

No. 638,999.

Patented Dec. 12, 1899.

F. B. SWEET.
SUSPENDERS.

(Application filed Sept. 5, 1899.)

(No Model.)

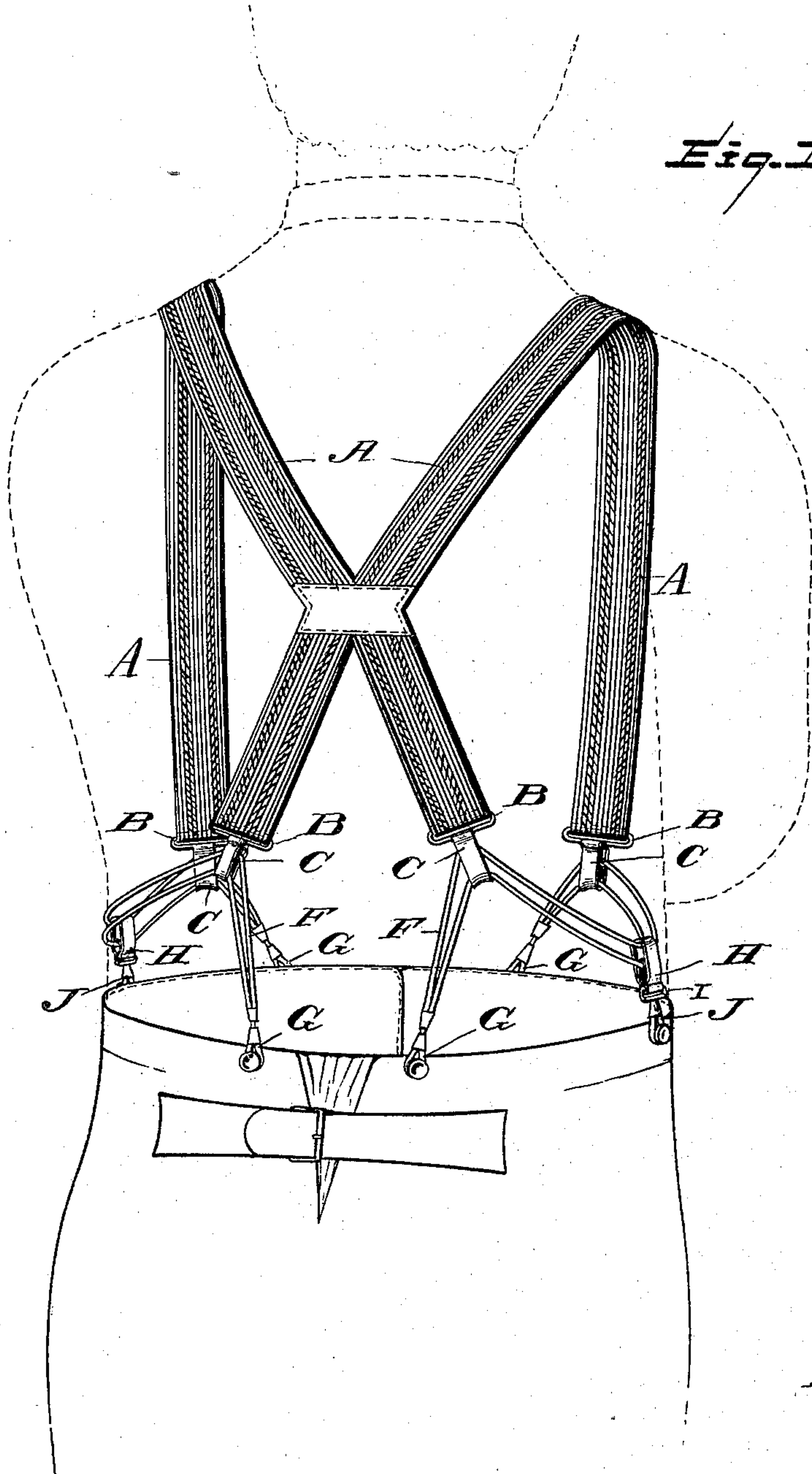


Fig. 1.

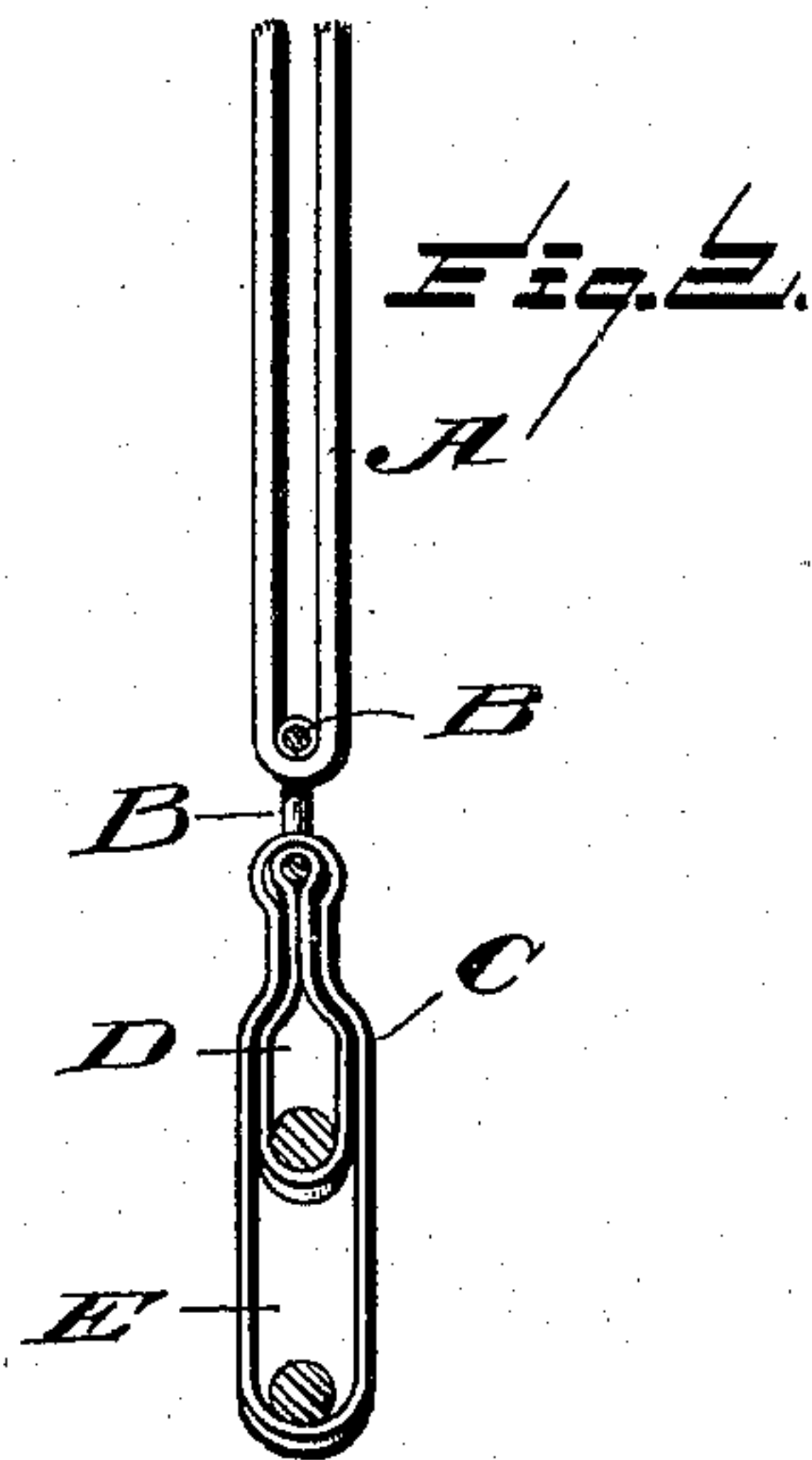


Fig. 2.

Witnesses

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SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 638,999, dated December 12, 1899.

Application filed September 5, 1899. Serial No. 729,519. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. SWEET, a citizen of the United States, residing at Lawrence, in the county of Douglas and State of Kansas, have invented certain new and useful Improvements in Suspenders, of which the following is a specification.

My invention has for its object the provision of suspenders of great strength and durability which will readily adapt themselves to the movements of the wearer's body; and it consists in certain novel features hereinafter described and claimed.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a perspective view of a pair of suspenders embodying my improvements, and Fig. 2 is an enlarged sectional view of one of the runners.

The shoulder-straps A are of the usual formation and will be made in a variety of sizes, as is now customary. At the ends of the straps I provide the loops or bars B, on which are hung the guides or runners C. These guides or runners consist of a pair of eyes D E, having their upper ends compressed around the lower portion of the loop or bar B, so as to form a hinged connection therewith. The lower eye E incloses and depends below the upper eye D and is permitted a slight play or vibration independent of said upper eye. I employ a double cord F or two cords having their ends united and carrying the button-engaging loops G. The branches of the cord pass through the eyes D E and are held and guided by said eyes. Between the guides C, I mount on the cords the runner or guide H, similar in construction to the guides C. In the guide H, however, the upper eye is the larger, and the two eyes are hinged at their lower ends to a bar or swivel I, from which depends a button-engaging loop J. The ends of all the eyes are slightly flared, so as to avoid chafing the cords in their movements.

It will be readily observed that the cords are not secured to any of the runners or guides, and consequently the said runners may readily slip over the cords and free movement of the wearer's body is permitted. The use of the double cord by dividing the strain lends added strength to the suspenders, and thereby prolongs the life of the same. Fur-

thermore, should one cord break the remaining cord will support the trousers until a new pair of suspenders can be procured or an additional cord supplied. The possibility of both cords breaking at the same time is so remote as to be unworthy of consideration. The two eyes being hinged independently, although at a common point, readily yield to the bending of the body and accommodate themselves to any unequal movements of the two cords. The runner H being disconnected from the cords will be maintained in a vertical position as the cords pull on both sides of the same, and as a result there is no drawing of the button forward or backward. The waistband of the trousers will therefore always fit smoothly and evenly upon the wearer.

I am aware that it is not new to construct suspenders with a continuous cord extending between and through bearings at the ends of the shoulder-straps and having a middle button-engaging loop hung thereon. I am also aware that it is old to provide a second eye or bearing at the end of the shoulder-strap to carry a loop or clasp for holding the drawers. I make no claim to such constructions herein, but claim only the particular suspenders devised by me.

Experience has demonstrated that the cord always wears out, while the shoulder-straps are yet good, and this result is attributed by me to the strain exerted on the cord by the weight of the clothing and the consequent friction between the cord and the bearings or loops through which it passes. Furthermore, the middle or side button-engaging loop has been heretofore merely hung on a single cord by a small eye and would too often swing toward the front or rear instead of standing vertically upward from the button. In those suspenders which have been provided with a second or supplemental eye to carry a drawers-supporting clasp or loop this supplemental eye has been formed from a blank the sides of which were brought together beneath and close to the bearing for the button-engaging cord, thereby forming practically a part of the said bearing and being incapable of any movement independent of the bearing. In my suspenders a double cord is employed, its branches running through different bear-

ings at the ends of the shoulder-straps. These bearings are hung from a common support, but the outer one depends straight below the inner one instead of following the bottom of the same and has sufficient movement independent of the movement of the inner bearing to permit the device to readily conform to the movements of the body. The middle or side button-engaging loop is hung on the double cord by a double bearing of the same construction, and as this arrangement furnishes two points of support at each side of said bearing or hanger it is obvious that the said bearing or hanger will be always vertical and drawing of the waistband of the trousers will be avoided. The employment of these double bearings and the double cord not only strengthens the article, but also prolongs its life, as the strain is divided and the friction scattered so that the wear is not concentrated. The suspenders, furthermore, owing to this diffusion of the friction, yield very readily to the movements of the body, so that in no position is the article uncomfortable to the wearer.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

The improved suspenders herein described and shown consisting of shoulder-straps, pairs of bearings or runners at the ends of the straps, the runners of each pair having a common connection with the strap and the outer runner having its sides extended in straight lines beyond the sides of the inner runner, a double cord having button-engaging loops at its ends and having its upper branch passed through the inner runners and its lower branch passed through the outer runners, the said branches being joined beyond the runners, a pair of runners hung loosely on the branches of the said cord between the shoulder-straps, and a button-engaging loop depending from and having a common connection with both runners of said pair.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANK B. SWEET.

Witnesses:

J. C. MOORE,

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