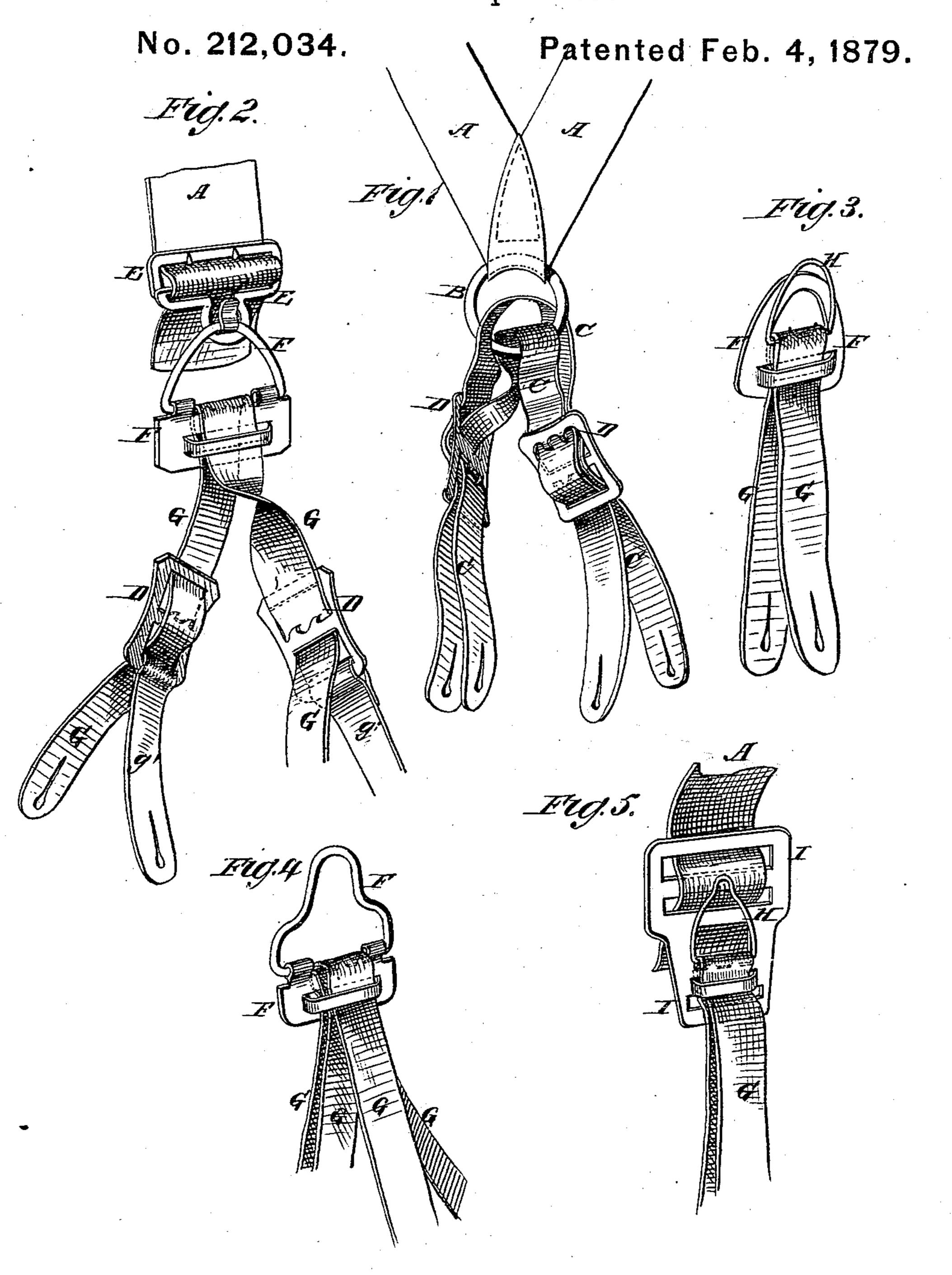
## W. A. MILLER. Suspender.



WITNESSES: Francis Mc Artle. 6. Sedgwick INVENTOR:

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BY

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## UNITED STATES PATENT OFFICE.

WILLIAM A. MILLER, OF MARTINSVILLE, ILLINOIS.

## IMPROVEMENT IN SUSPENDERS.

Specification forming part of Letters Patent No. 212,034, dated February 4, 1879; application filed February 26, 1878.

To all whom it may concern:

Be it known that I, WILLIAM ANDERSON MILLER, of Martinsville, in the county of Clark and State of Illinois, have invented a new and useful Improvement in Suspenders, of which the following is a specification:

Figure 1 shows the arrangement for the rear straps. Fig. 2 shows the arrangement for the forward straps. Fig. 3 shows another arrangement for the same. Fig. 4 shows another arrangement for the same. Fig. 5 shows another arrangement for the same.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish suspenders which shall be so made as to support the pantaloons and drawers or pantaloons and overalls at the same time, which may be readily adjusted to support the drawers or overalls at the proper place, and which will not allow the straps to slip should the pants be heavier than the drawers or overalls, or should one or more buttons come off.

The invention will first be described in connection with the drawings, and then pointed

out in the claims.

A represents the main straps of the suspenders, which pass over the shoulders of the wearer, in the usual way. The rear ends of the straps A meet at an angle, and to them is attached a ring, B, through which are passed the short or button straps C. The straps C, after passing through the ring B, are passed near their ends through buckles or slides D in pairs, as shown in Fig. 1, which buckles D are formed by cutting two wide cross-slots through pieces of sheet metal, forming three parallel cross-bars.

The straps C are passed through the slots of the buckles D, and are kept from sliding in said buckles by teeth formed upon the crossbars, and which penetrate the said straps C.

The straps C may be crossed, and one end of the two straps C passed through one buckle D, and their other ends passed through the other buckle D, as shown in Fig. 1, which arrangement will make the straps C self-adjusting; or the two ends of one strap C may be passed through one buckle D and the two ends of the other strap C passed through the other Havi

buckle D. In this case the straps C are adjusted by adjusting the buckles D. This arrangement may be applied to the forward ends of the shoulder-straps A by hooking the ring B over the hook of a buckle.

To the forward ends of the main straps A are buckled buckles E, which have hooks formed upon their lower part to receive the loops of the buckles F. The buckle F has slots in its lower part, through which the button-straps G are passed and has teeth formed upon the upper edge of the upper cross-bar to penetrate the straps G, and, in connection with the slots, prevent the said straps G from slipping.

A single strap, G, may be passed through the buckle F, and buckles D, having short straps g', attached to their lowest cross-bars, placed upon its ends, as shown in Fig. 2; or two button-straps, G, may be passed through the slots of the buckle F, as shown in Fig. 4. In the latter case the teeth of the buckle F should be made so long as to penetrate both straps G, or the buckle should be made so wide as to allow the two straps to be placed

edge to edge.

The buckle F may be made with a hinge, as shown in Figs. 2 and 4, so that it may be bent at an angle for convenience in adjusting the straps G; or it may be made without a hinge, as shown in Fig. 3. In the latter case the strap or straps G should have a ring, H, placed upon it at the upper bar of the buckle F, to enable it to be conveniently raised from the teeth of the said buckle and adjusted. This arrangement may be applied to the rear ends of the shoulder-straps A by securing the loop of the buckle F to the said rear ends at their point of meeting.

In the arrangement shown in Fig. 5 the button-straps G are connected with the main strap A by a double buckle, I, having two slots in its upper part, through which the main strap A is passed, and having two slots in its lower part to receive the strap or straps G. In this case the strap or straps G should be provided with a ring, H, to enable it to be conveniently raised from the teeth of the cross-bar to adiust it.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. The combination of the ring B, button-straps C, and buckles D, combined and arranged as and for the purpose described.

2. The combination, with the main straps A, of the hook-buckles E, slotted toothed loop-buckles F, and straps G, as and for the purpose specified.

3. The combination of the ring H with the button-straps G, to enable them to be conveniently adjusted upon their buckles, substantially as herein shown and described.

WILLIAM ANDERSON MILLER.

Witnesses:

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E. C. MILLER, B. H. WELSH.