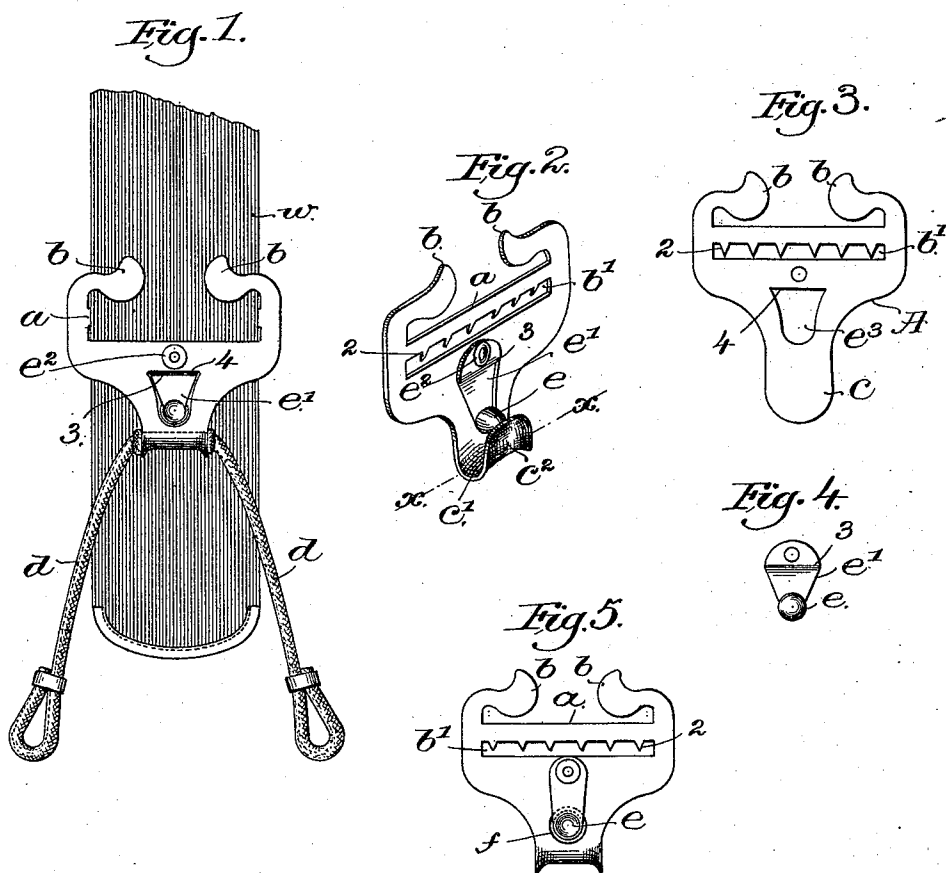


(No Model.)

A. M. ZIEGLER.
SUSPENDER BUCKLE.

No. 487,044.

Patented Nov. 29, 1892.



Witnesses.

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UNITED STATES PATENT OFFICE.

ALFRED M. ZIEGLER, OF BOSTON, MASSACHUSETTS.

SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 487,041, dated November 29, 1892.

Application filed June 17, 1892. Serial No. 437,020. (No model.)

To all whom it may concern:

Be it known that I, ALFRED M. ZIEGLER, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Suspender-Buckles, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention has for its object to improve and simplify that part of the buckle called the "hook" or the part which is engaged by the ends or buttonhole portions of the suspender. The buckle herein shown has at its lower end an open upturned hook or saddle of concavo-convex shape in cross-section which is free to be engaged by the cords or ends containing the buttonholes, and co-operating with this hook is a tongue having a substantially-hemispherical teat terminating near and opposed to the free end of the hook, so that the said teat, while it enables the cord to be readily inserted in the hook, yet offers sufficient resistance to the removal of the cord to prevent the accidental escape of the cord from the hook. The tongue referred to is secured to the buckle-body preferably by an eyelet, and the plate is so shaped and fitted to the buckle-body as to prevent side twisting or strain of the plate.

Figure 1 shows part of a suspender with one of my improved buckles attached thereto. Fig. 2 in perspective shows what I denominate the "inner side" of the buckle. Fig. 3 shows the blank before its end is bent into hook form. Fig. 4 shows the plate detached, and Fig. 5 shows a modified form of body and plate.

The buckle is composed of a blank A, (see Fig. 3,) having a toothed cross-bar *a*, an open space above it closed but partially by the horn-like ends *b b*, under and behind which may pass the web *w*, the web after crossing the said cross bar entering the slot *b'*, so as to be engaged by the teeth 2 at the under side of the cross-bar.

The part of the buckle so far described forms the subject-matter of claim in an application, Serial No. 432,332, filed on the 9th day of May, 1892. The blank has an end *c*, which in a suitable die is bent backwardly toward the cross-bar to form the hook *c'*, Fig. 2, the said hook in cross-section in the line *x*, Fig. 2,

being of saddle shape or concavo-convex, so as to sustain the cord *d* without contact with chafing on square corners or surfaces. The blank is cut out between the slot *b'* and the hook sufficiently to enable a hemispherical teat *e* to be located in the mouth or entrance to the hook and the seat *c'* thereof. The teat *e* is connected to and forms part of a plate *e'*, attached, preferably, to the blank or buckle-body by an eyelet *e'*. In Fig. 3 the opening *e'* for the teat *e* is of substantially the size and outline of the plate *e'*, and the plate *e'* is shouldered, as at 3, to co-operate with the edge 4 to thus aid in keeping the plate *e'* from lateral motion or vibration, the shoulder aiding in reducing the strain on the eyelet or fastening *e'*. In Fig. 5 the opening *f* for the teat is of slightly-larger diameter than the teat *e*, and the latter is extended through said opening, the plate carrying the teat resting firmly against one side of the buckle-frame. In practice I prefer that the hook *c'* rest directly against the web or be turned toward the body of the wearer, as in Fig. 1, thus leaving a substantially-smooth surface at the outer side of the buckle.

The plate *e'*, with its hemispherical teat, forms a novel and extremely-useful adjunct to the body of the buckle and the hook, and by pulling on the cord to overcome the stiffness of the plate *e'* permits the passage of the cord *d* into the hook or out from the hook, as required.

This invention is not limited to the particular shape of the upper part of the buckle or the part which engages the web.

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

1. In a suspender-buckle, a sheet-metal plate or frame provided with a hook having a concavo-convex seat and an opening in the plate above the seat, combined with a yielding plate having a semispherical teat to partially close the throat of said hook, but yet yield readily to the introduction and removal of a round cord, as and for the purposes set forth.

2. The herein-described suspender-buckle, it consisting of a one-piece metal plate of single thickness, the plate being cut away be-

tween its side edges to leave a single cross-bar with a web-receiving space above and below it, the under edge of the cross-bar having a series of teeth turned outwardly toward the front of the plate to engage the web, the part
5 of the plate below the lowermost space being tapered and bent toward the back of the plate and then upwardly to form a hook, the ends of the spaces in the plate both above and be-
10 low the cross-bar serving as edge guides for the selvage edges of the web, the space in the plate above the cross-bar having an open mouth through which to lead the web laterally out and then in when the buckle is to be

adjusted on the web, substantially as described.

3. The buckle-frame having the two horns, a fixed bar toothed at its under edge, a slot, a hook, and a recess, combined with a plate provided with a hemispherical teat fastened to said frame, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED M. ZIEGLER.

Witnesses:

GEO. W. GREGORY,
M. J. SHERIDAN.