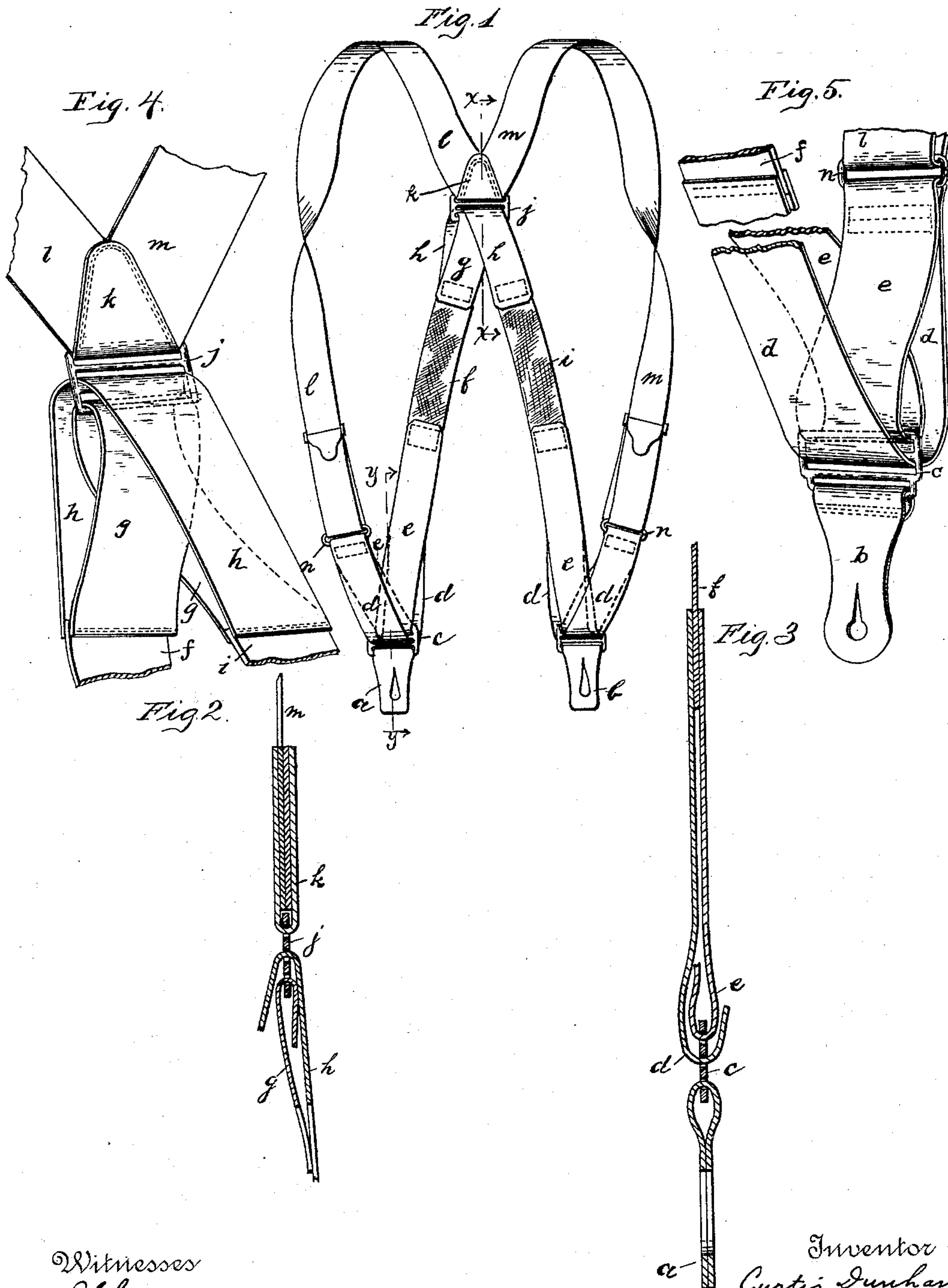


(No Model.)

C. DUNHAM.
SUSPENDERS.

No. 468,561.

Patented Feb. 9, 1892.



Witnesses
J. E. Greer.
Fred Kemper.

Inventor
Curtis Dunham.
By his Attorneys
Gifford & Law

UNITED STATES PATENT OFFICE.

CURTIS DUNHAM, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO LOTTIE E. STEIN, OF SAME PLACE.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 468,561, dated February 9, 1892.

Application filed October 27, 1890. Serial No. 369,426. (No model.)

To all whom it may concern:

Be it known that I, CURTIS DUNHAM, of New York, in the county and State of New York, have invented a new and useful Improvement in Suspenders, of which the following is a specification.

My invention relates to that class of suspenders in which the front and rear extremities of each shoulder-strap come together at a point over the hip, where they are united with the waistband, a union being also made between the two shoulder members at the back; and it consists in a location of the elastic fabric and of running equalizing connections whereby greater ease is secured by the wearer than heretofore.

Figure 1 represents a pair of suspenders containing my invention. Fig. 2 represents a section of the same through the line $x x$ of Fig. 1. Fig. 3 represents a section of the same through the line $y y$, Fig. 1. Fig. 4 represents a perspective view of the sliding connection with the back junction-piece on a somewhat larger scale than Fig. 1. Fig. 5 represents a perspective view of the running connection at the attaching ends, same scale as Fig. 4.

$a b$ are the ends, which are buttoned to the waistband at points over the hips. Since each half of the suspender is a duplicate of the other half, it will be sufficient to describe one of them. The end a is joined by the slotted metallic plate c with the straps d and e , which straps are joined together at each end and pass through separate slots of the piece c , so as to form a running or equalizing connection therewith. The straps d and e are made of leather, so as to play back and forth easily on the metal of the piece c and wear well. At the rear end, about one-third the way up the back, the ends of d and e are connected with an elastic webbing f , which is so short as not to reach to the point of union between the two halves of the suspenders. At its upper end this elastic webbing f is secured to the ends of the leather straps g and h , which are united at their opposite ends with the corresponding elastic webbing i of the opposite half of the suspenders. The straps g and h pass through the separate slots in the slotted metallic piece j , so as to form a running equalizing connection therewith. To this metallic piece

j is firmly secured the binder k , by which the rear ends of the shoulder-straps l and m are firmly secured together. The shoulder-strap l extends upward and forward over the shoulder and downward till it is fixed to the front ends of the straps d and e by the metallic loop n . It will be observed that the elasticity in these suspenders is confined to the two strips f and i , which extend only a part of the distance between the ends a and b and the back connection. It will also be observed that these elastic pieces connect at opposite ends with straps, which form a running connection, respectively, with the shoulder-straps at their back junction and with the ends a and b , which are buttoned to the waistband, these straps being inelastic. These features, combined with the fact that the suspenders are united with the waistband only at two points over the hips, give the wearer extraordinary ease and freedom of motion, and at the same time may be embodied in an inexpensive and very durable structure.

I claim—

1. In a suspender adapted to suspend the garment from points over the hips, the combination, with the back junction slotted plate and the slotted attaching end plates, of the rear straps connected together and having a sliding equalizing connection with both the back junction-plate and the attaching end plates, and the front straps connected at their lower ends with said rear straps and having their upper ends joined together and secured to said back junction-plate independently of said rear straps, the front and rear straps being independent of each other at said back junction-plate, substantially as and for the purposes described.

2. In a suspender adapted to suspend the garment from points over the hips, in combination, the back elastic fabrics i and f , the inelastic straps d and g , connected, respectively, with the opposite ends thereof, the shoulder-straps l and m , the ends a and b , and means whereby a running connection is formed between the shoulder-straps $l m$ and the strap g and also between the straps d and the ends, substantially as described.

CURTIS DUNHAM.

Witnesses:

JAMES T. LAW,
FRED S. KEMPER.