(No Model.)

E. J. KRAETZER.

BUCKLE.

No. 496,161. Patented Apr. 25, 1893.

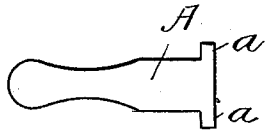

Fig. 1

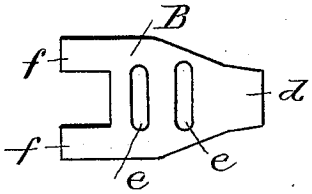

Fig. 2.

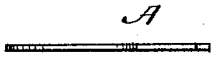

Fig. 3.

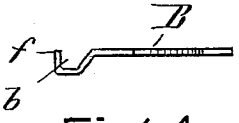

Fig. 4

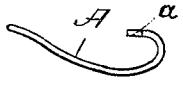

Fig. 5

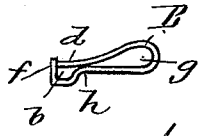

Fig. 6.

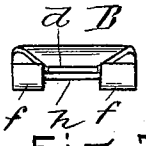

Fig. 7.

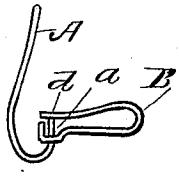

Fig. 8

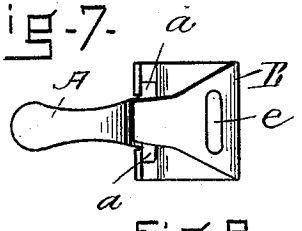

Fig. 9.

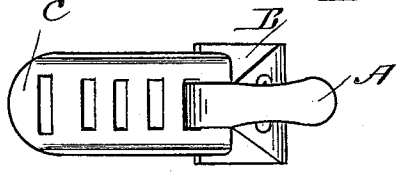

Fig. 10.

WITNESSES

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Atty.

UNITED STATES PATENT OFFICE.

EDWIN J. KRAETZER, OF CAMBRIDGE, MASSACHUSETTS.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 496,161, dated April 25, 1893.

Application filed November 29, 1892. Serial No. 453,502. (No model.)

To all whom it may concern:

Be it known that I, EDWIN J. KRAETZER, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

My invention relates to that class of buckles commonly used on arctics, overshoes, and the like, and consists in special features of construction hereinafter set forth in detail.

Referring to the accompanying drawings: Figures 1 and 2 are plans of the blanks A and B from which are made the tongue and tongue plate respectively. Fig. 3 is an edge view of A before it is bent into the shape of the tongue shown in Fig. 5. Fig. 4 is an edge view of tongue plate B, partially completed. Fig. 5 is an edge view of tongue. Fig. 6 is an edge view of tongue plate B completed. Fig. 7 is an end view of same. Fig. 8 is an edge view of tongue and tongue plate combined. Fig. 9 is a plan view of same, wide open. Fig. 10 is a plan of draw plate attached to tongue and tongue plate.

The tongue A is of the shape shown in Figs. 1 and 5, and has at its end the laterally projecting pintles *a a* by which it is attached to the tongue plate.

The tongue plate B is formed from the blank of the shape shown in Fig. 2, having the ears *f f* at one end, the transverse slots *e e* in the center, and the taper *d* at the other end. The ears *f f* are first bent to form the angular journals *b*, Fig. 4. These journals project below the plane of the plate and the ends of the ears project upward at right angles to said plane. The end *d* is then bent up and over to form a loop, *g*, as shown in Fig. 6, the tapered end *d* just fitting between the upright ends of the ears *f f*. The sharp bend of the loop comes between the transverse slots *e e* so that in the completed tongue plate these perforations are superimposed and form a means of attaching said tongue plate to the flap of the overshoe or other article. The curve of the end *d* is reversed slightly so that it will be practically horizontal at the end, and it is bent over so that it springs down hard on the shoulder *h*, Fig. 6, thus forming the spring of the buckle. The tongue is attached to the tongue plate by springing the pintles *a a* of the tongue into the journals *b b* of the tongue plate. The end *d* then bears on the central portion of the end of the tongue, between the pintles and holds it in position. When the tongue is open or closed, the pintles lie flat in the bottom of the journals, but in any other position these pintles are more or less on edge in the journals and consequently as they are broader than the depth of the journals, the end *d* is sprung up as shown in Fig. 8. The spring thus obtained is strong and durable. The usual draw-plate G is used, having a number of transverse slots and bars, against any one of which bars the tongue of the other member of the buckle is adapted to engage. This is fastened by the end to one flap of the overshoe, while the tongue plate is fastend to the other flap. As stated above, the end *d* of the loop spring of the tongue plate rests between the upright ends of the ears *f f;* that is, its end is flush with the outer sides of said upright ends of the ears *f f*, which project up above it on each side. This is clearly shown in Figs. 7 and 9. It will be seen that by this construction, the tongue is securely locked to the tongue plate;—horizontally, by the journals *b b* engaging with the pintles *a a*, and vertically by the end of the spring *d* bearing on the central rear end of the tongue between the pintles. Besides securely locking together the tongue and tongue plate, this arrangement of the spring, journals, and pintles renders my buckle very stable; it being almost impossible to unclasp the tongue by accident.

This stability, together with the simplicity of the parts of my buckle, and their power and durability, combine to render it a very desirable article of manufacture.

I claim—

1. A buckle consisting of the combination of a draw plate, a tongue having pintles, and a tongue plate having pintle-supporting, journal ears and a spring formed of said plate bent upon itself and whose free end rests between said ears directly upon the central rear

end of said tongue, the doubled end of the plate being formed into a loop to render it more resilient, substantially as described.

2. In a buckle, a tongue plate B struck up in one piece, having journal ears *f f*, a loop spring *g* formed of said plate bent upon itself and with its free end *d* resting between the said ears, substantially as described.

In witness whereof I have hereunto set my hand.

EDWIN J. KRAETZER.

Witnesses:
WM. B. H. DOWSE,
L. H. FAWCETTE.