

C. E. HOWE.
OVERALLS SUSPENDERS LOOP.
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961,718.

Patented June 14, 1910.

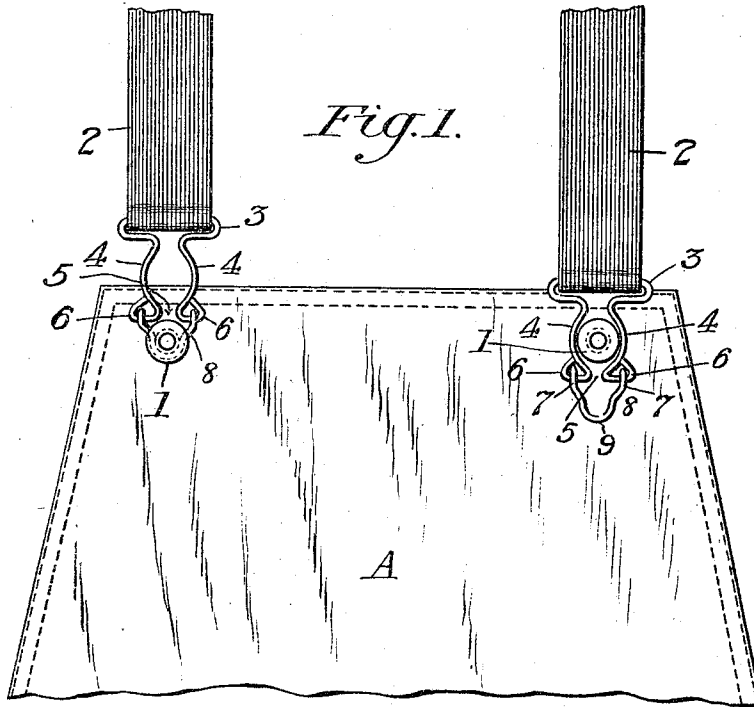
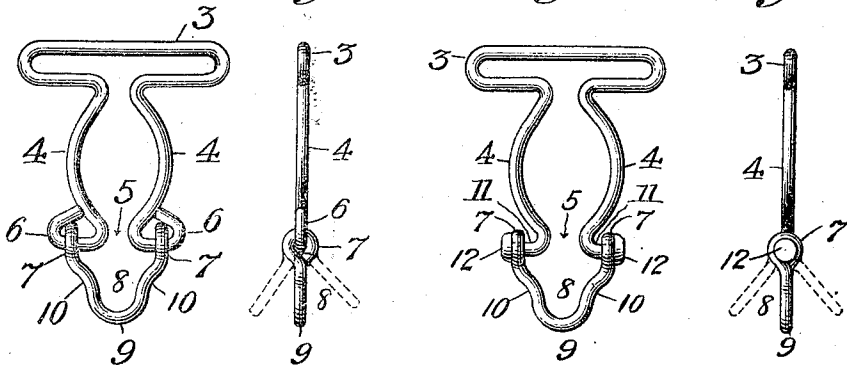


Fig. 2. Fig. 3. Fig. 4. Fig. 5.



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att'y

UNITED STATES PATENT OFFICE.

CHARLES E. HOWE, OF SUMMIT, NEW JERSEY, ASSIGNOR TO SWEET, ORR & COMPANY,
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OVERALLS-SUSPENDERS LOOP.

961,718.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES E. HOWE, a citizen of the United States, residing at Summit, in the county of Union and State of New Jersey, have invented a certain new and useful Improvement in Overalls-Suspenders Loops, of which the following is a full, clear, and exact description.

This invention is designed to provide a metallic loop for use especially on the ends of the suspenders on overalls to engage the button on the bib or apron, which will admit of the wearer bending, turning and twisting his body without the loop binding or pressing against him and without liability of becoming detached from the button.

In the preferred construction there is a spring suspension member attached to the suspender or strap, having bowed limbs which yield for the passage of the button between them, and to the ends of which is hinged a rigid button-engaging member, freely swinging back and forth, or inwardly, and outwardly with relation to the wearer's body, so that there is an unlimited degree of flexibility that will attain the desired freedom of movement of the wearer without inconvenience to him and without danger of the loop being disconnected from the button.

In the accompanying drawings, illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is an elevation of enough of the straps or suspenders and the bib or apron of a pair of overalls, with the loops of this invention applied, to show the use of the invention, the loop at the observer's left-hand side being engaged with the button, and the loop at the observer's right-hand side being in process of engagement with the button next to it. Fig. 2 is a front elevation, and Fig. 3 is a side elevation of the form of loop shown in Fig. 1. Fig. 4 is a front elevation, and Fig. 5 is a side elevation of a loop having a modified form of hinge-joint connecting the suspension and the button-engaging members.

Without thereby limiting the invention to overalls, or indeed to suspenders, the title herein to the contrary notwithstanding, I will proceed to describe the invention in detail with reference to the illustrations contained in the drawings, and then will par-

ticularly point out and distinctly claim the invention.

The bib or apron A has buttons 1 at or near its upper corners, and suspender-straps 2 extend up from the rear of the garment, where they are attached, not shown, but as usual. Each of these straps is sewed or otherwise fastened in an eye 3 of a loop, and from this eye extend spring limbs 4 bowed outwardly to form an eye through which the button is passed, as shown at the observer's right-hand side Fig. 1, and then these limbs converge to form a throat as at 5, so that a considerable pull in opposite directions lengthwise of the strap is necessary in order to exert the resilience of the limbs in order to pass the button through the throat, as at the observer's left-hand side Fig. 1. Next to the throat the limbs are formed with eyes 6 lying in the longitudinal plane of the limbs. This structure constitutes the spring suspension member of the loop. In the eyes 6 are arranged the eyes 7 of the rigid button-engaging element 8 of the device, and this device has a compound curvilinear outline, including the dip 9 for active engagement with the shank of the button, the laterally extending curved portions 10, and the parallel straight portions, in which last are formed the eyes 7 for completing the hinge-joint with the suspension member. The button-engaging member is of such dimensions as to preclude the escape of the button from it save by passing it back through the throat of the suspension member into its intermediate bowed portion.

Instead of making eyes 6 on the ends of the limbs of the suspension member, these ends may be turned out straight, as shown in Figs. 4 and 5, at 11, and their extremities headed as at 12, and the button-engaging member placed upon them and held thereon loosely by the heads 12. In the construction shown in Figs. 1 to 3 and that shown in Figs. 4 and 5, there is enough play on the ends of the limbs 4 to admit of the movement of the limbs away from each other in order to permit the passage of the button into and out of the button-engaging element, and yet permit the throat to close, when the button is engaged by the button-engaging element, to such extent as to block or resist the accidental escape of the button from such element; or, in other words, to

prevent accidental detachment of the loop from the button, and to effectively retain or maintain such engagement.

As is obvious, the connection of the suspension-member and the button-engaging member, through the medium of their respective eyes 6 and 7, and the relative arrangement of these eyes afford a slip engagement between these members which admits of the lateral movement of the limbs of the suspension-member in order to permit the button to pass through the throat into the button-engaging element, and the closing of the throat over the thus engaged button, and reverse movements for the disengagement of the loop and button.

In both forms of the invention, and others that will suggest themselves to those skilled in the art, this essential novel feature exists and distinguishes the invention mainly from the prior art, namely, the button-engaging element is pivotally mounted upon the lowermost portions of the suspension member so as to swing freely thereon in both directions, as indicated by the dotted lines in Figs. 3 and 5, and to any extent, excepting in the practically impossible event of doubling up against the suspension member, and hence the wearer has perfect freedom of movement of his body, without the loop binding or pressing against him. In other words, the loop is flexible toward and away from the wearer.

The loop is constructed of two pieces, so joined as to form a natural spring, which opens out readily while the button is being inserted and springs back instantly to hold the button when in place. Being in two pieces, freely movable in opposite directions, it is much more flexible than prior constructions made of a single piece or of two pieces where the movement of one piece is limited by the other. The button may be inserted and withdrawn by a slight pull or push of the fingers. The increased play allowed by the two-piece construction permits the wearer to bend, turn, or twist his body without the buckle binding or pressing against

him, thus adding to his convenience and comfort. Finally, the stability of the connection with the button is insured, since it is practically impossible for the button to work out of the button-engaging member, and in point of fact it is necessary for the wearer to remove it.

What I claim is:—

1. A loop for overalls suspenders and other articles, composed of a suspension member having a laterally opening eye terminating in a contracted throat and laterally extending ends, and a button-engaging member made rigid and having a compound curve ending in eyes by which it is pivotally mounted in the lowermost portions of the ends of the suspension member, whereby the two members have relative freedom of movement in opposite directions.

2. A drop loop for overalls and other articles, composed of a suspension-member having a laterally opening eye terminating in a contracted throat and laterally extending eyes, and a curved button-engaging member made rigid and having eyes pivotally mounted upon the lowermost portions of the eyes of the suspension-member whereby the two members have relative freedom of movement in opposite directions.

3. A drop loop for overalls and other articles, comprising a suspension-member having laterally resilient limbs terminating in a contracted throat and laterally extending eyes adjacent to said throat, and a rigid button-engaging member adapted to engage the shank or hub of a button and provided with eyes having a pivotal slip engagement with the lowermost portions of the eyes of the suspension-member, whereby said button-engaging member is adapted to swing freely in opposite directions from the eyes of the suspension-member.

In testimony whereof I have hereunto set my hand this 14th day of April A. D. 1909.

CHARLES E. HOWE.

Witnesses:

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