

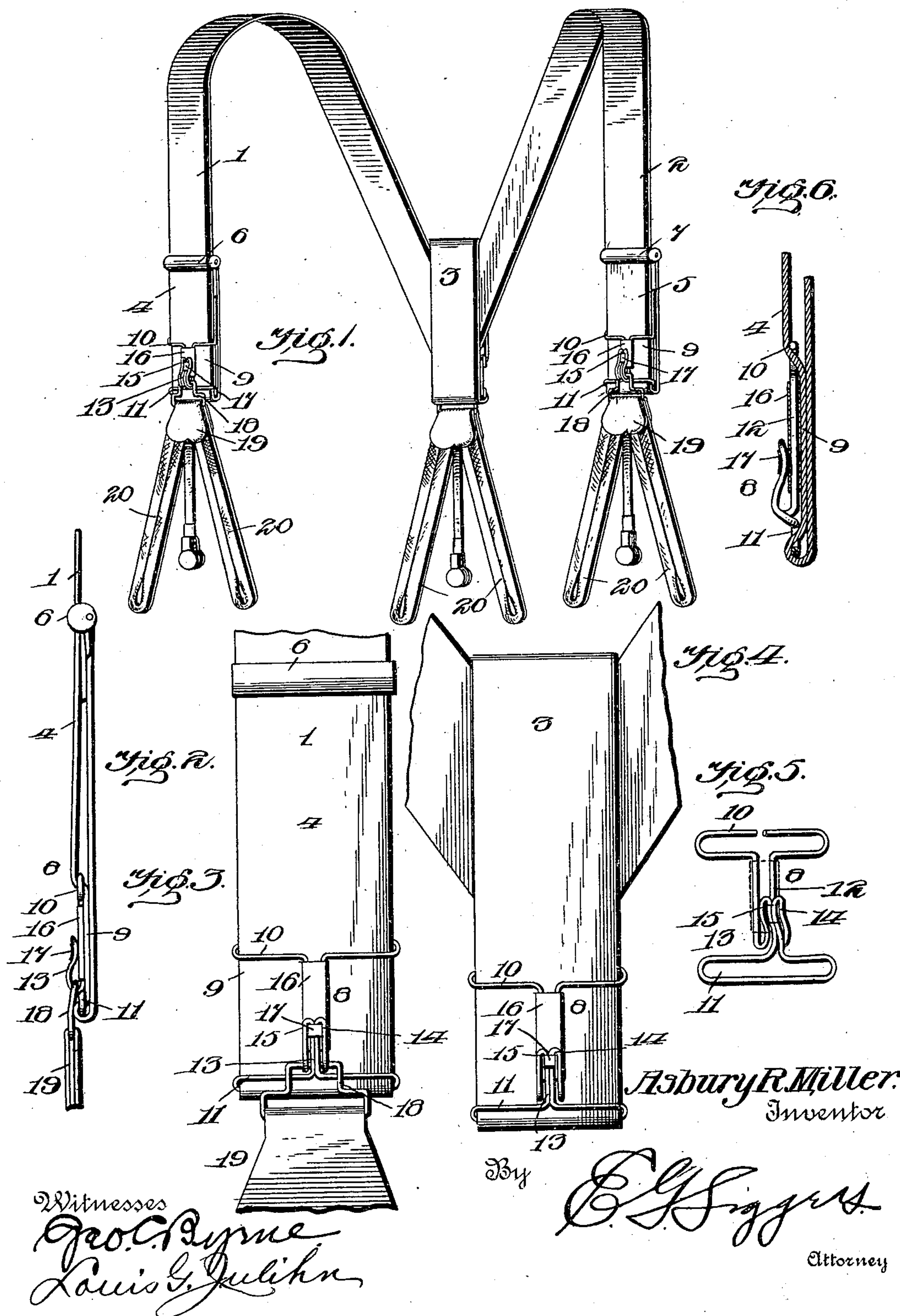
No. 681,924.

Patented Sept. 3, 1901.

A. R. MILLER.
SUSPENDERS.

(Application filed Oct. 12, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

ASBURY R. MILLER, OF LOCKHAVEN, PENNSYLVANIA.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 681,924, dated September 3, 1901.

Application filed October 12, 1900. Serial No. 32,865. (No model.)

To all whom it may concern:

Be it known that I, ASBURY R. MILLER, a citizen of the United States, residing at Lockhaven, in the county of Clinton and State of Pennsylvania, have invented new and useful Improvements in Suspenders, of which the following is a specification.

My present invention relates to improvements in suspenders, but more particularly to an improved suspending device of novel form designed to be applied to the suspenders in a novel manner for the purpose of detachably supporting a tab member or suspender-end.

The object of the invention, considered in a broad aspect, is to produce a suspending device which when applied to the suspenders will be entirely removed from contact with the shirt or other garment over which the suspenders are worn.

The special utility of the invention in the aspect stated will be apparent when it is noted that in all forms of suspenders with which I am familiar some metallic portion of the buckle or the loop of the tab member is permitted to contact with the garment, with the result that the garment is not only soiled but tends to subject the contacting portions of the buckle to the deleterious action of perspiration, which rusts the buckle and besides destroying its utility tends greatly to increase the soiling of the garment. Considered in a somewhat more specific aspect, however, the object of the invention is to produce a simple and inexpensive suspending device adapted to be supported within an adjustable loop formed in the suspenders and freely slidable upon the web in order that it may be positioned at the bottom of the loop at all times, notwithstanding the adjustability thereof.

A further object of the invention is to so construct the suspender that the same suspender-end or tab may be used at any one of the three points, this interchangeable arrangement being of special advantage in case one of them should become broken, whereby a new one can be substituted without throwing the suspenders away.

To the accomplishment of these objects and others subordinate thereto, all as will hereinafter appear, the invention consists in the peculiar construction and arrangement of

parts to be described in detail, illustrated in the accompanying drawings, and defined in the appended claims.

In said drawings, Figure 1 is a perspective view of a pair of suspenders equipped with my improved suspending device. Fig. 2 is a side elevation of one of the end loops of the suspenders equipped with my improved suspending device. Fig. 3 is a front view thereof, and Fig. 4 is a view showing the manner in which the back loop of the suspenders is attached to the webs to compel the latter to lie perfectly flat against the back of the wearer. Fig. 5 is a detail view of the suspending device detached, and Fig. 6 is a sectional view showing the manner in which the suspending device is mounted upon the loop of the suspenders.

Referring to the numerals employed to designate corresponding parts throughout the views, 1 and 2 indicate the webs of a pair of suspenders diverging from the back loop 3, between the layers of which the rear ends of the webs are permanently secured, as by sewing, to organize the loop and the webs in a compact flat body which will rest flat and unobtrusively against the back of the wearer. The front ends of the web are provided with adjustable suspender-loops 4 and 5, formed by doubling back their ends and connecting their extremities to adjusting or regulating buckles 6 and 7, designed to regulate the length of the loops 4 and 5 and to thereby accommodate the suspenders to the convenience of the individual. The construction and operation of the buckles 6 and 7 need not be described herein, inasmuch as they constitute the subject-matter of my concurrent application, Serial No. 32,684, and which has since been patented, No. 666,770, dated January 29, 1901.

Each of the loops 3, 4, and 5 is designed to sustain a suspending device 8, which is slidably carried, as shown in the drawings, upon the front side portion 9 of each loop and rests at the bottom of the loop, so that any strain imposed upon the suspending device will draw the sides of the loop into contact. The purpose of this particular mounting of the suspending device is to position it at a point wholly between the ends of the loop and to remove it from contact with the shirt or other garment

over which the suspenders are worn, by interposing between the suspending device and the garment the other side portion or adjustable end of the loop, which thus constitutes a protector for the shirt. In order to effect this arrangement, however, a special form of suspending device is made necessary, and I have therefore devised a suspending device constructed of stout steel wire bent to form a pair of elongated parallel-spaced loops 10 and 11 and an intermediate shank 12, all lying flat in the same plane, and a spring-hook 13, bent from the shank at a point adjacent to the loop 11.

The precise manner of forming the suspending device to produce the general design illustrated may be varied; but a simple, and perhaps preferable, manner of accomplishing the desired end consists in doubling a single strand or wire, which is then bent at its doubled end to define the loop 11. The two wire strands, which will then extend from the center of one side of the loop, are bent out of the plane in which the loop is disposed to form a pair of twin hooks 14 and 15, each composed of a double strand of wire, as shown. The two strands are then brought back into the plane of the loop at a point adjacent thereto and are extended upward in parallel relation to compose the shank 12, at the end of which opposite the loop 11 the ends of the strands are bent to form the loop 10, disposed, as before stated, to lie flat in the plane of the shank and loop 11. To secure greater rigidity of this structure, the side portions or strands of the shank 12 are surrounded and retained by a keeper or flat sleeve 16, of light sheet metal, and the inner or adjacent portions or strands of the hooks 14 and 15 are likewise secured by a sheet-metal band 17, which organizes the twin hooks into a single retaining-hook, which I have heretofore designated by the numeral 13 and which is designed for the reception and suspension of the loop 18 of a tab member or suspender-end 19. Thus the tab member, which comprises a suitable number of buttonhole-tabs 20, united at their upper ends and provided with the loop 18, constitutes a detachable part of the suspenders, and as the suspending-hook 13 is located at a considerable distance above the lower end of the suspending device, and hence a considerable distance above the lower end of the suspender-loop, the metal loop of the tab member is retained in a position which precludes the possibility of its coming in contact with the shirt or other garment.

In applying the suspending device constructed as described the front side portion of the suspender-loops 3, 4, and 5 are passed through the loop 10 from the front, thence behind the shank 12, and through the loop 11 from the rear, which arrangement will obviously cause the suspending device to lie flat upon the front portion 9 of the suspender-loop and to be held away from the garment

by the intermediate layer of the web, which constitutes the back side of the suspender-loop and serves to guard the suspending device. It will also appear that the suspending device will slide freely upon the web and that the lower bar 20 of the loop 11 will consequently rest at all times in the bottom of the suspender-loop regardless of the extent to which the latter may be adjusted by the manipulation of the buckles 6 and 7.

By the term "suspender" employed throughout the specification and claims I desire to be understood as meaning that device for supporting trousers which is known to the trade and in the art by the term "suspender" in contradistinction to the term "supporter," which latter is applied to various other classes of garment-supporting devices.

From the foregoing it will appear that I have produced a garment-supporter of that class known as "suspenders," embodying suspending-buckles constructed and mounted in a manner to insure their retention wholly out of contact with the garment over which the suspenders are worn; but while the present embodiment of my invention is believed at this time to be preferable I do not limit myself to the precise details of construction herein illustrated and described, as it is obvious that many changes, modifications, and variations may be effected without departing from the scope of the protection prayed.

It will be observed that I have provided at the back of the suspender and at the ends of each of the suspender-straps a loop adapted to receive a suspending device which is of the same construction, whereby the same construction of suspender-end can be used either at the back or at the front of the suspender. By this arrangement should either one of the suspender-ends break the user will have in his possession an extra end, which can be substituted for the broken one without throwing the suspenders away.

What I claim is—

1. A garment-suspender provided with a loop, a suspending device freely slidable upon the outer side portion of the loop and resting at its lower end in the bottom thereof, and a suspender-end retained by the suspending device and engaging therewith above the lower end of the loop.

2. A garment-suspender provided with an adjustable loop, a suspending device freely slidable upon one side portion of the loop and resting at its lower end in the bottom thereof, the other side portion of the loop constituting a guard, and a suspender-end engaged with the suspending device at a point above the lower end of the loop.

3. A garment-suspender provided with a loop, a suspending device slidably retained upon the front portion of the loop, wholly between the ends thereof, the lower end of the suspending device resting in the bottom of the loop, while the rear portion of the latter constitutes a guard for the suspending de-

vice, and a suspender-end attached to the suspending device above the bottom of the loop.

4. A garment-suspender provided with a loop, a suspending device having a pair of transverse, unobstructed spaced loops receiving the front side of the suspender-loop, a suspending-hook located intermediate of the said transverse loops, the rear side of the suspender-loop constituting a guard to prevent contact of the suspending device with the garment over which the suspenders are worn, and a suspender-end attached to the suspending-hook.

5. A garment-suspender provided with a loop, a suspending device mounted solely upon one side of the said loop so that the other side thereof constitutes a guard to prevent contact between the suspending device and the garment over which the suspenders are worn, said suspending device comprising a pair of transverse-spaced loops, an intermediate shank, and a suspending-hook extending from the shank and disposed opposite thereto and located between the loops, and the suspender-end provided at its upper end with a loop engaging the suspending-hook of the said suspending device, said suspender-end being disposed against the front side of the suspender-loop.

6. A garment-suspender provided with a loop, a suspending device mounted solely upon one side of the loop to cause the other side thereof to act as a protector for the shirt, said suspending device comprising a pair of transverse-spaced loops, an intermediate shank disposed at right angles to the loops, and an upwardly-opening hook extending from the shank and located between the loops,

and the suspender-end engaging the said hook and disposed against the front side of the suspender-loop.

7. A garment-suspender provided with a loop, a suspending device mounted solely upon one side of the loop so as to constitute the other side thereof a guard or supporter to prevent the suspending device from contacting with the garment over which the suspenders are worn, said suspending device being formed from a single strand of wire and comprising a loop, a hook extending from one side of the loop, and a double shank extending from the hook and terminating in a second loop, and the suspender-end attached to the hook so as to be disposed against the front side of the suspender-loop.

8. A suspending device comprising a pair of transverse loops, an intermediate shank disposed at right angles to the loops and connected thereto, and the upwardly-opening hook extending from the shank and located between the loops, said hook being disposed substantially parallel with the shank.

9. A suspending device formed from a single strand of wire and comprising a loop, an upwardly-opening rigid hook extending from one side of the loop, and a double shank extending from the bottom of the hook and terminating in a second loop, whereby the hook is located between the two loops.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

A. R. MILLER.

Witnesses:

JOHN H. SIGGERS,
EDWIN E. VROOMAN.