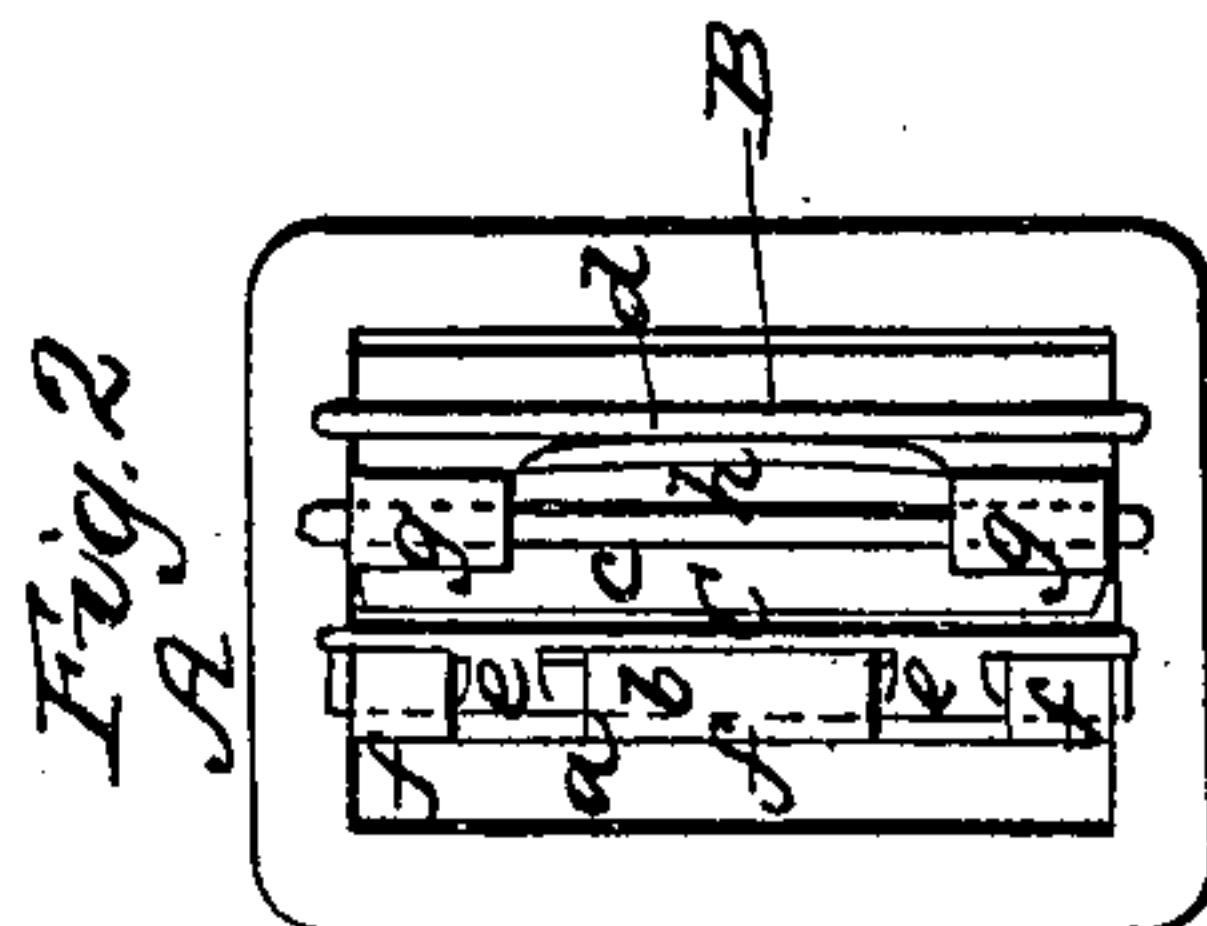
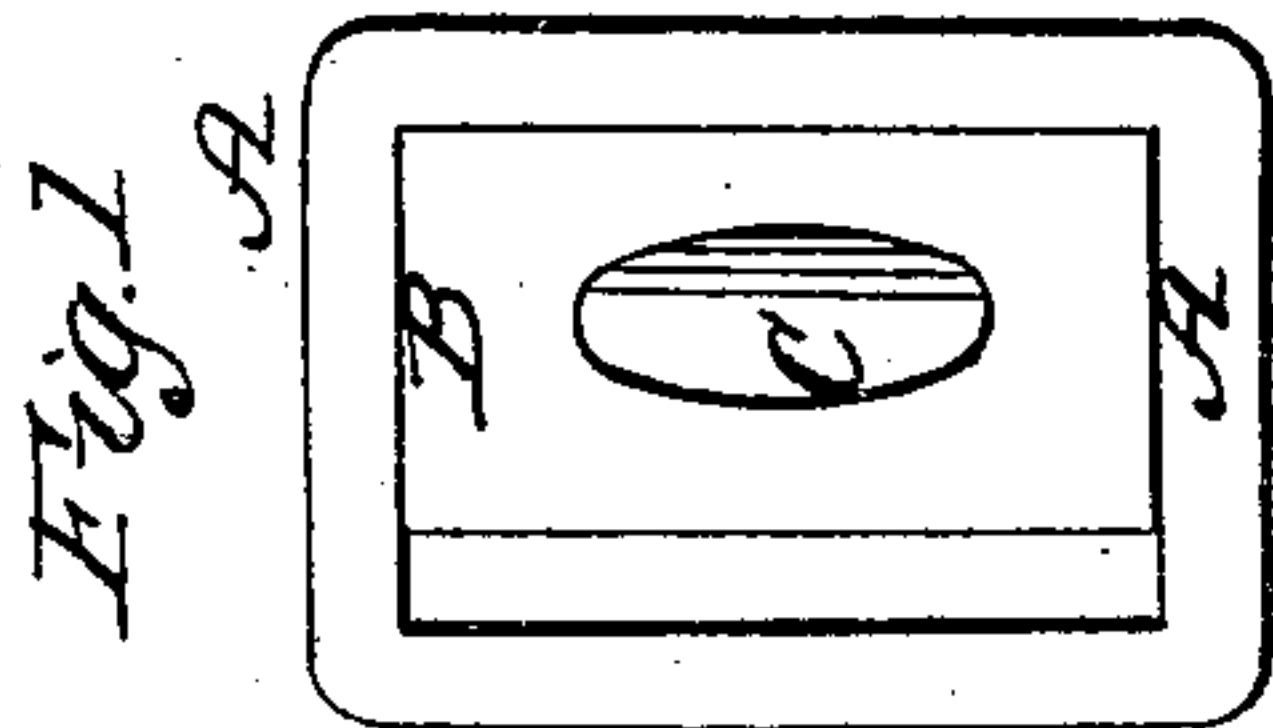
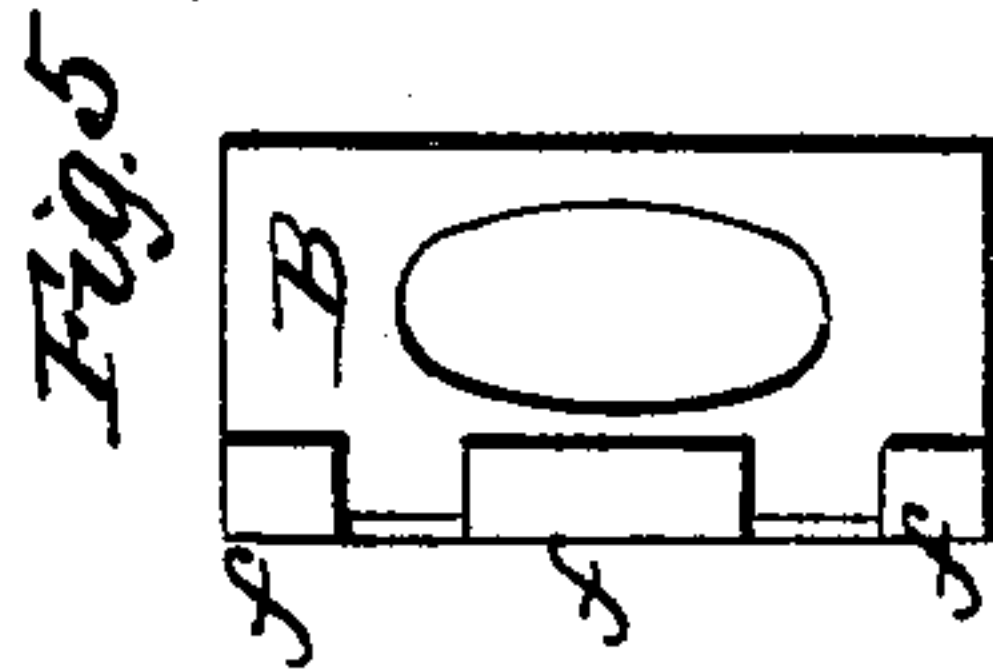
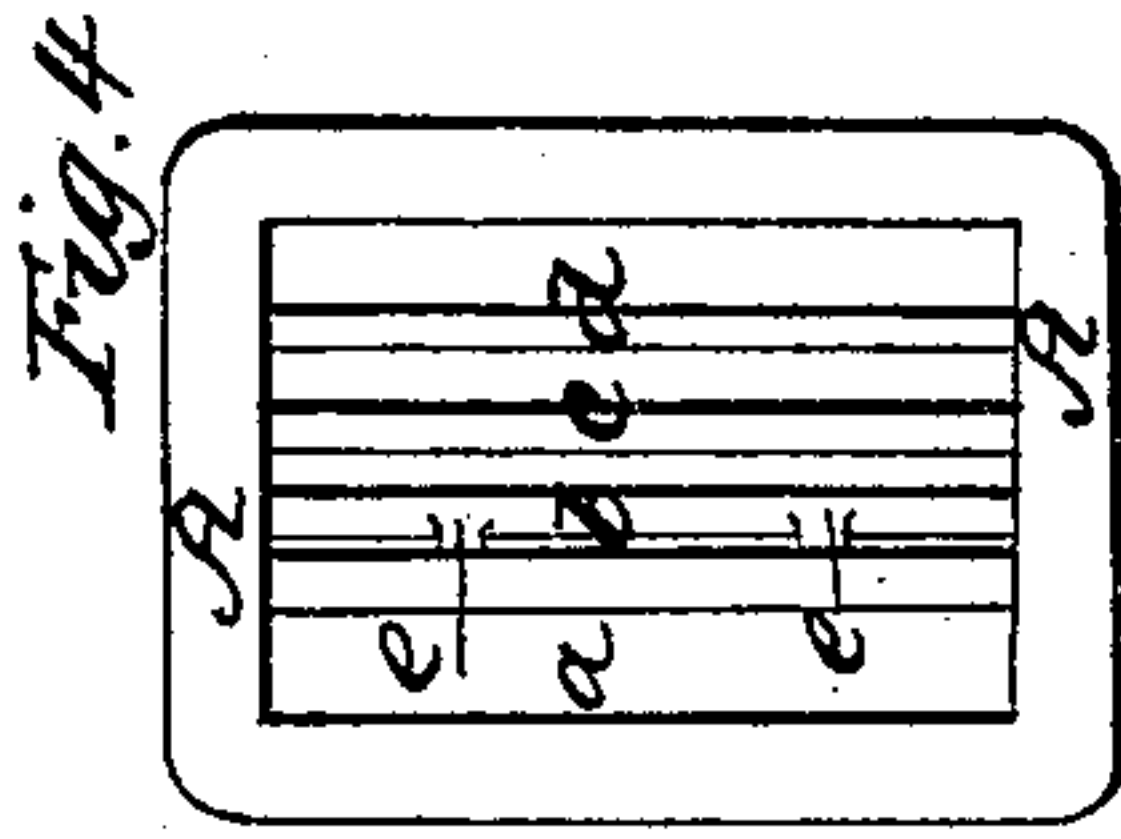
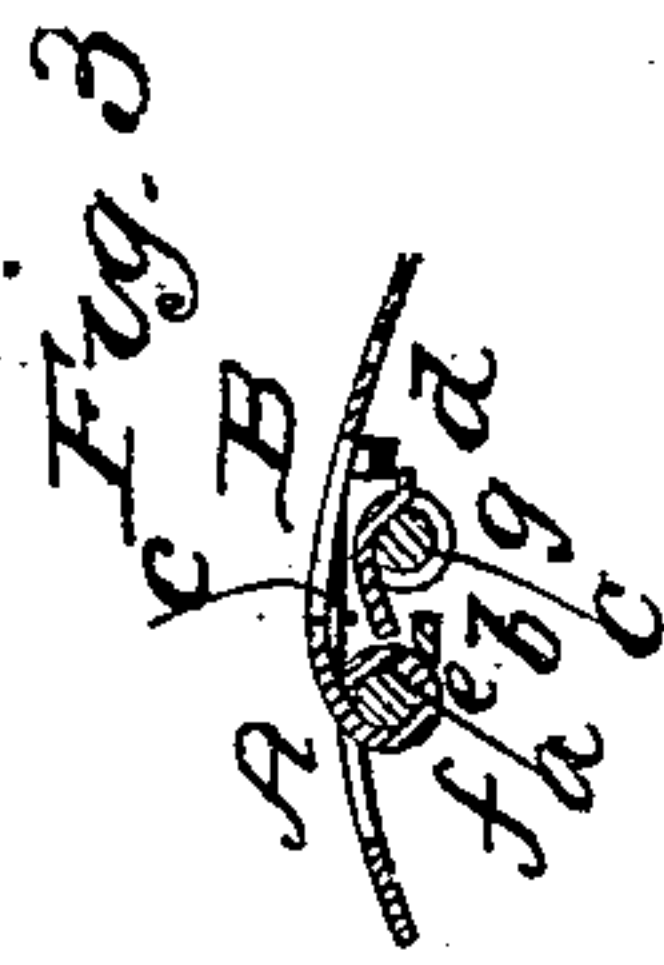
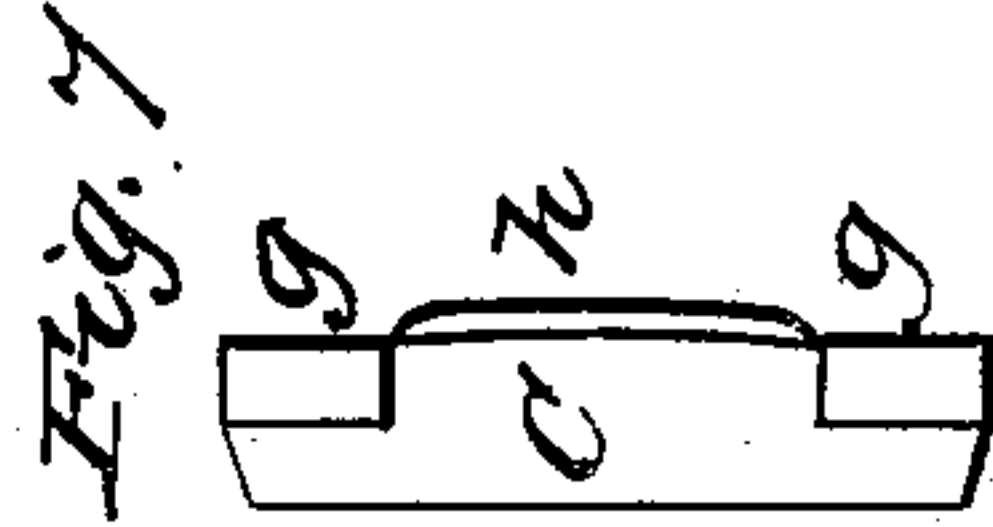
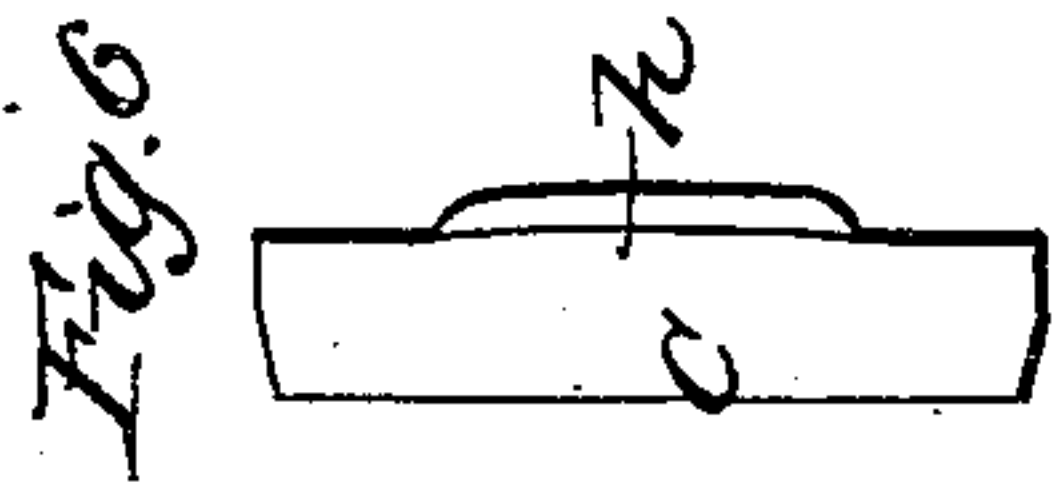


WOODMAN & HATFIELD.

Buckle.

No. 47,159.

Patented April 4, 1865.



Witnesses
Frederick C. Custer
J. P. Hale Jr.

Inventor
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 by their attorney
R. H. Eddy

UNITED STATES PATENT OFFICE.

CHARLES E. WOODMAN AND CHARLES B. HATFIELD, OF BOSTON, MASSACHUSETTS, ASSIGNORS TO SAID CHARLES E. WOODMAN.

IMPROVED BUCKLE.

Specification forming part of Letters Patent No. 47,159, dated April 4, 1865.

To all whom it may concern:

Be it known that we, CHARLES EUGENE WOODMAN and CHARLES B. HATFIELD, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Buckles for Shoes and various other Articles; and we do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a top view of one of our improved buckles; Fig. 2, an under side view of it; Fig. 3, a transverse section of it; Fig. 4, a top view of its frame and cross-bars as they appear preparatory to the application of their tongues. Fig. 5 is an under side view of the larger tongue. Fig. 6 is a top view, and Fig. 7 an under side view, of the lesser or double tongue, to be hereinafter explained.

In the said drawings, A denotes the buckle-frame as made of metal or other suitable material, and being in the form of an open rectangle. Extending across the said frame, and between and parallel to its longer sides and parallel to one another, are four cross-bars, *a b c d*, which are arranged with respect to one another as shown in the drawings. The first two of these bars are joined by two connections, *e e*, which are disposed between the end bars of the frame in manner as shown in Fig. 2, and serve as stops to arrest the larger tongue when turned upward. On the first bar, as the larger or overlapping tongue is hinged or so applied to it as to be capable of being turned thereon, the lesser or double tongue C turns in a similar manner on and projects in opposite directions from the bar *c*. In order to hinge the larger tongue to its bar *a*, three projections, *f f f*, from the said tongue are bent around the bar. Similar projections, *g g*, from the lesser tongue C extend around the bar *c*. The additional part, *h*, of the lesser tongue performs an important office—that is to say, it operates in conjunction with the bar *c* in holding the retaining-strap of the buckle in place when the buckle is applied to it. In other words, the little auxiliary tongue or part *h* and the bar *d* aid in preventing the buckle from slipping on the strap under the strain of the confining-strap.

In applying the retaining-strap to the

buckle, such strap is first to be passed through the buckle from its under side and between the two tongues, after which it should be turned or bent over the lesser tongue C and next passed down between the said lesser tongue and the bar *d*. From this it will be seen that an attempt to pull the strap backward through the buckle will cause the double tongue to pinch the strap against the two bars *b d*, and with a degree of friction generally more than sufficient to prevent the buckle from slipping on the strap under any ordinary draft of the other or confining strap.

In the application of the said confining-strap to the buckle, it is to be passed over the upper surface of that part of the other strap which may extend through the buckle. From thence the confining-strap should be passed upward through the buckle—that is, through the space between the bar *d* and the next adjacent side of the buckle-frame, thence across and over the larger tongue, thence down between the rear part of the said larger tongue and the next adjacent side of the buckle-frame, and thence between the lower surface of the said side and the upper surface of the retaining-strap.

For the purpose of enabling a person to raise the larger tongue upward, such tongue may have a hole or slot made through it, such slot being for the reception of the thumb-nail of the person when by means of such he may attempt to turn the tongue upward.

The advantages of our improved buckle, made as described, are as follows: First, it does not require any puncturing of the retaining-strap in order for its attachment to the buckle, as the buckle has no pointed tongue or tongues to go through the said strap, which tongues confine the buckle to one position on the strap. Thus a buckle having such tongues cannot be changed in position on a strap, (in case the strap should become stretched,) except new holes are made in the strap for the reception of the buckle tongue or tongues. Our improved buckle can be readily adjusted to any position on the strap, and thus, when applied to a shoe, it can be easily so moved and fixed on the strap as to come directly over the middle of the instep. In some cases the auxiliary part *h* may be dispensed with,

and the same may be said with regard to the bar *d*; but we prefer in general to retain these parts in the buckle, as they contribute greatly toward holding it to the retaining-strap.

We do not claim the combination of a furcated or toothed tongue and an overlapping tongue with a buckle-frame; but

What we claim as our invention is as follows—that is to say:

1. The combination and arrangement of the holding-bar *b* and the straight-edged tongue *C* with the bar *a*, the overlapping tongue *B*, and the buckle-frame *A*.

2. The combination and arrangement of the compound or double tongue *C* and the bar *b* with the overlapping tongue *B* and the buckle-frame.

3. The combination and arrangement of the

compound or double tongue *C*, the bar *b*, or its equivalent, the bar *d*, and the frame *A*.

4. The combination and arrangement of the cross-bar *d* with a single tongue and an overlapping tongue and the buckle-frame.

5. The construction of the overlapping tongue with a slot, or its equivalent, arranged within it substantially in manner and for the purpose set forth.

6. The combination of the connections *e e* with the two cross-bars *a b* and the tongue *B* applied to them (the said bars) and the buckle-frame, as specified.

CHARLES EUGENE WOODMAN.
CHAS. B. HATFIELD.

Witnesses:

R. H. DDY,

F. P. ALE, Jr.