

No. 678,251.

Patented July 9, 1901.

J. W. HAFER.  
SUSPENDERS.

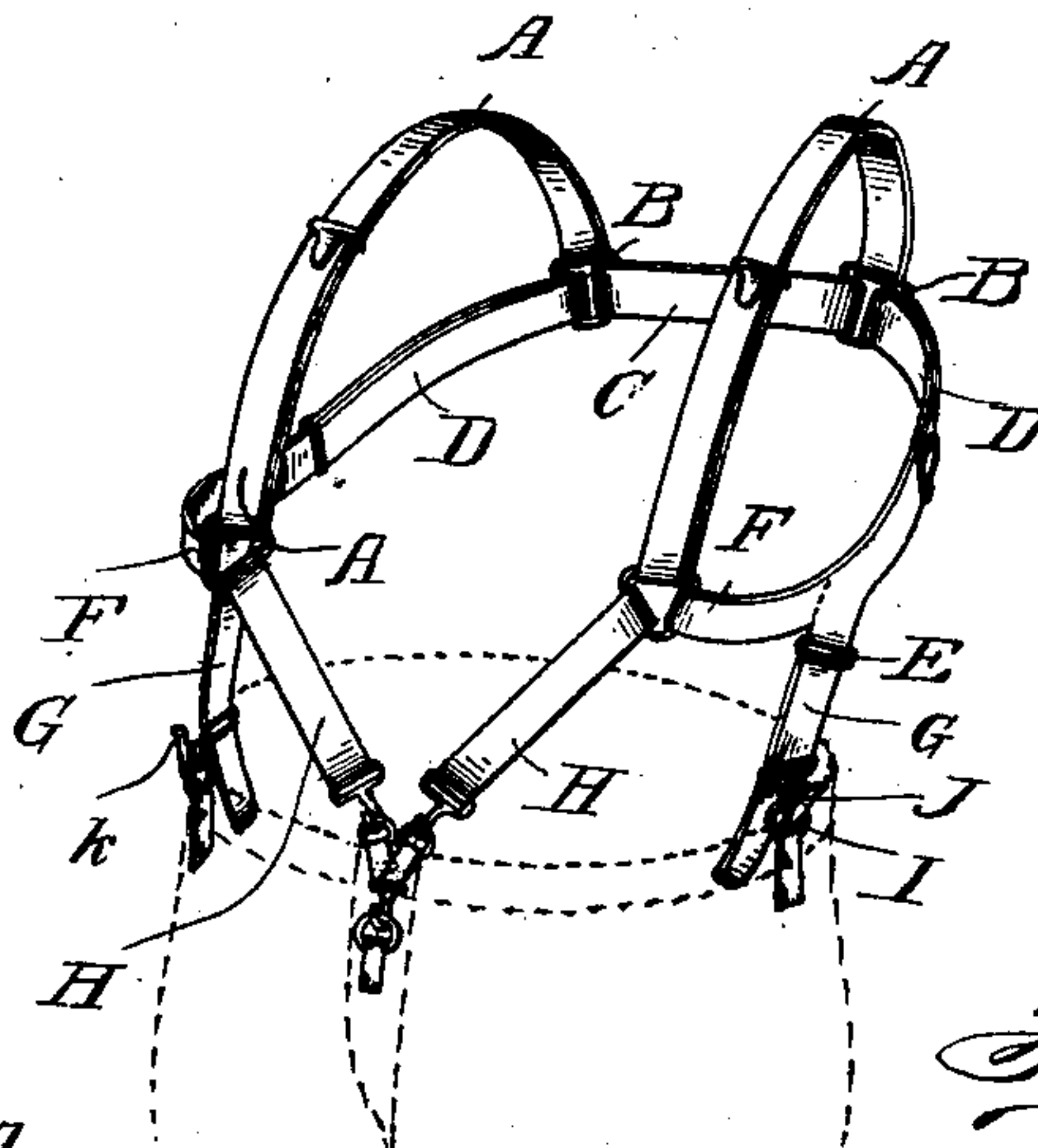
(Application filed Apr. 16, 1901.)

(No Model.)

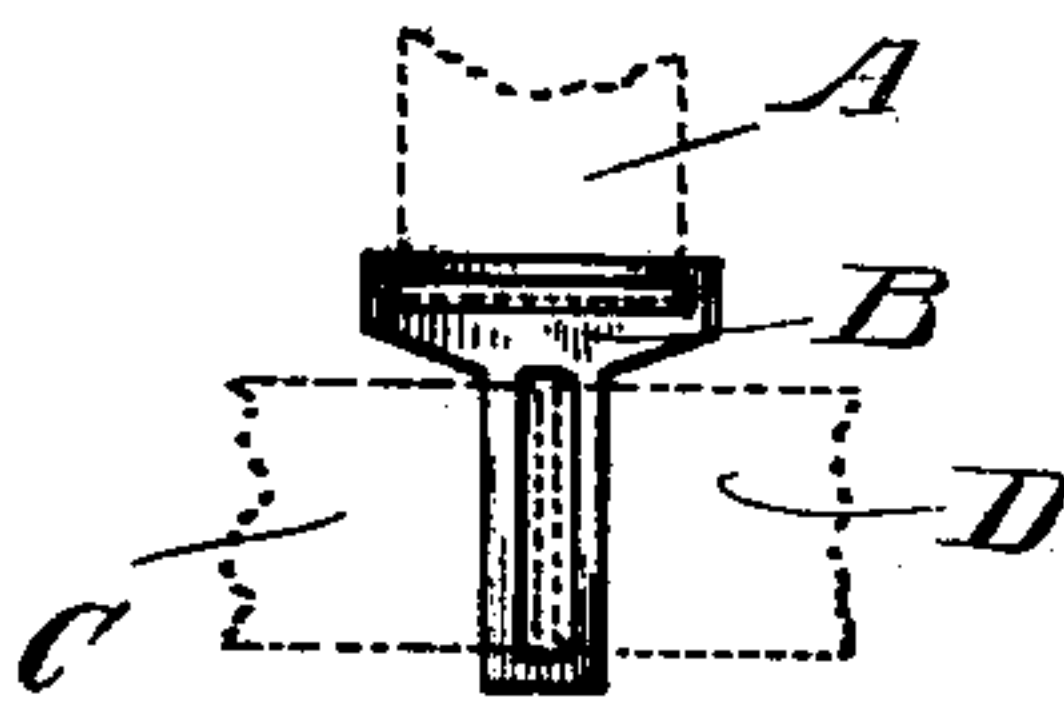
*Fig. 1.*



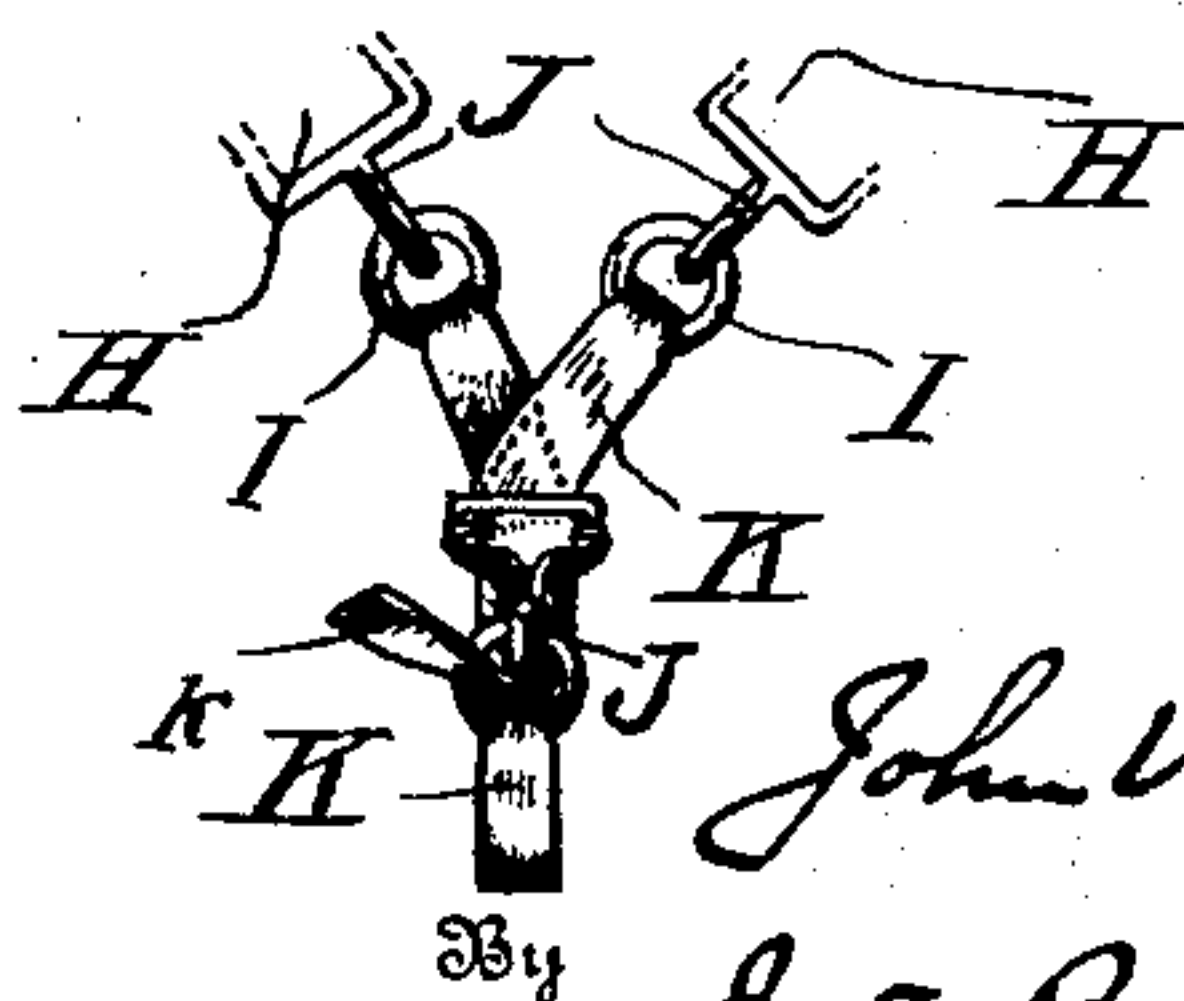
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 678,251, dated July 9, 1901.

Application filed April 16, 1901. Serial No. 56,119. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. HAVER, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented new and useful Improvements in Suspenders, of which the following is a specification.

My invention has for its object to produce a pair of suspenders of peculiar construction which shall be adapted to support the trousers in such a manner as to cause them to set properly and comfortably and to secure this without attaching the suspenders to the rear of the trousers, thus relieving the wearer of the strain which is necessarily incident to suspenders connected to the trousers at the rear whenever the body is bent forward.

It also has for its object to produce a pair of suspenders which shall operate also as a shoulder-brace, and, further, to prevent the suspenders thus constructed from cutting or drawing to an uncomfortable degree upon the wearer around the shoulders.

It has for a further object to produce an important means for attaching the suspenders to the trousers.

To secure these objects, my invention consists of a pair of suspenders and means for attaching them to the trousers constructed in the manner which I will now proceed to describe and as illustrated in the drawings, in which—

Figure 1 is a view illustrating the suspenders in use upon a person. Fig. 2 is a perspective view of the suspenders alone in the position which they occupy when in use. Fig. 3 is a detail view of one of the connecting-pieces B. Fig. 4 is a detail view illustrating the front connection or attachment of the suspenders with the trousers.

Referring to the drawings, A A indicate front straps, which are adapted to be carried over the shoulders and connected with buckles or connecting-plates B at the back. The two buckles B are connected by a cross strap or piece C. The length of the straps A is such that the cross-strap C is disposed relatively high—that is, across the back between the shoulders.

D D are rear straps, which are connected at their upper ends to the buckles B.

F F indicate connecting-straps arranged to

connect the lower ends of the front and back straps A and D. This connecting-strap may be connected to the parts A and D in any desirable way, though I prefer to have it connected directly by sewing or otherwise with the rear or back strap D and connected with the front strap by means of a buckle or triangular-shaped ring.

It will be seen by reference to the drawings that the parts A, D, and F constitute a closed loop through which the arm of the wearer is thrust, the strap A extending across the back of the shoulder and under the arm and the connecting-piece F being arranged at the side under the arm. The two loops thus formed are united by the back strap C, and thereby held in proper relation to each other.

G represents the main supporting strap or band. It is connected with the loop of the suspenders, through which the arm of the wearer extends, as described, directly under the arm, preferably by being connected at the junction of straps D and F, and it is adapted to be secured to the trousers at the side thereof near the top and in line with the side seam. By uniting or connecting the suspenders with the trousers at this point two important results are secured. In the first place the attachment is in the most advantageous position for suspending the trousers, and in the second place it is arranged where it is strongly reinforced, so that there is no danger of the attachment tearing the trousers.

H H represent front supporting-pieces. They are connected with the lower ends of the front straps A and are adapted to be connected with the front portion of the trousers, preferably with the inner fly thereof. These front supporting straps or pieces operate to sustain the trousers in front, holding them properly in position, and they also serve to draw the front straps A forward, preventing them from assuming a tight and uncomfortable position under the arms, as is liable to occur if they are not thus held. The suspenders when constructed and attached to the trousers as described are very comfortable, as there is no connection between the suspenders and the rear of the trousers, thus leaving the back free, so that there is no strain when the body is bent forward, and it



is the common experience of the wearers of suspenders that the great strain and danger of breakage is due to the forward bending of the body. A further advantage is that the front straps A and H coöperate to hold the bosom of the shirt against the body, and thus they tend to prevent bulging or wrinkling thereof.

While it is evident that the suspenders constructed as described might be attached to the trousers by means of buttons or tabs formed with buttonholes, I prefer a novel form of connection which I have illustrated in the drawings and which consists of a ring or loop I, adapted to be engaged by a hook or catch J at the ends of the supporting-pieces of the suspenders. The rings or loops are firmly secured to pieces of braid, tape, or other suitable fabric K, adapted to be permanently secured by sewing to the trousers. These are secured in such position that the rings or loops are just below the top edge of the trousers, and thus out of sight. I prefer that a portion of the tape *k* should be extended upward or beyond the ring I and secured to the trousers, so as to constitute a shield or guard for preventing the hook J from wearing the trousers when it is connected with the ring.

What I claim is—

1. In suspenders the combination of the strap portions arranged to encircle the arms, the back connecting-strap between such arm-encircling portions, supporting - straps arranged between the arm-encircling parts and

the sides of the trousers directly under the arms, and other supporting-straps arranged between the arm-encircling parts and the front central portion of the trousers, substantially as set forth.

2. In suspenders the combination of the front straps arranged to pass over the shoulders, the cross strap or piece C at the back connecting the front straps, the back straps D arranged to be brought from the back to under the arms, the connecting strap or piece F uniting the lower portions of the back straps D and the front strap, the supporting-straps G united with the trousers at the sides, and the downwardly and forwardly extending connecting-pieces H extending from the lower ends of the front straps to the front of the trousers where they are united, substantially as set forth.

3. The combination with suspenders having supporting ends provided with hooks, of the attachments arranged to be secured to the trousers for connections with the suspenders and consisting of straps, tape or braid adapted to be united with the trousers by sewing and provided with the extended ends *k*, and rings secured thereto and adapted to be engaged by the hooks of the trousers and arranged in front of the ends *k* of the straps, substantially as set forth.

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