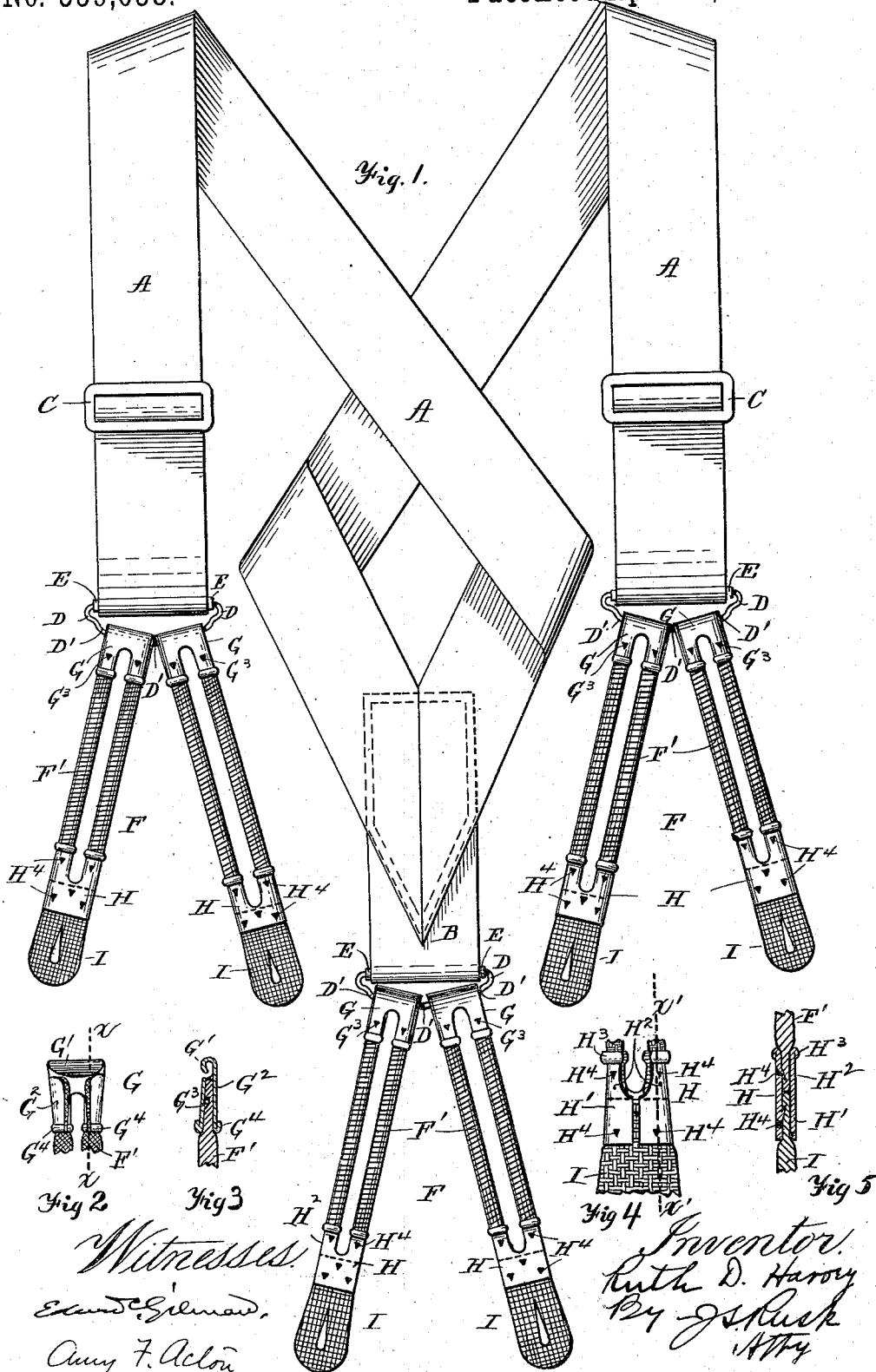


(No Model.)

R. D. HARVEY.
SUSPENDERS.

No. 559,058.

Patented Apr. 28, 1896.



UNITED STATES PATENT OFFICE.

RUTH D. HARVEY, OF BOSTON, MASSACHUSETTS.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 559,058, dated April 28, 1896.

Application filed September 10, 1895. Serial No. 562,044. (No model.)

To all whom it may concern:

Be it known that I, RUTH D. HARVEY, of Boston, county of Suffolk, and Commonwealth of Massachusetts, have invented new and useful Improvements in Suspenders, of which the following is a specification; and I hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it ap-

10 pertains to make and use the same.

My invention relates to a new and useful improvement in suspenders; and it consists of certain novel features hereinafter described, and particularly pointed out in the

15 claim.

In the accompanying drawings, which form a part of my application and illustrate a construction embodying my invention, Figure 1 is a perspective view of a pair of suspenders provided with my improvement. Fig. 2 is a rear elevation of one of the metallic clasps hereinafter referred to. Fig. 3 is a cross-sectional view of a metallic clasp, taken on the line *x x*, Fig. 2. Fig. 4 is a rear elevation of

20 one of the lower metallic clasps hereinafter referred to. Fig. 5 is a cross-sectional view on the line *x' x'*, Fig. 4.

Like letters of reference refer to like parts throughout the several views.

30 The shoulder-straps A are joined together at the back and provided with a tab B, and the front free ends of said straps are secured to a slide C, by which the said straps may be let out or taken up. Through the tab B and

35 also at the front of the suspenders are arranged the metallic loops D, the said loops being provided, preferably, with rollers E, which provide an easy movement to the letting out and taking up of the suspenders at

40 the front.

To the front and rear metallic loops D are secured the waist-straps F, made of elastic cords F'. The elastic cords F' are arranged in pairs, as shown, and the upper and lower

45 ends of each pair are firmly secured and held by the metallic clasps G and H, respectively.

The upper clasp G is provided with an upper lip G' and two independent lower extensions G², and in said lower ends are arranged

50 pointed spurs G³, and the extreme lower ends are turned over, as shown at G⁴, to provide

a round edge, which prevents the metal cutting into the elastic cord.

The lower metallic clasps H are provided with a lower portion H' and two upper independent extensions H², which, at the extreme end, are turned over, as shown at H³, and provide a round edge, so as not to cut into the elastic cords.

The upper ends of the material forming the buttonhole-loop I pass up into the lower portion H' of the metallic clasp H, and the lower ends of the elastic cords F' are located in the extensions H², and in order to assist in holding the buttonhole-loop I and elastic cords F' in said lower clasps spurs H⁴ are provided, which pierce the material, which is the purpose of the spurs G³ in the upper clasps G. The said metallic clasps G and H are pressed tightly around the upper and lower ends, respectively, of the elastic cords F', and the clasp H at the lower end is also pressed closely around the buttonhole-loop I, so as to secure said parts firmly to the said clasps, and the said spurs G³ and H⁴, which pierce the material located in the clasps G and H, assist in holding the same within the said clasps, and then the upper end G' of the metallic clasp G is bent over in the form of a loop, as shown in Fig. 3, in order to hold the same on the metallic loop D. These loops D are provided with substantially straight portions D', over which the loop formed by the upper end G' is located, and by this arrangement the strain on the elastic cords F' is in a right line to the supporting-loop D of the waist-straps F.

In suspenders as now manufactured, where the waist-straps are of elastic material, the said material is one piece from end to end and is suitably supported and connected to the shoulder-straps; but owing to the continual pull in different directions on said material it is apt to pull out and wear at the center where supported; but by my invention all the pull on the elastic web is in a straight line to its support, as the said material does not extend in one piece from end to end, but is arranged in separate pieces on each side, and by doubling the elastic material on each side the strength thereof is increased and the life of the suspender lengthened.

Having thus ascertained the nature of my

invention and set forth a construction embodying the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

5 A suspender comprising shoulder-straps terminating in tabs, loops provided with rollers passing through said tabs, clasps secured by lips to the loop and by integral extensions provided with spurs to the upper portion of
10 the cords, a clasp having integral extensions provided with spurs secured to the lower por-

tion of the cords, and a buttonhole-loop secured to the lower clasp.

In testimony whereof I have signed my name to this specification, in the presence of 15 two subscribing witnesses, on this 7th day of September, A. D. 1895.

RUTH D. HARVEY.

Witnesses:

EDWIN C. GILMAN,
AMY F. ACTON.