

No. 855,403.

PATENTED MAY 28, 1907.

H. E. HOWE.
BUSHING OR THIMBLE FOR LASTS.
APPLICATION FILED JULY 14, 1906.

Fig. 1.

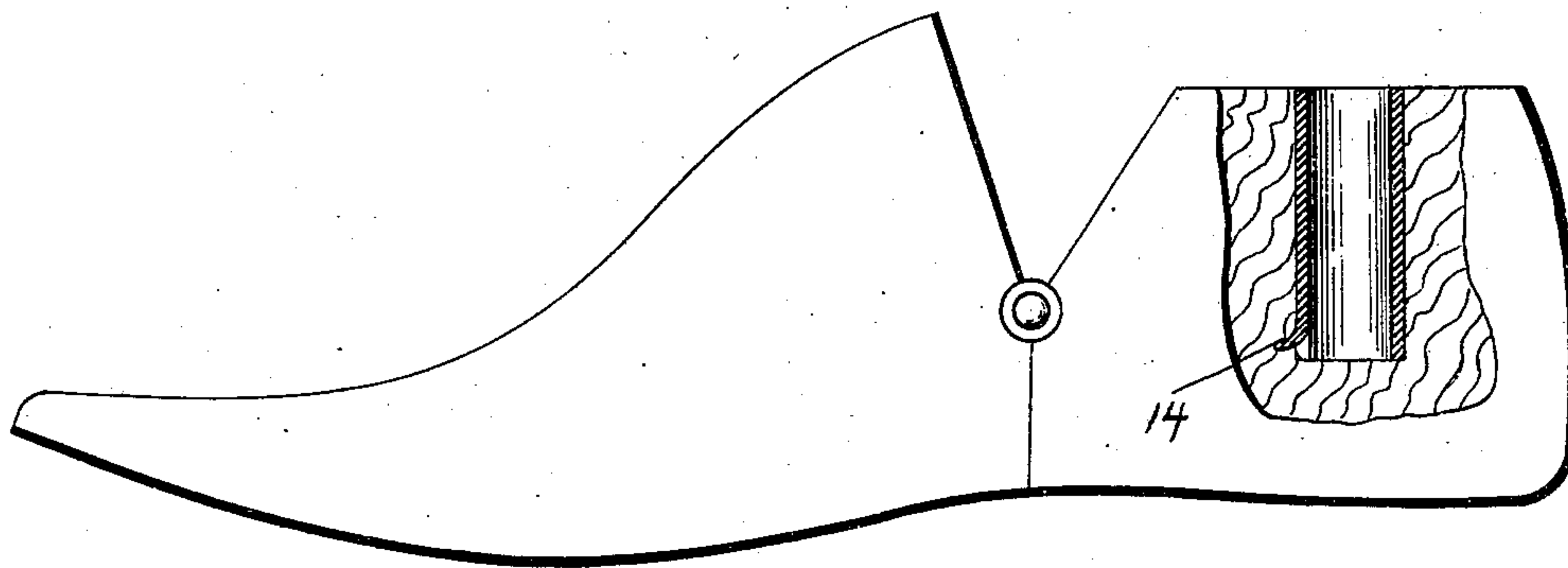


Fig. 2.

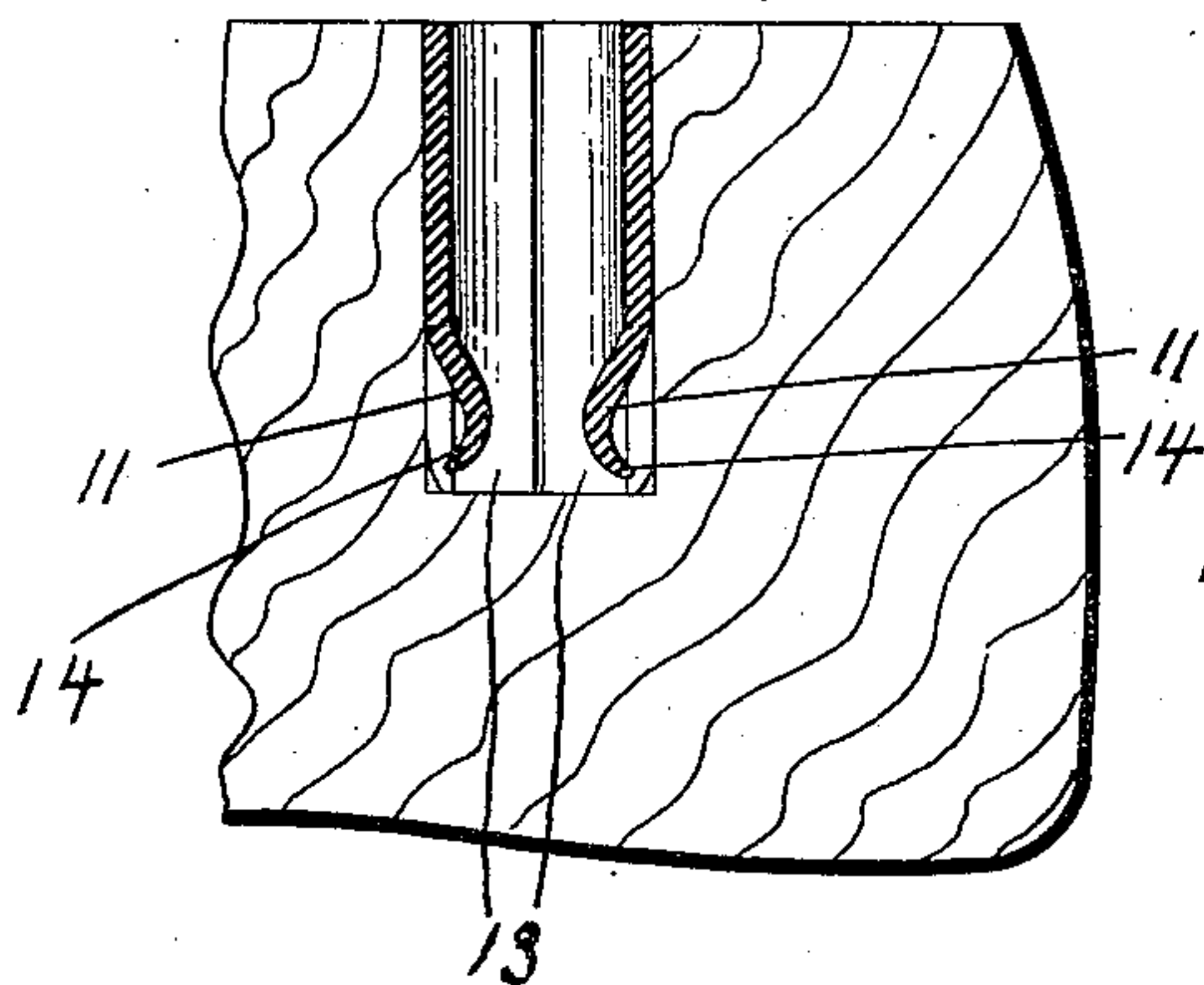


Fig. 3.

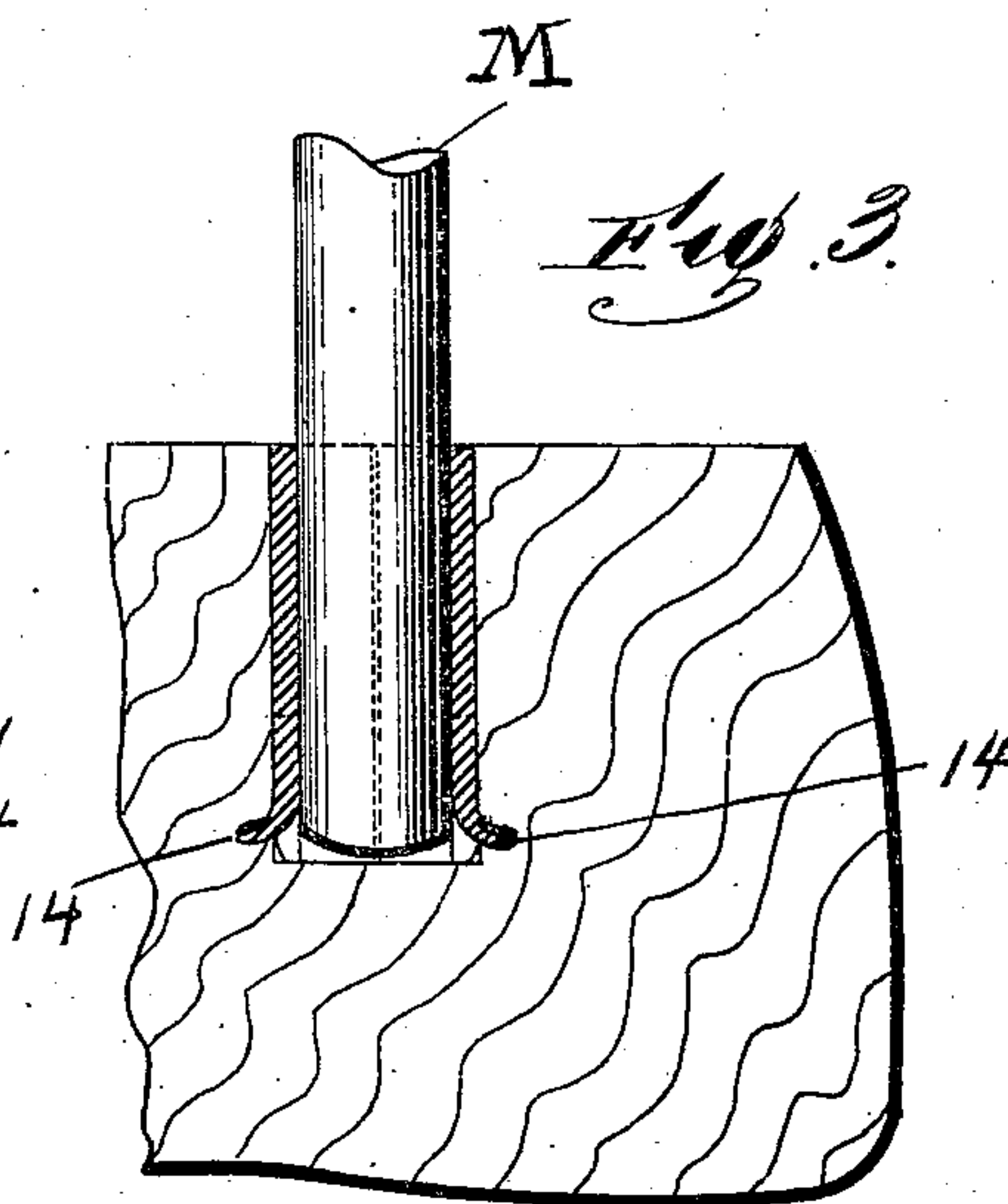
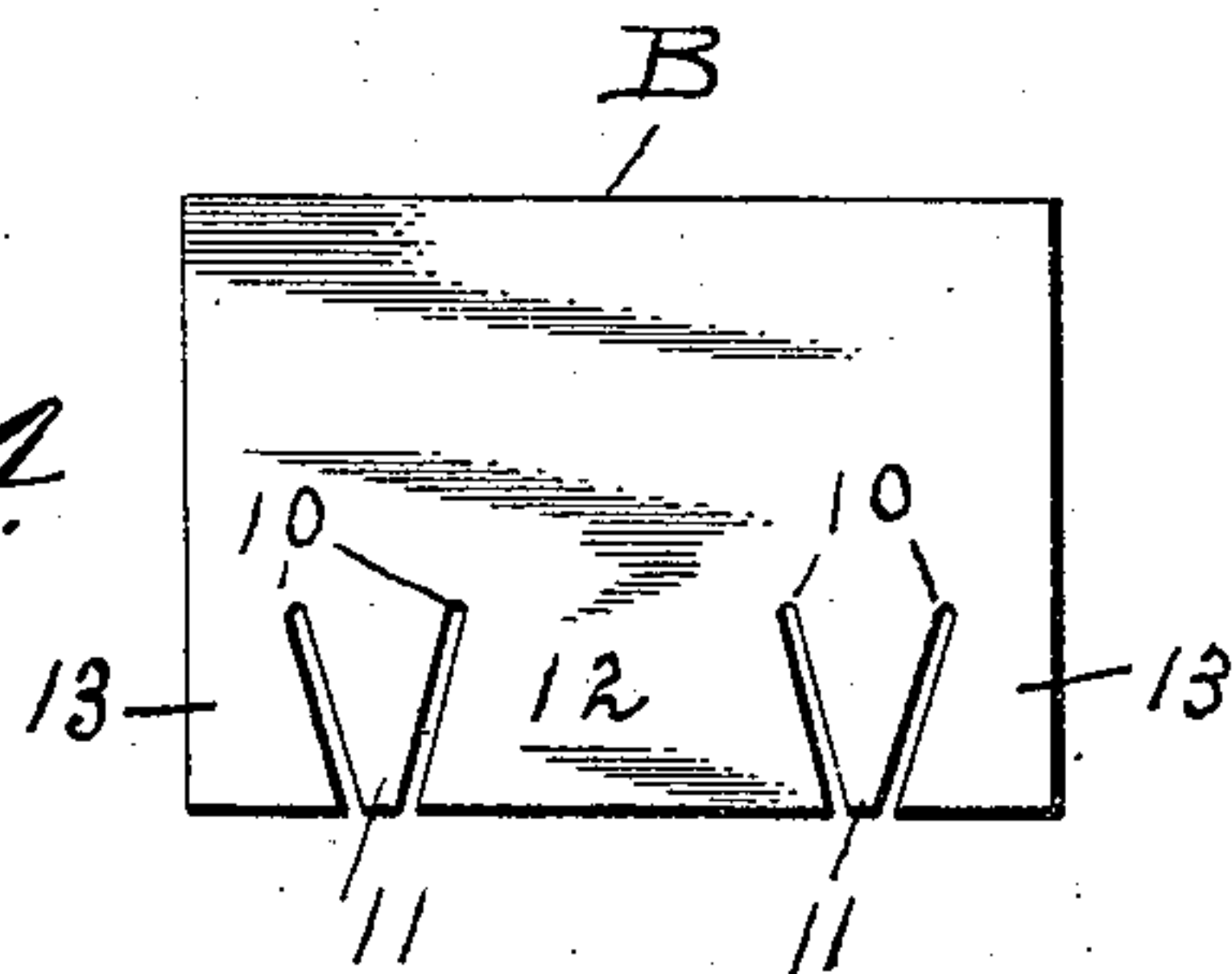
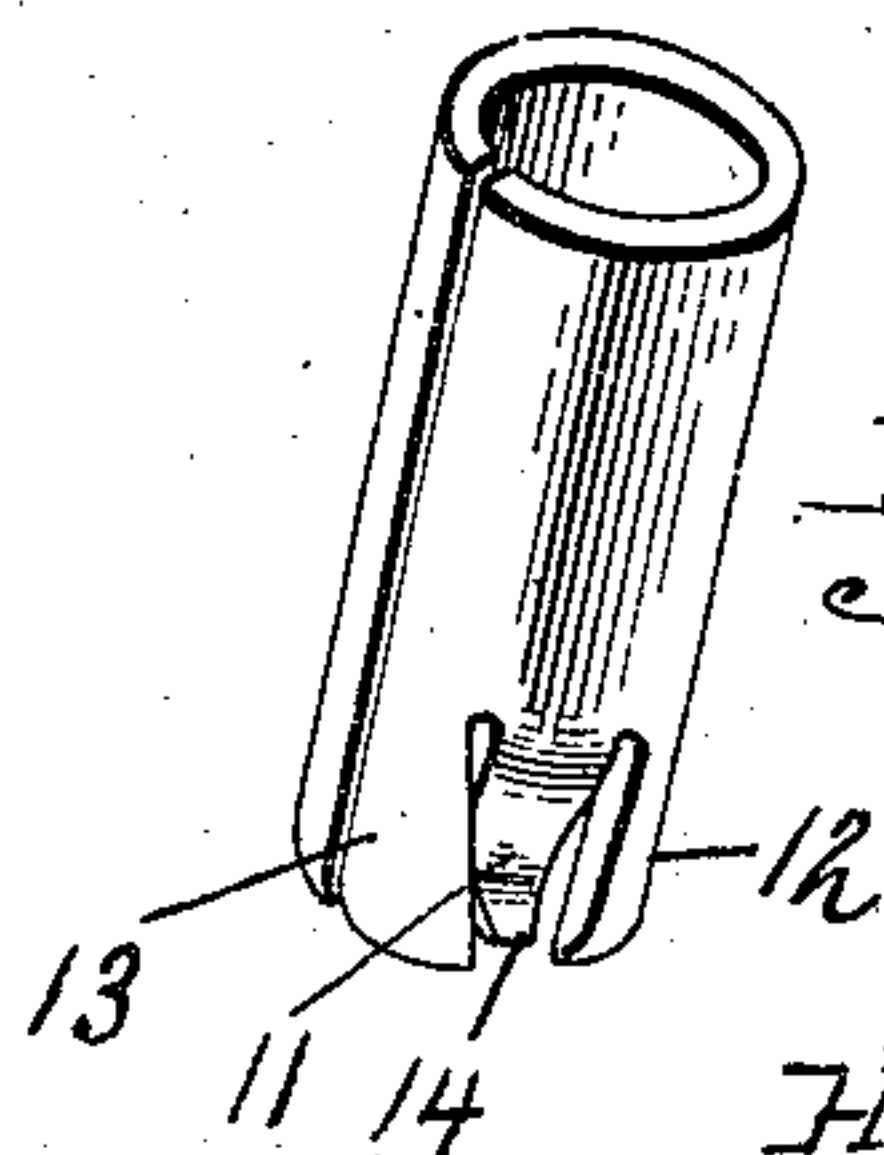


Fig. 4.



Witnesses:
C. F. Messon
E. M. Allen.

Fig. 5.



Inventor:
H. E. HOWE—
By Attorneys
Lathrop & Lathrop

UNITED STATES PATENT OFFICE.

HENRY E. HOWE, OF AUBURN, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO ROBERT L. GOLBERT, OF WORCESTER, MASSACHUSETTS.

BUSHING OR THIMBLE FOR LASTS.

No. 855,403.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed July 14, 1906. Serial No. 326,189.

To all whom it may concern:

Be it known that I, HENRY E. HOWE, a citizen of the United States, residing at Auburn, in the county of Worcester and State of Massachusetts, have invented a new and useful Bushing or Thimble for Lasts, of which the following is a specification.

The object of this invention is to provide an improved thimble or bushing for lasts.

10 Lasts are held in position by a jack-pin which is inserted in a hole bored in the last. It is customary to provide a thimble or bushing for this hole so that the last will not be worn on the jack-pin.

15 The object of this invention is to provide an improved construction of thimble or bushing used for this purpose, so constructed as to be securely held in the last and so as to fit the jack-pin accurately.

20 The invention is shown in the accompanying drawing, referring to which,

Figure 1 is an elevation partly in section of a last with my improved thimble or bushing applied thereto. Fig. 2 is a sectional view on 25 an enlarged scale illustrating the way another form of the thimble or bushing is first inserted in the last. Fig. 3 is a similar view illustrating how the latter bushing or thimble is secured in place. Fig. 4 is a view of the 30 blank from which the second bushing or thimble is made, and Fig. 5 is a perspective view of the second bushing or thimble ready for insertion into the last.

35 The invention will be best understood by a detail description.

In the form shown in Figs. 2, 3, 4 and 5, a sheet metal blank B, as shown in Fig. 4, is provided with two sets of inwardly diverging cuts or slits 10 at one end thereof. These 40 slits 10 can be made by saw cuts or can be made by punching or stamping. The inwardly diverging cuts or slits will leave two V-shaped or pointed prongs 11—11 and trapezoidal sections 12 and 13—13. The blank is then 45 rolled into a cylindrical form. The points of the prongs 11—11 are then bent out to form spurs 14—14 and the prongs are then bent inwardly, as shown in Figs. 2 and 5, so that the prongs will be inside the outer periphery of the tube. The bushing or thimble thus formed is inserted in a hole bored in the last, as shown in Fig. 2. The bushing is made so that it can be easily inserted in this 50 hole, whereby there will be no tendency to split

the last. Then a mandrel M is forced down 55 into the thimble or bushing. This will cause the V-shaped prongs to move outwardly and the spurs thereon to enter the wood to hold the thimble or bushing in place in the last. It will be noticed that during this operation, 60 the trapezoidal sections 12 and 13—13 will not be affected by the operation of setting the prongs and it will be noticed that they will have a full cylindrical bearing against the wood in the last. This will provide, prac- 65 tically a smooth, cylindrical surface for the jack-pin to the bottom of the hole, which surface remains true and is not disturbed by the setting of the bushing or thimble in place.

70 By the constructions described, a simple and durable device is provided which will accurately support the last, and as the shape of the cylindrical hole is preserved during the operation of setting the thimble or bush- 75 ing in place, thus allowing accurate fitting of the jack-pin the entire length of the thimble or bushing. It will also be noticed that as the thimble is made out of sheet metal, that it can be cheaply and economically manufac- 80 tured.

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

A bushing or thimble for lasts comprising a 85 piece of sheet-metal having a pair of upwardly diverging cuts or slits at the lower edge thereof forming a V-shaped prong, leaving a supporting tongue of a general trapezoidal shape on each side of the prong, 90 the sheet being rolled into a tube having an axis at right angles to the edge in which the cuts or slits are located to bring the prong at the lower end of the tube, and the end of the prong being bent outwardly, and the body 95 of the prong inwardly, whereby the bushing or thimble can be inserted in a last and the prong forced into the wood by a mandrel, leaving the trapezoidal tongue in undis- 100 turbed position.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

HENRY E. HOWE.

Witnesses:

ALBERT E. FAY,
MARY E. REGAN.