

(No Model.)

J. McKENZIE, Jr.
BUCKLE FOR SUSPENDERS.

No. 532,806.

Patented Jan. 22, 1895.

Fig. 1.

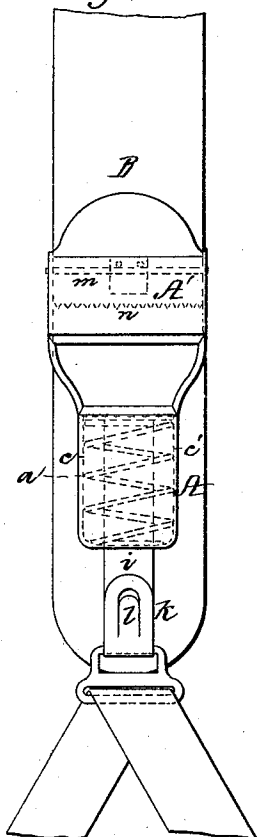


Fig. 2.

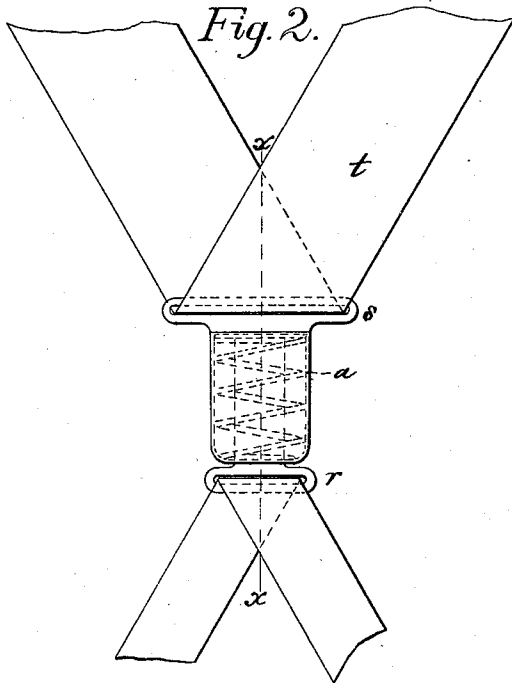


Fig. 3.

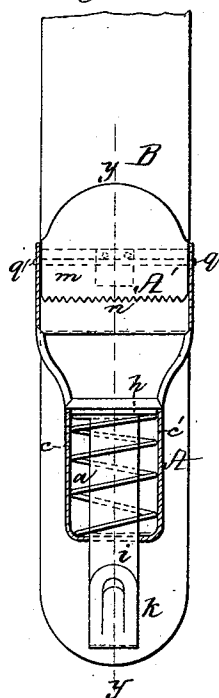


Fig. 5.

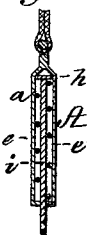


Fig. 4.



Fig. 8.

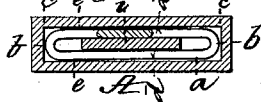


Fig. 7.

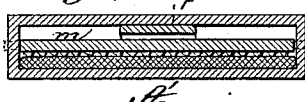
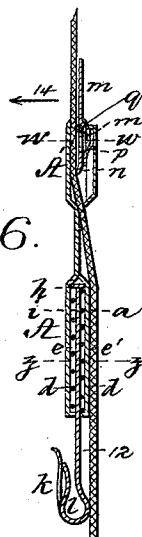


Fig. 6.



Witnesses.

Aug. W. Stearns.

A. F. Stearns

Inventor.

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UNITED STATES PATENT OFFICE.

JOHN MCKENZIE, JR., OF PROVIDENCE, RHODE ISLAND.

BUCKLE FOR SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 532,806, dated January 22, 1895.

Application filed December 6, 1893. Serial No. 492,900. (No model.)

To all whom it may concern:

Be it known that I, JOHN MCKENZIE, Jr., of Providence, in the county of Providence and State of Rhode Island, have invented certain Improvements in Buckles for Suspenders, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

10 Figure 1 is a front elevation of a suspender having applied thereto a buckle constructed in accordance with my invention. Fig. 2 is a rear elevation of the suspender, the construction of my buckle being adapted for supporting the back of the garment. Fig. 3 is a vertical section taken in the direction of the width of the buckle and the front of the suspender strap. Fig. 4 is a plan of the buckle constructed as shown in Fig. 1 with the suspender removed. Fig. 5 is a vertical section on the line *x x* of Fig. 2; Fig. 6, a vertical section in the plane of line *yy* of Fig. 3; Fig. 7, a section on the line *ww* of Fig. 6 enlarged; Fig. 8, a section on the line *zz* of Fig. 6 enlarged.

25 The object of my improvement is to provide a suspender buckle of simple construction in which the strap clamping device consists of a flat lever pivoted about the middle of its length and having its lower end serrated and inclosed in a casing, and the upper end projecting above said casing, as hereinafter described and pointed out in the claim.

35 In the said drawings is represented a metal casing composed of two portions A, A' the lower portion A being preferably narrower than the upper portion A'. Within the lower portion A is located an elliptical spirally arranged spring *a*, whose transverse diameter *b b* is about equal to the horizontal distance between the interior of the two opposite sides *c, c'*, while the conjugate diameter *d d* of the spring is about equal to the horizontal distance between the interior of the front *e* and back *e'* of the casing. (See Fig. 8.)

45 Resting on the top of the spring and extending across the junction of the two portions A A' is a horizontal bar *h* to which is connected the upper end of a vertical arm *i* which is located in the longitudinal axis of the spring and passes down through the bot-

tom of the portion A sufficiently far to bend up its lower end into the form of a hook *k* (Figs. 1, 3 and 6) the center of the hook being punched inwardly toward its upright portion 55 12, thereby forming a spring *l* for retaining in place the ordinary ring used in connecting the supporting straps with the front of the garment.

The interior of the enlarged portion A' of 60 the casing is of the same width as the strap B on which it slides, the strap being passed down from its top through an aperture in its bottom and at the back of the portion A'. Within the upper end of this portion A' is 65 pivoted a wide flat lever *m*, on a pin *q* soldered thereto, its lower end forming a serrated jaw *n*. A bent spring *p* secured at its upper end within the portion A' and in its normal position bearing against the back of the jaw 70 *n* forces its teeth into the strap (Fig. 6) and retains it in position when adjusted to the proper length.

The strap may be lengthened by moving 75 the upper end of the lever *m* in the direction of the arrow 14 which overcomes the pressure of the spring *p* and disengages the serrated jaw from the strap when the buckle is free to be moved down thereon, and when adjusted 80 the strap is held by the return of the serrated jaw (on the release of the spring). When however the suspender is to be shortened, it is only necessary to slide the buckle upward on the strap without removing the pressure 85 of the serrated jaw on the strap.

Where the straps at the back of the garment are to be united by an elastic connection, I modify the construction of my buckle as follows, viz., (see Figs. 2 and 5.) I dispense 90 with the upper portion A' of the casing and with the hook *k*, and extend the vertical arm *i* through the bottom of the portion A only a sufficient distance to form a transverse loop *r* for the bight of the bifurcated back strap to rest in, and I also modify the casing A by 95 slightly enlarging its upper end and forming a transverse loop *s* (somewhat larger than that *r*) for the reception of the bifurcated shoulder strap *t*.

100 I am aware that spiral springs have been employed in the formation of suspender buckles, but I believe that no previous invention

anticipates my herein described specific construction and arrangement of its parts.

I claim—

5 A strap clamping device consisting of a flat lever *m* having a pivot pin *q* about the middle of its length and a serrated jaw *n* at its lower end, a casing *A'* in which it is pivoted and has said lower end inclosed and its upper
10 end projecting through the top of said casing, and a spring *p* secured to the inner side of

the casing *A'* for pressing the jaw into contact with the strap, all combined and arranged substantially as described.

Witness my hand this 15th day of November, 1893.

JOHN MCKENZIE, JR.

In presence of—

JOHN E. CONLEY,

JOHN C. QUINN.