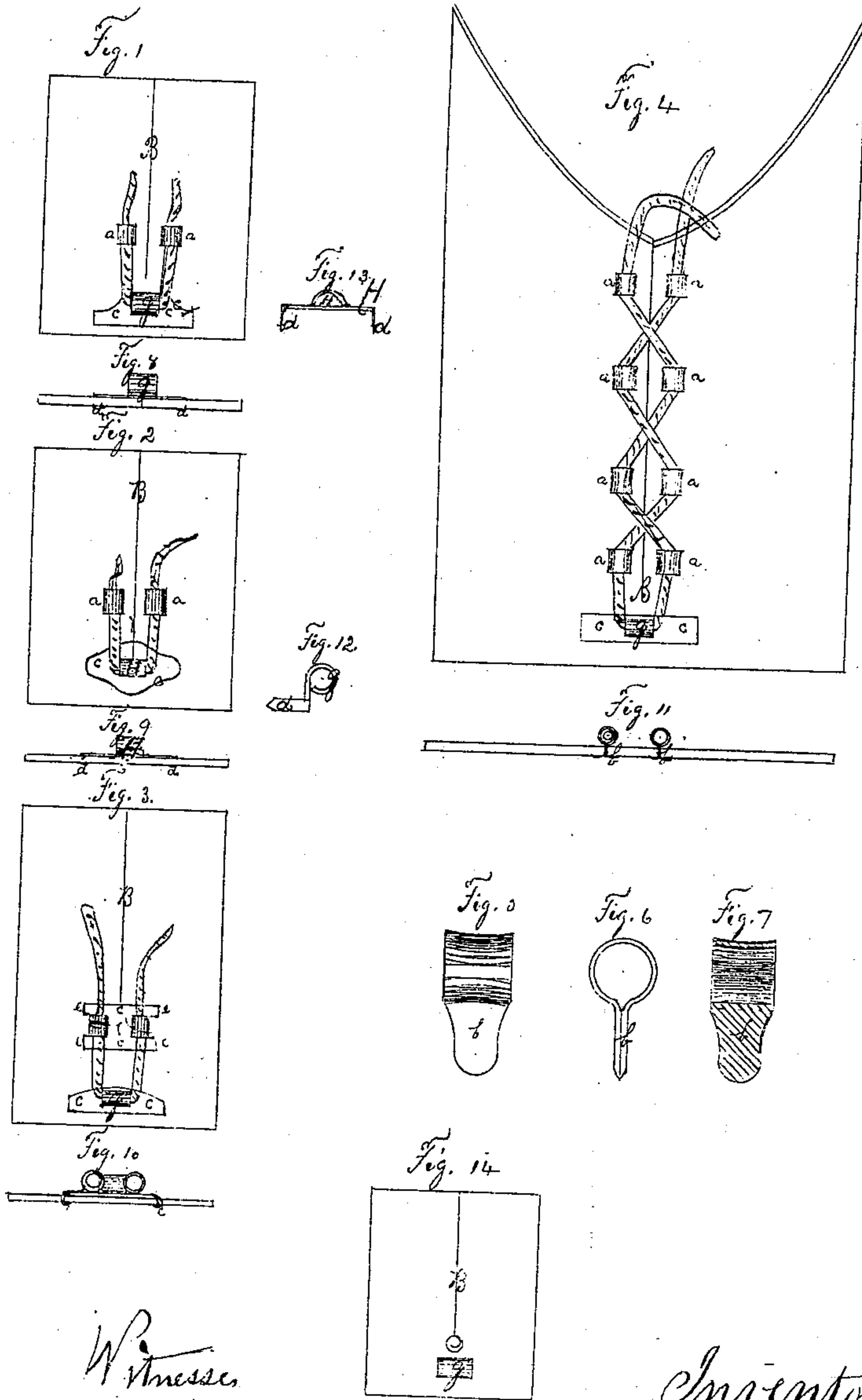


A. G. MEAD.
LACING EYE.

No. 95,708.

Patented Oct. 12, 1869.



Witnesses,
H. S. Brown
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ALBERT G. MEAD, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF, CHARLES J. ADDY, AND GEORGE H. WOOD, ASSIGNORS TO ALBERT G. MEAD, CHARLES J. ADDY, AND MILTON A. KENT, OF SAME PLACE.

Letters Patent No. 95,708, dated October 12, 1869; antedated September 27, 1869.

IMPROVED LACING-EYE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, ALBERT G. MEAD, of Boston, in the county of Suffolk, and State of Massachusetts, have invented certain new and useful Improvements in Lacing-Eyes for Boots and Shoes, and in a lacing-eye and stay combined, 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—

Figures 1, 2, 3, and 4, represent a portion of the front of the shoe with my improvements applied thereto;

Figures 5, 6, and 7, are different elevations of detached lacing-eyes made according to my improvement, but considerably enlarged;

Figures 8, 9, and 10, are end elevations of figs. 1, 2, and 3, respectively;

Figure 11 is a transverse section of fig. 4, on the line A B thereof;

Figure 12 is an end elevation of the transverse lacing-eye *g*, shown in figs. 1 and 8; and

Figure 13, an end elevation of transverse eye *H*, shown in figs. 2 and 9.

Figure 14, a transverse eye, *G*, applied direct to the leather.

This invention relates to a new and improved lacing-eye, for lacing boots and shoes; to a transverse lacing-eye, to hold the loop or bight of the lacing, and to the latter, combined with a stay, to prevent the stock being torn when drawing the upper on to the last, or, to use a common expression, "in lasting the shoe."

This invention has for its object to materially cheapen the article of lacing-eyes, to facilitate their application, to prevent the cutting of the lacing at the bight or looped portion, and to strengthen the shoe at the terminus of the central or other slit, by a device which serves the double purpose of a stay and a bight or loop-holding eye, which will not cut nor chafe the lacing *h*.

My improved lacing-eyes *a*, which are designed for the ordinary lacing-operations, are made of thin sheet-metal or flattened wire, prepared for the purpose, and then formed, as clearly shown in the enlarged drawing, figs. 5, 6, and 7, fig. 6 being an end view of the eye, fig. 5, a side view, and fig. 7, a sectional elevation.

This lacing-eye is formed by a simple process, with a machine constructed for that purpose, and when thus formed, it is applied by first pricking or punching a small hole through the leather, and by inserting the two pronged portions, *b*, through the hole, drawing or forcing the eye portion close down on the outside, and clinching the points of the portions *b* on the under side, all as clearly shown in figs. 4 and 11.

These lacing-eyes should be made slightly curved or conical, or with the opening at the ends larger than at the centre, as shown in figs. 4, 5, and 7; but when either the transverse eye *g* or *H* is used, with or without the plate or stay *c*, then the eyes *a* may be straight, as shown in figs. 1, 2, and 3, as the transverse eye guides or leads the two parts of the lacing nearly in a direct line to each of the lower eyes *a*, and holds the loop or bight without cutting the lacing.

Lacing-eyes *a*, made and applied as shown and described, are much cheaper, easier applied, more compact, (setting closer to the leather,) and less liable to derangement than any other similar device I have ever seen, and less liable to catch the gimps, laces, or fringes about the dress of ladies who use lacing-eyes in their boots or shoes.

The transverse eyes *g* and *H* are also very important, whether applied direct to the leather, in the same manner as the eyes *a*, or by being formed in one with the plate or stay *c*, transverse eye *H*, as shown, but I consider the latter the best, as it serves the double purpose of a stay for the leather, and as an easy and complete device for holding the loop or bight of the lacing, and guides or leads the two parts of the latter more direct to the next succeeding eyes at the sides of the slit in the boot or shoe.

Instead of the transverse eyes *g* or *H*, I sometimes employ a double lacing-eye, *f*, on a plate or stay, *c*, as shown in fig. 3, the extremities *e* of the plate having points or prongs turned down, pressed through the leather, and clinched on the under side, as seen in fig. 10. This last-named device is a very good one, as it serves for a stay, as in the one before described, and also as a device for holding the bight of the lacing; but for the last-named purpose, I prefer the transverse lacing-eye *g*, which may be applied to the leather below the double lacing-eye *f*, as shown in the drawings.

Either of the transverse eyes, when combined with the stay, is applied to the boot or shoe by prongs or points *d* at the extremities of the plate, and these points are clinched on the under side, as seen in figs. 8 and 9, which holds them firmly to the leather.

The transverse eye *H*, when combined with the plate or stay *c*, may be formed by turning the eye-portion upward from one side of the piece of thin metal, as seen in figs. 1 and 12, or it may be formed by swaging up the central portion of the plate to form a loop or eye, as seen in figs. 2 and 13, either of which is cheap, simple, and easily made, and either will do good service.

I am aware that a metallic stay has been used and secured to the leather, by two common eyelets, formed of the substance of the plate, in the ordinary way of forming eyelets.

I am also aware that various kinds of eyelets, eyes,

loops, and hooks have been used for lacing boots and shoes, but eyes like these shown and described by me, I have never seen; and therefore,

I claim—

1. A transverse eye, H, and plate c, as described, which serve a double purpose, as a stay for the leather and for holding a loop or bight for the lacing.

2. A double lacing-eye, f, and plate c, constructed and applied in the manner and for the purpose substantially as described.

3. The combination of the transverse eye H and

plate c with eyelets a, when applied to the leather by plate c, for the purpose and substantially as described.

4. The combination of transverse eye G with eyelets a, substantially as described.

5. The combination of transverse eyes G and H with eyelets a, for the purpose and substantially as described.

ALBERT G. MEAD.

Witnesses:

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JOHN E. CRANE.