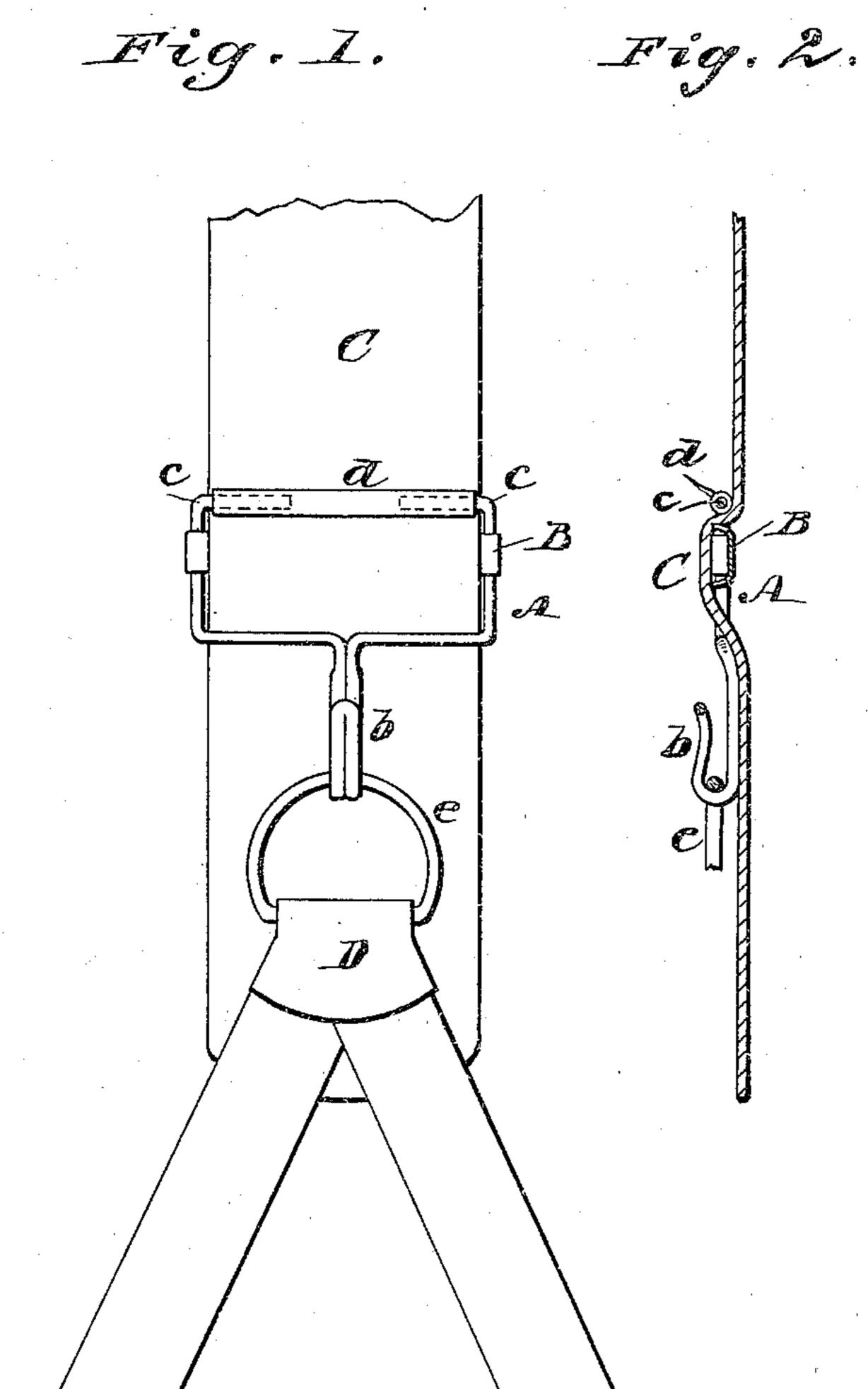
(No Model.)

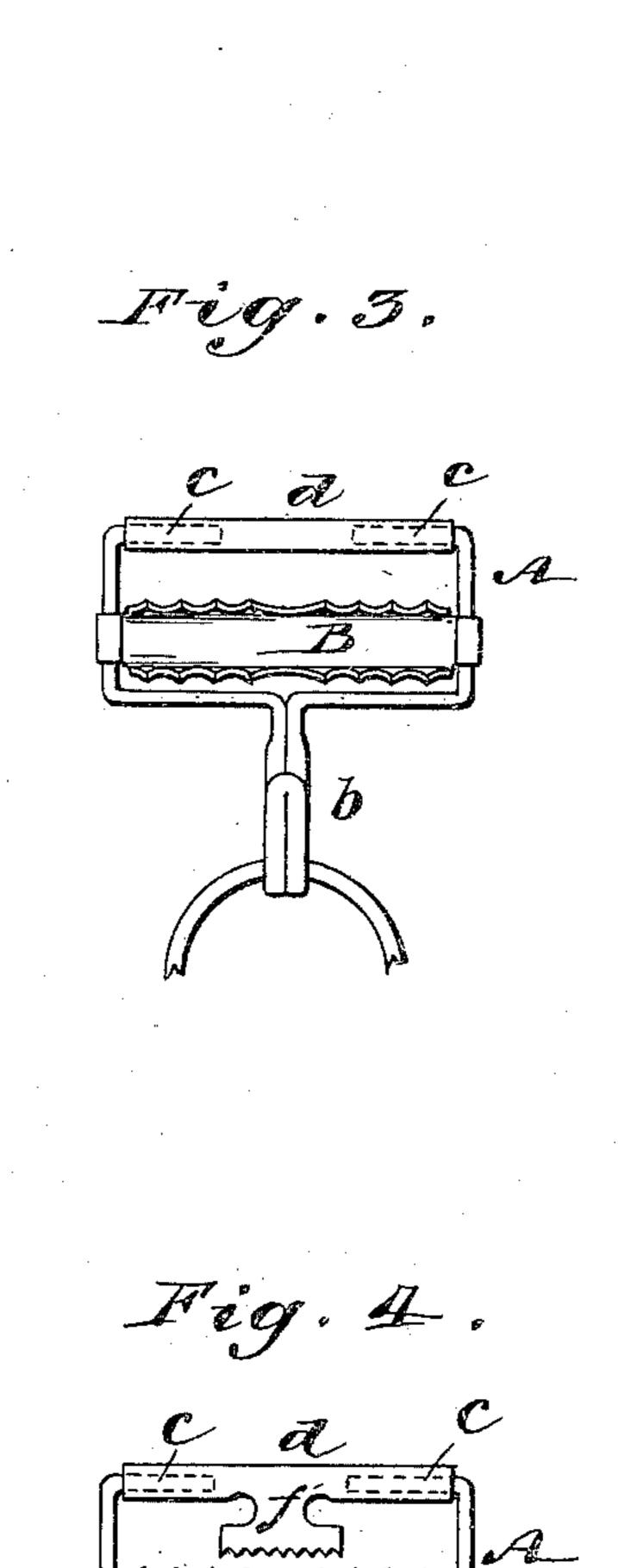
## C. R. HARRIS.

## SUSPENDER OR OTHER BUCKLE.

No. 368,529.

Patented Aug. 16, 1887.





WITNESSES:
Schull Dearner S

C. bedginck

INVENTOR:

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ATTORNEYS.

## United States Patent Office.

CHARLES R. HARRIS, OF WILLIAMSPORT, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND WILLIAM SILVERMANN, OF SAME PLACE.

## SUSPENDER OR OTHER BUCKLE.

SPECIFICATION forming part of Letters Patent No. 368,529, dated August 16, 1887.

Application filed February 19, 1887. Serial No. 228,211. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. HARRIS, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Improvement in Suspender or other Buckles, of which the following is a full, clear, and exact description.

This invention relates to suspender or other like buckles, or combined buckles and lower hooks or loops capable of manipulation or adjustment from the front, and in which the buckle-frame is made of wire and has combined with it a rear toothed cross bar that engages with the web passing through the buckle-frame; and the invention consists in certain novel constructions and combinations of parts, substantially as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a front view of a suspender-strap in part, with a buckle embodying my invention applied, and showing in part the ring-engaging ends of the suspenders attached. Fig. 2 is a longitudinal section of the same in a plane at right angles to Fig. 1, and Fig. 3 is a front view of the combined buckle and hook detached. Fig. 4 is a front view of the buckle under a modified construction.

In Figs. 1, 2, and 3, A is the main body of the buckle-frame or buckle-frame proper, made of a piece of spring-wire bent and doubled upon itself below to form a spring doubled wire hook, b, as in the buckle described in Letters Patent No. 245,967, granted me or my assignees July 20, 1886, and having its upper ends, cc, entered within a tubular sleeve, d, which closes the joint in the frame and strengthens the latter, and which may either be fixed or fitted to turn as a roller upon the ends cc.

B is the toothed cross-bar, which may be of any suitable construction so far as its toothed surface is concerned, but which has its ends constructed to loosely clip and slide up and down or along the straight and parallel sides of the buckle-frame. When the sliding toothed so cross-bar B is midway, or thereabout, of the top ing cross-bar or fraging cross-bar or fr

and bottom of the buckle-frame, the main web portion C of the suspenders, which passes under or back of the top and bottom of the buckle-frame and over or in front of said toothed cross-bar, can then be adjusted through 55 the buckle, or the buckle be adjusted on or along the web, as required. To tighten the buckle on the web C, the sliding cross-bar B is slid up against or toward the top of the buckle-frame, which will bind the web against 6c the top of the frame and on or against the toothed cross-bar, thereby holding it securely.

The spring-wire hook b serves for the engagement of the ring or stirrup e of the lower detachable suspender-ends, D, with the buckle. 65 The buckle, however, may have any other suitable engaging device in place of the hook—as, for instance, a loop at the bottom of the buckle-frame.

The modification in Fig. 4 shows a like con- 70 struction of the buckle, but with its lower engaging device in the form of a loop, b', though it might be a hook, if desired; and the roller or tubular sleeve d, instead of being a plain one, is a toothed one, it being formed with a 75 toothed inner projection, f. When the sleeve d is made free to turn, this toothed projection f may be raised to facilitate the adjustment of the web, and by sliding up the cross-bar B against or toward it the web will be securely so held in place within the buckle, in like manner as hereinbefore described. In each instance the sleeve d, whether toothed or plain, virtually constitutes an upper portion of the buckle-frame.

Here it should be observed that the combination of the toothed sliding cross-bar with the buckle-frame closed on its top, and constructed substantially as described, essentially differs from a combination, such as has before 90 been used, of a buckle-frame open on its upper margin with its extremities turned inward and downward and pointed, and a plain sliding cross-bar or frame perforated to receive the pointed extremities of the main frame 95 through it for engagement with the suspender-strap.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

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1. In a suspender or other like buckle, the frame of the buckle closed on its top, in combination with the toothed sliding cross-bar for engagement independently of the buckle-frame and for operation in relation with the upper closed portion of the buckle-frame, substantially as specified.

2. The wire frame of the buckle-body having straight parallel sides with disconnected to ends c c at top and constructed to form an engaging hook or loop below, in combination

with the tubular sleeve d and the sliding crossbar B, substantially as specified.

3. The buckle frame or body A, in combination with a toothed cross-bar, and the tubular sleeve d, having a toothed projection, f, substantially as specified.

CHARLES R. HARRIS.

Witnesses:

F. H. McCormick, Carl Herdic.