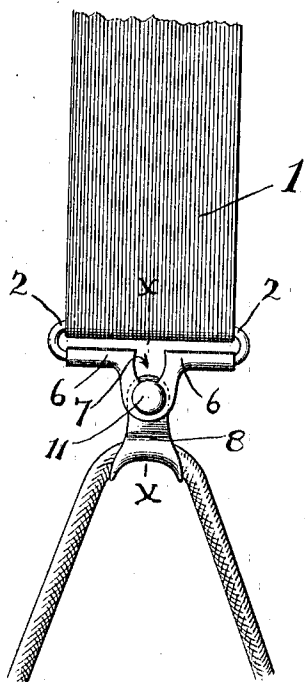


Fig. 2.

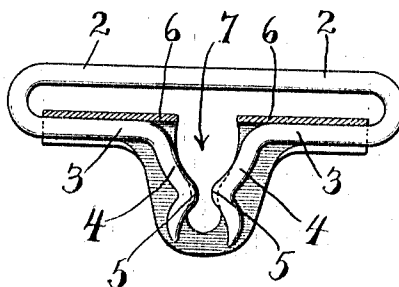
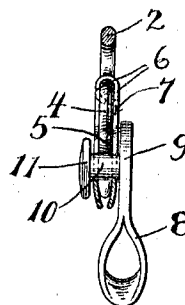


Fig. 3.



WITNESSES

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SUSPENDER CAST-OFF.

1,059,332.

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To all whom it may concern:

Be it known that I, ERNEST N. HUMPHREY, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Suspenders Cast-Offs, of which the following is a full, clear, and exact description.

This invention relates to an improved form of cast-off device for suspenders and the like, and is designed to provide a simple and efficient device of this character wherein the interlocking and separation of the two separable parts may be readily effected. These and other features will be apparent from the more detailed description following taken in connection with the accompanying drawings forming part thereof and illustrating a preferable form of the invention.

In these drawings, Figure 1 is a view in front elevation of a preferable form of the cast-off construction applied to the end of a suspender strap; Fig. 2 is a view in front elevation, partly in section, of the upper part of the cast-off; Fig. 3 is a vertical section taken on the line X—X of Fig. 1, the strap end and cord being omitted.

Referring to these drawings by numerals, 1 indicates the lower end of a suspender strap or analogous support which is looped under the upper bar 2 of the spring clip forming in part the upper member of the cast-off. The upper portion of this clip is constructed in the form of a loop designed to receive the strap end as above described, the lower bars 3—3 of the loop being separated and having their ends 4 bent downwardly and inclining inwardly and terminating adjacent their ends in rounded complementary locking shoulders 5. A casing or sheathing 6 of sheet material, preferably stamped metal, is bent around the lower bars 3 of the loop member and extends downwardly on either side of the members 4—5 of the spring clasp, its two leaves lying on either side of said members and substantially hiding them from view. This casing 6 is provided with a curved slot 7 extending downwardly from its upper edge to a point adjacent the lower edge of the casing. The outline of the slot corresponds substantially with the inner contour of the downwardly bent ends 4 of the two spaced spring members forming the spring clasp, but exposes the locking shoulders 5, and extends there-

below. The casing 6 at the lower extremity of the slot 7 is formed on a curve for the purpose to be later described. The parts so far described, comprise one of the two separable parts of the cast-off structure, in this instance the upper part. The other part of the cast-off construction, in the present instance the lower part, comprises a tubular cord guide and support 8, whose upper end 9 is provided with a stud 10 extending outwardly therefrom and having its end formed with a head or shoulder 11 and forming a button. The diameter of the stud 10 and that of the curved lower end of the casing slot 7 are substantially coincident, said end acting as a bearing for the stud.

With the foregoing description and structure of the part in mind, it will be seen that they cooperate in the following manner: In order to interlock the two separable parts, the lower part of the cast-off is moved upwardly to bring its stud 10 in and through the upper and enlarged part of the casing slot 7, whereupon the cord guide 8 and its stud are moved downwardly to the lower and contracted end of the slot. The space between the inner edges of the complementary locking shoulders 5 is less than the diameter of the stud 10, so that as the latter is moved downwardly with its cord guide, it will engage and force apart these locking shoulders and may then be moved below said shoulders to rest on the curved edge of the casing at the lower end of the slot, the locking shoulders 5 snapping in behind and above the stud 10 and detachably locking it against vertical movement and preventing accidental retraction thereof. The head 11 of the stud will be positioned on the outer side of the casing on either side of the lower end of the slot and will prevent lateral withdrawal of the guide and stud while the stud 10 will itself engage and be supported from the casing 6. In order to "cast off" the lower part of the device formed in this case by the cord guide, it is only necessary to move the cord guide and its stud 10 upwardly in the slotted portion 7, this movement engaging said stud with the under side of said rounded locking shoulders 5 and forcing them outwardly so that the stud may be moved to the upper and enlarged end of the slot 7, and may be withdrawn laterally therefrom. This slot, it will be noted, has its upper end enlarged to permit

the lateral insertion therethrough of the stud 10 and its head 11, and has its lower end contracted and curved to substantially coincide with the curve of the stud 10 to
5 afford a bearing therefor.

The loop member with its spring clasp may be made of either wire or sheet metal possessing resilient qualities.

While I have described the specific embodiment of the invention, various structural changes are possible within the spirit of the invention and the scope of the appended claims.

What I claim is:

15 1. In a device of the character described, in combination, two separable parts, one of said parts comprising a loop member having a spring arm extending therefrom and provided with a locking shoulder, and a casing
20 of sheet material carried by said loop member inclosing said spring arm from both sides and having a slot therein exposing said locking shoulder and extending therebeyond; and the other of said parts being
25 provided with a stud adapted to be inserted in said slot to engage and be supported by said casing and to detachably lock with the shoulder of said spring arm.

30 2. In a device of the character described, in combination, two separable parts, one of said parts comprising a loop member having complementary spaced spring arms extending therefrom and provided with complementary

locking shoulders, and a casing of sheet material carried by said loop member inclosing 35 said spring arms from both sides and having a slot therein exposing said locking shoulders and extending therebeyond; and the other of said parts being provided with a stud adapted to be inserted in said slot to 40 engage and be supported by said casing at the end of said slot and to detachably lock with said complementary shoulders.

3. In a device of the character described, in combination, two separable parts, one of 45 said parts being provided with a loop member having spaced spring arms extending therefrom and formed with complementary locking shoulders thereon, and having a casing 50 of sheet material secured to and extending from said loop member to inclose said spring arms from both sides, said casing being provided with a converging slot therein exposing said locking shoulders and extending and terminating therebeyond; and the 55 other of said parts being provided with a headed stud adapted to be inserted in said slot to seat against said casing at the end of said slot and be supported by said casing with its shank in detachable locking en- 60 gagement with said shoulders.

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