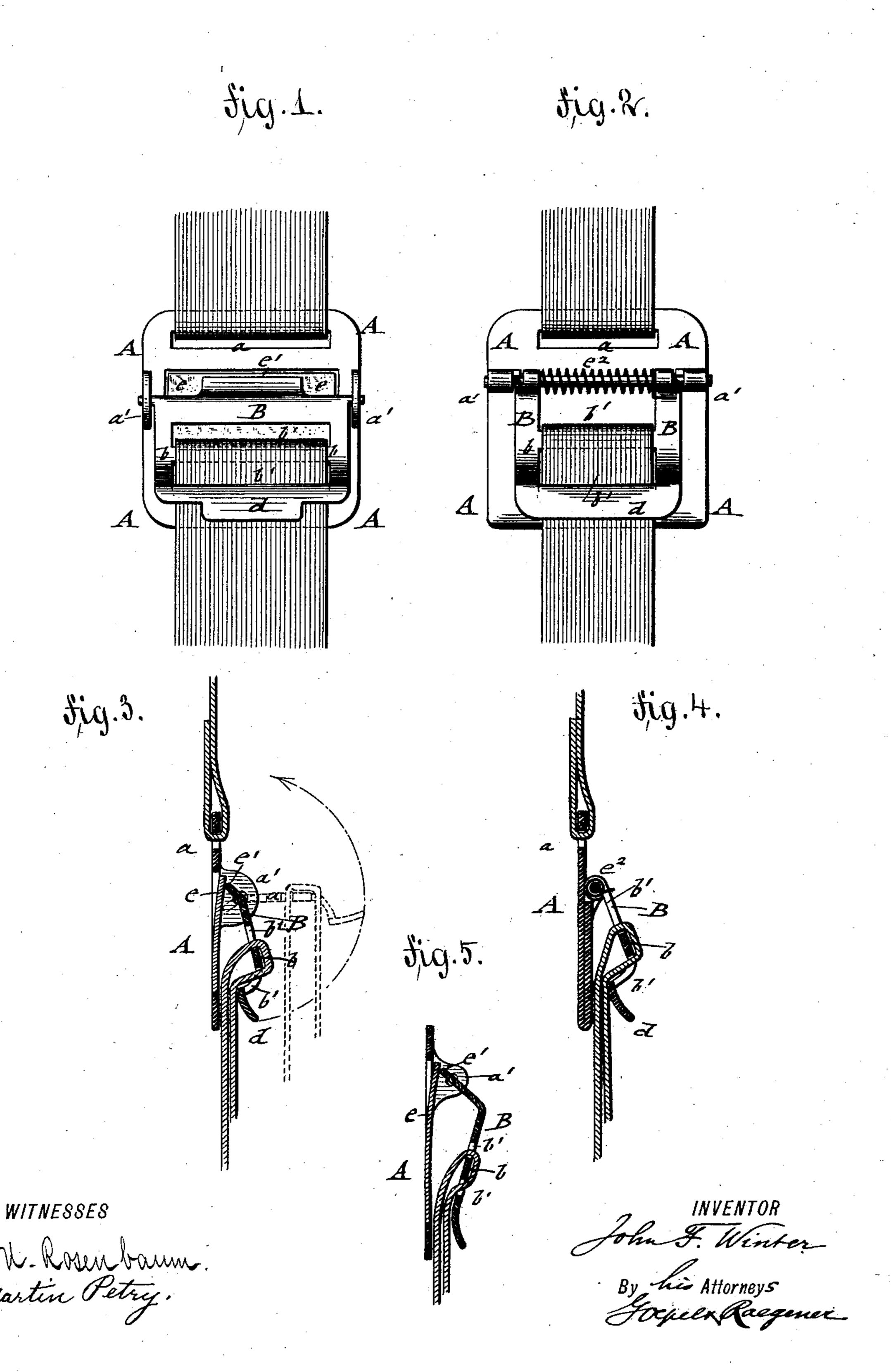
J. F. WINTER.

BUCKLE.

No. 338,327.

Patented Mar. 23, 1886.



United States Patent Office.

JOHN F. WINTER, OF NEW YORK, N. Y., ASSIGNOR TO GEORGE W. McGILL, OF SAME PLACE.

BUCKLE.

SPECIFICATION forming part of Letters Pateut No. 338,327, dated March 23, 1886.

Application filed May 19, 1885. Serial No. 166,067. (No model.)

To all whom it may concern:

Be it known that I, John F. Winter, of the city, county, and State of New York, have invented certain new and useful Improvements in Buckles, of which the following is specification.

This invention relates to buckles for suspender-straps and other purposes, by which the straps can be readily adjusted by pulling them in one direction, while they are rigidly clamped when the strain is exerted in opposite direction.

The invention consists of a supporting main plate and of a hinged and convexly-bent buckle15 plate that is pressed by a spring on the main plate, and provided with a transverse tongue and a slot at each side of the tongue for the passage of the strap, the buckle-plate being further provided at its front edge with an up20 wardly - bent heel for readily opening the buckle-plate when passing the strap through the slots of the plate.

In the accompanying drawings, Figures 1 and 2 represent side elevations of two different constructions of my improved buckle. Figs. 3 and 4 are vertical transverse sections of Figs. 1 and 2, and Fig. 5 is a vertical transverse section of a modified construction of the buckle-plate.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the supporting main plate of my improved buckle, which plate is provided at one end with a slot, 35 α , to which a strap or band is attached. The supporting-plate A is provided at the sides with upwardly-bent ears or sleeves a', that are made integral therewith, to which ears is pivoted a buckle-plate, B, which is made of con-40 vex shape, and provided with a tongue, b, and a transverse slot, b', at each side of the tongue b. The angular bend of the buckleplate may be either at the front part, where the tongue b is arranged, as in Figs. 2 and 3, 45 or at the rear part of the buckle-plate, as shown in Fig. 5; but the bend must be a greater distance from the supporting-plate A than the pivots or pintle of the buckle-plate, as otherwise the buckle-plate would not exert the required friction on the strap to be applied 50 thereto. The strap to be applied to the buckle is passed first through the rear slot, then over the tongue, and then through the front slot. The front edge of the buckle-plate is provided with an upwardly bent end or heel, d, by 55 which the buckle-plate can be lifted for conveniently passing the strap through the same and adjusting it therein.

The buckle-plate B is pressed by a spring, e, onto the supporting-plate A, the spring- 60 pressure being obtained either by slitting the supporting-plate in the form of a spring-tongue, which bears against a downwardly-bent heel, e', at the rear edge of the buckle-plate, as shown in Fig. 1, or by hinging the 65 buckle plate to the supporting-plate and applying a spiral spring, e², around the pintle of the hinge and to the buckle-plate and supporting-plate, as shown in Fig. 2. In either case the buckle-plate B is retained on the support- 70 ing-plate until lifted against the pressure of the spring by taking hold of the front end, d.

By pulling the outer end of the strap passed through the slots of the buckle-plate in one direction, the strap may be readily adjusted 75 in the buckle, while the strap is rigidly retained by the buckle when strain is exerted in the opposite direction thereon, owing to the friction between the overlapping parts of the strap and the strap and the buckle-plate, 80 which friction increases with the increasing strain on the strap.

My improved spring buckle may be used for suspender-straps, stocking-supporters, file-straps, and for all other purposes on which a 85 simple and reliable spring buckle or clasp is required. The buckle admits the ready adjustment of the strap without exerting a cutting or bearing action on the fabric, as the clasp has teeth biting into the fabric.

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

1. The combination of the main supportingplate A, provided with ears a', the angular or convex clamping buckle plate or lever B, pivoted to said ears, and adapted to swing into horizontal position and to close at its lower end against the main plate, the bend of the buckle-plate extending, when closed against the main plate, beyond the plane of its pivotal connection therewith, and a spring which forces the buckle-plate against the main plate, 5 for clamping the lapped ends of the strap between said plates, said plates being provided with means for connecting the strap thereto, substantially as described.

2. The combination of the main plate A, provided with ears a' and with the spring e, and the angular buckle-plate B, pivoted to said ears, and provided with the bar b for the strap, and with the inwardly bent end e', resting against said spring e, substantially as described

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3. The combination of the main plate A, the

angular buckle-plate B, pivoted thereto, the bend of said buckle-plate extending beyond its pivotal connection with the main plate, said buckle-plate being provided with an outturned toe, d, and a spring for forcing said buckle-plate into contact with said main plate, said plates being provided with means for connecting the strap thereto, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOHN F. WINTER.

Witnesses:

PAUL GOEPEL, CARL KARP.