

S. W. SHOREY.  
LAST FOR BOOTS OR SHOES.

No. 109,845.

Patented Dec. 6, 1870.

Fig. 1

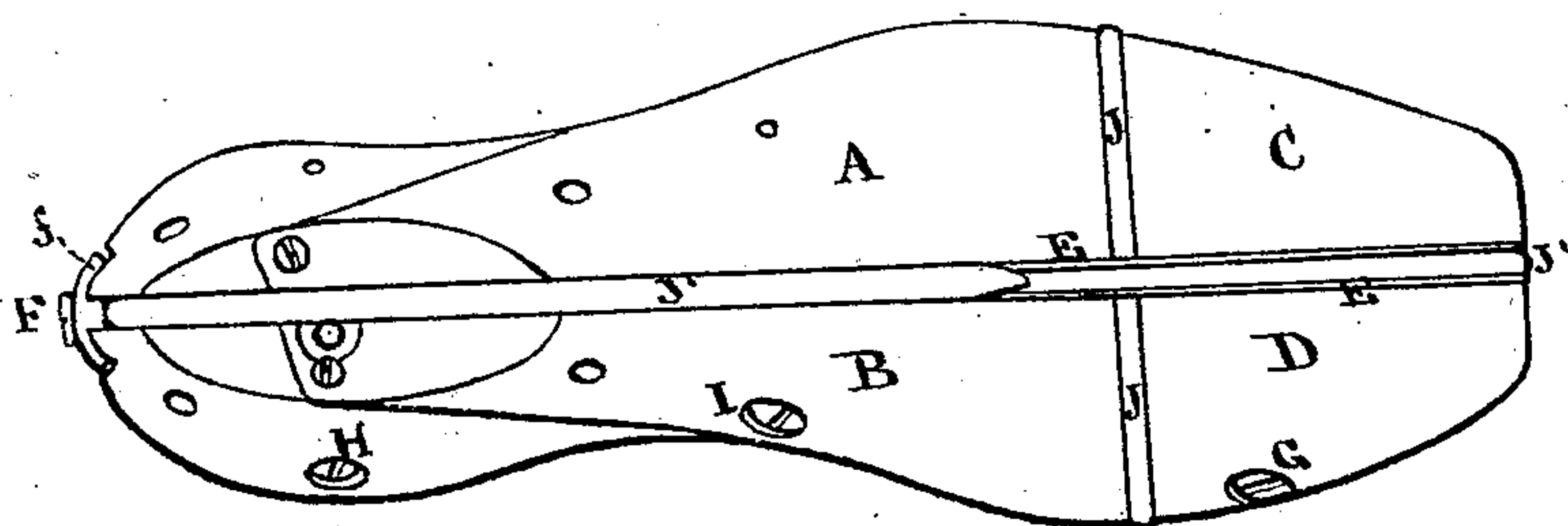


Fig. 2

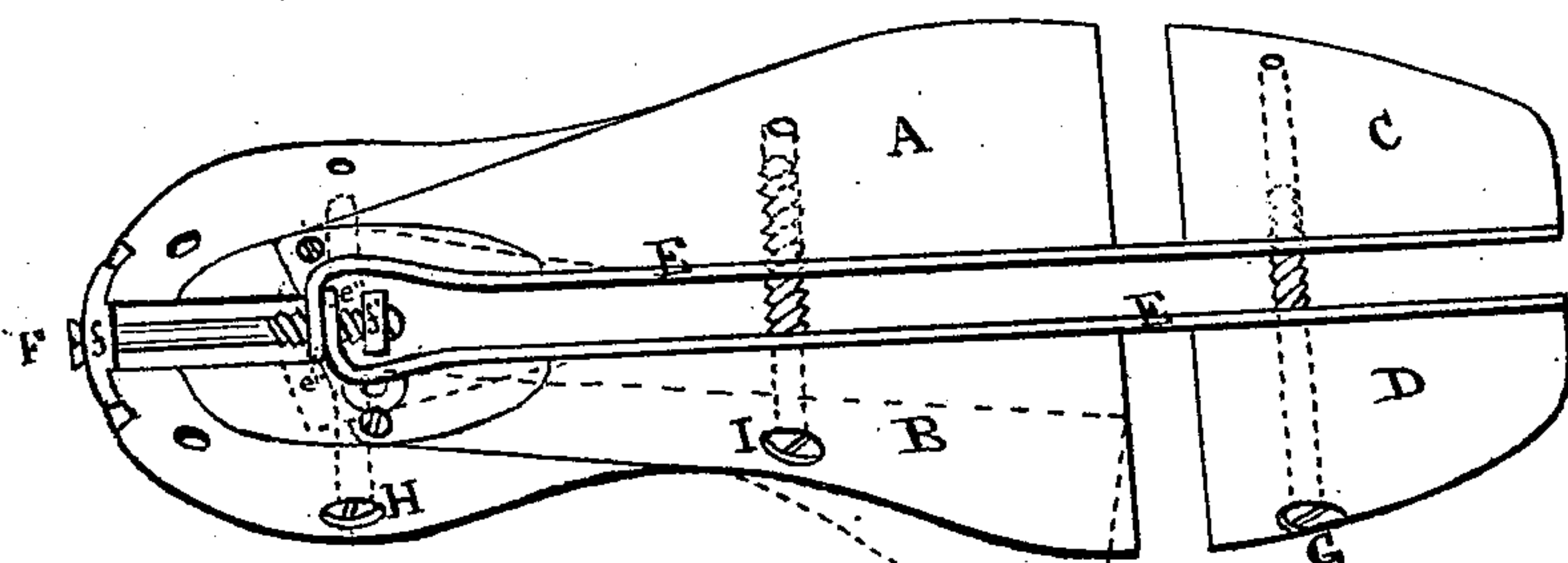


Fig. 3

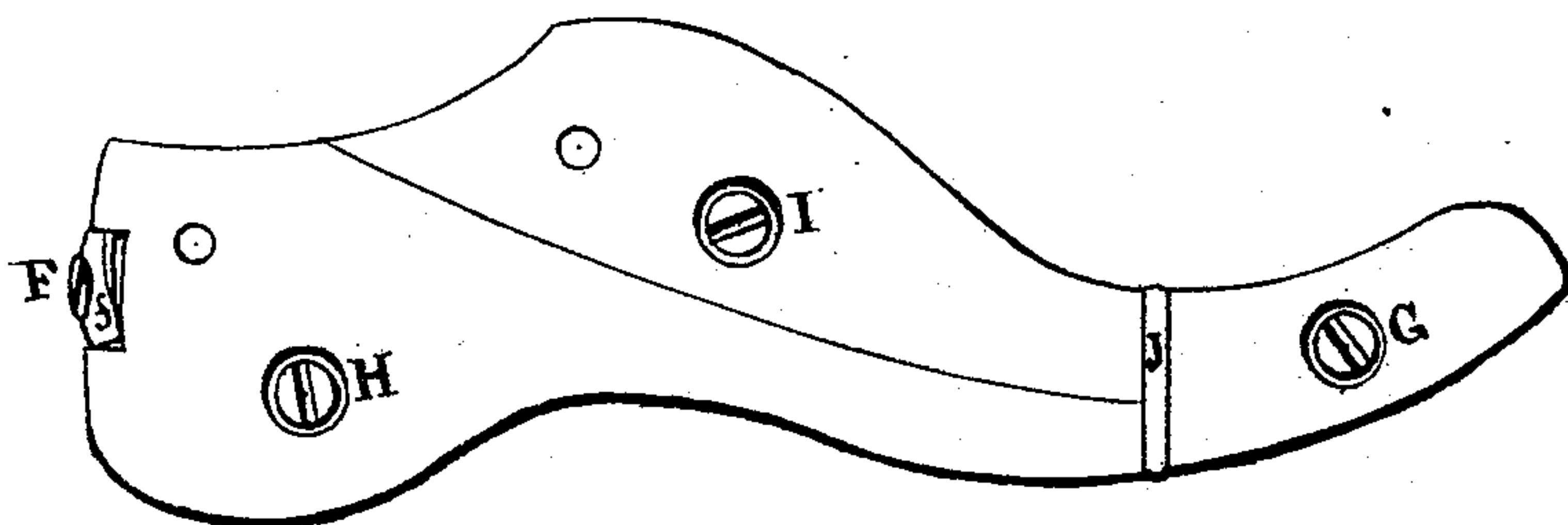
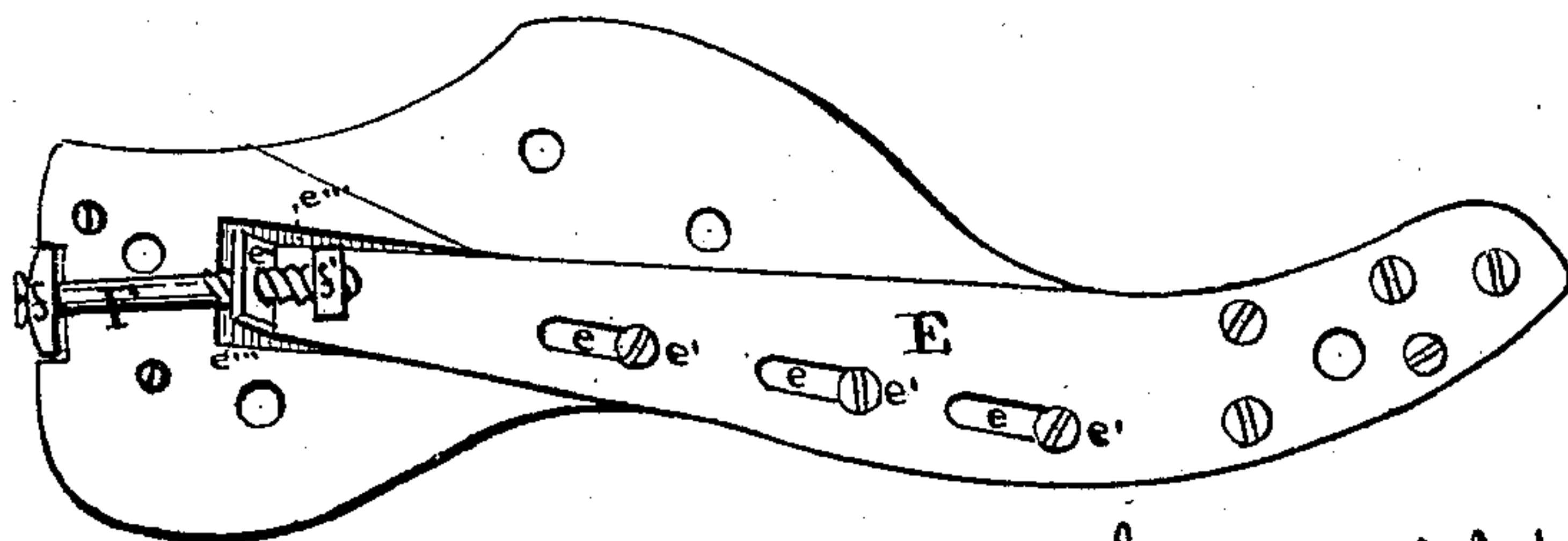


Fig. 4



Witnesses

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SAMUEL W. SHOREY, OF CHICAGO, ILLINOIS.

Letters Patent No. 109,845, dated December 8, 1870; antedated November 26, 1870.

## IMPROVEMENT IN LASTS FOR BOOTS AND SHOES.

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

I, SAMUEL W. SHOREY, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Boot and Shoe-Lasts, of which the following is a specification.

### *Nature and Objects of the Invention.*

The nature of my invention relates to a last constructed in sections, with screws and slips for adjusting or causing the same to conform to feet of various sizes, forms, and proportions, all as hereinafter fully described.

### *Description of the Accompanying Drawing.*

Figure 1 is a top view of a last embodying my invention.

Figure 2 is the same view as fig. 1 with the sections shown set apart.

Figure 3 is a side elevation.

Figure 4 is a longitudinal vertical sectional view of fig. 1.

### *General Description.*

A B C D represent the four different sections of a last divided vertically, central and longitudinally into two sections, and laterally near the ball of the foot into two parts or sections.

E E represent elastic metal strips, one end of which is secured permanently to the front or toe-sections C D, as shown at fig. 4, and the rear part attached to the sections A B by slots *e e e* and bolts *e' e' e'*, allowing the strips or plates E E to slide freely longitudinally on the face of the sections A and B.

The rear ends of these plates E E are turned out to form lugs, *e'' e''*, and rest in recesses *e''' e'''* in the heel sections A B.

F is a bolt passing through the plate *f*, having a bearing on both heel sections A B, threaded at its forward end and passing through the lugs *e'' e''* into a nut, *f'*.

G is a bolt passing through one of the toe-sections, C D, and into the other.

H is a bolt passing through one of the heel-sections A B and into the other.

I is a bolt securing the instep blocks, which are cut out in my improved last in the usual manner for convenience in withdrawing the last from boots and shoes.

J J J' J' represent strips, which may be formed of leather or other suitable material, their outer edges being made to conform to the shape of that part of the last where they are used, some of them made rectangular and some wedge-shaped.

The operation of my invention is as follows:

The four sections A B C D are brought into position, the lugs *e'' e''* overlapping each other and the rear end of plates E E pressing back into the recesses

*e''' e'''*, thus allowing the close contact of the faces of the sections A and B.

The bolt F is now passed through the holes in the lugs *e'' e''* into the nut *f'*, and the bolts G and H placed in their respective positions; then, by tightening up the said bolts, the faces of the sections A B C D may be brought closely and firmly together.

To increase the last in length, strips J-J are placed between the sections A B and C D, of the thickness required, when the toe-sections C D may be brought back by the bolt F, and hold them firmly in position, to turn the toe to the right or left or up or down, wedge-shaped strips may be used in the same places, and all brought back close and tight by the same means, the bolt F drawing the plates E E and thereby the toe-sections C D.

To increase the width of the last, strips J' J' may be placed between the sections A D and B C, and held firmly by tightening up the bolts G and H.

To increase the width of the toe of the last, wedge-shaped pieces, J', may be used between the toe-sections C and D, and to increase the width of the heel, wedge-shaped pins may be used between the heel-sections A and B.

To increase the width of the last at the ball of the foot, wedge-shaped pieces or strips, J', may be used between the longitudinal sections at that point, the flexible plates E E, in all the above adjustments, allowing the sections to freely assume any of the positions indicated.

It will be plainly seen that with a few sizes of lasts, say a number five, number seven, and number nine, constructed in the herein described manner, lasts may be made to fit a variety of sizes, forms, and proportions of feet, and be made to conform to a certain class of crooked feet entirely out of the reach of any ordinary kit of lasts, thus enabling the boot and shoe-manufacturer, with a very few of my conformable lasts, to produce almost any size, shape, or configuration of boots or shoes.

### *Claims.*

I claim as my invention—

1. The plates E E and bolt F, when arranged between the longitudinal sections A D and B C, for the purpose of adjusting the relative positions of the heel and toe-sections, substantially in the manner described, and for the purpose specified.

2. The bolt F, plates E E, strips J J J' J', bolts G and H, when combined and arranged with a last divided into the four sections A B C D, substantially as described and for the purpose specified.

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Witnesses:

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