

No. 659,317.

Patented Oct. 9, 1900.

A. G. PETERSON.
PRESSER FOOT FOR SEWING MACHINES.

(Application filed Jan. 30, 1899.)

(No Model.)

Fig. 1.

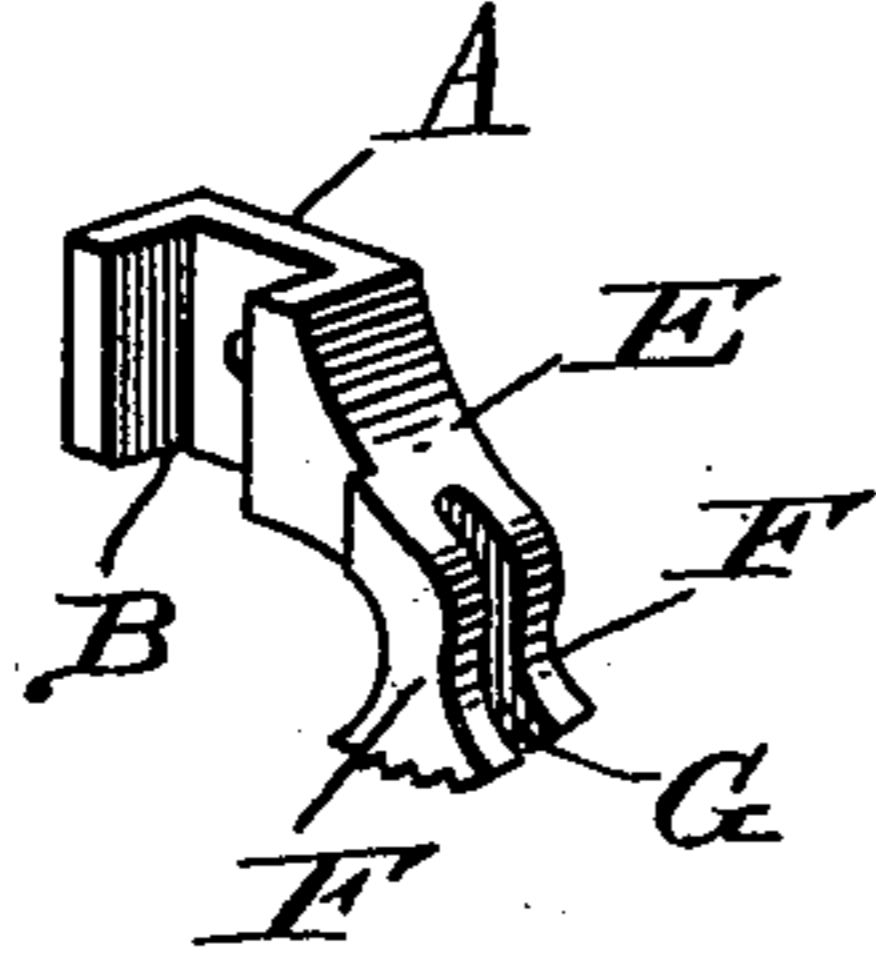


Fig. 2.

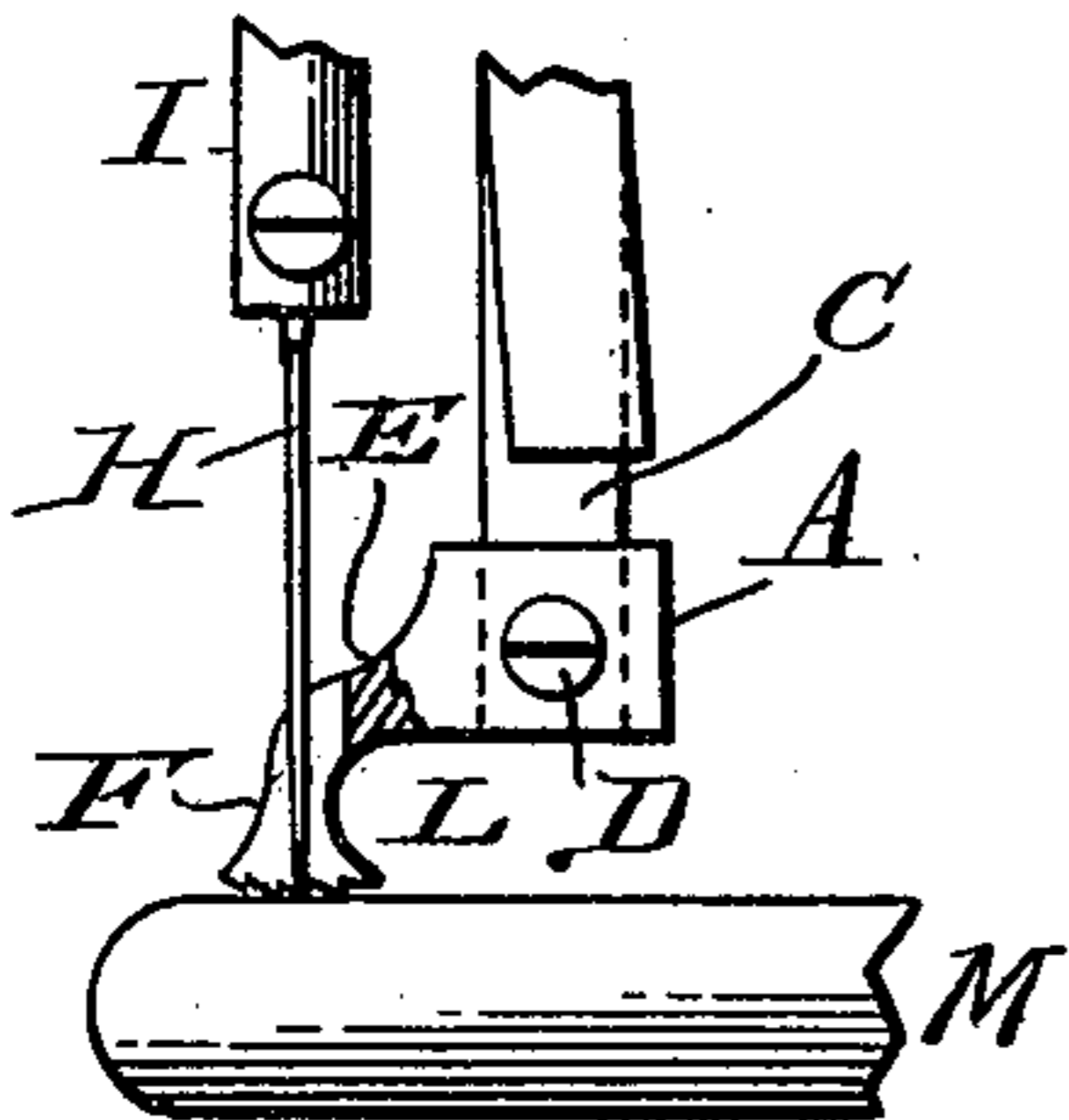


Fig. 3.

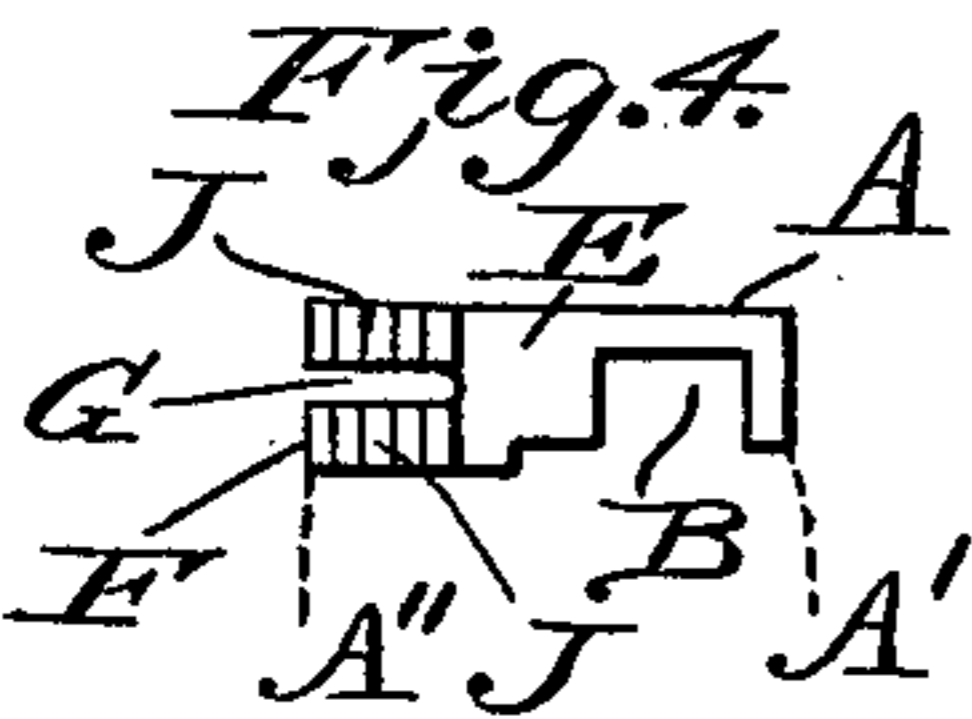
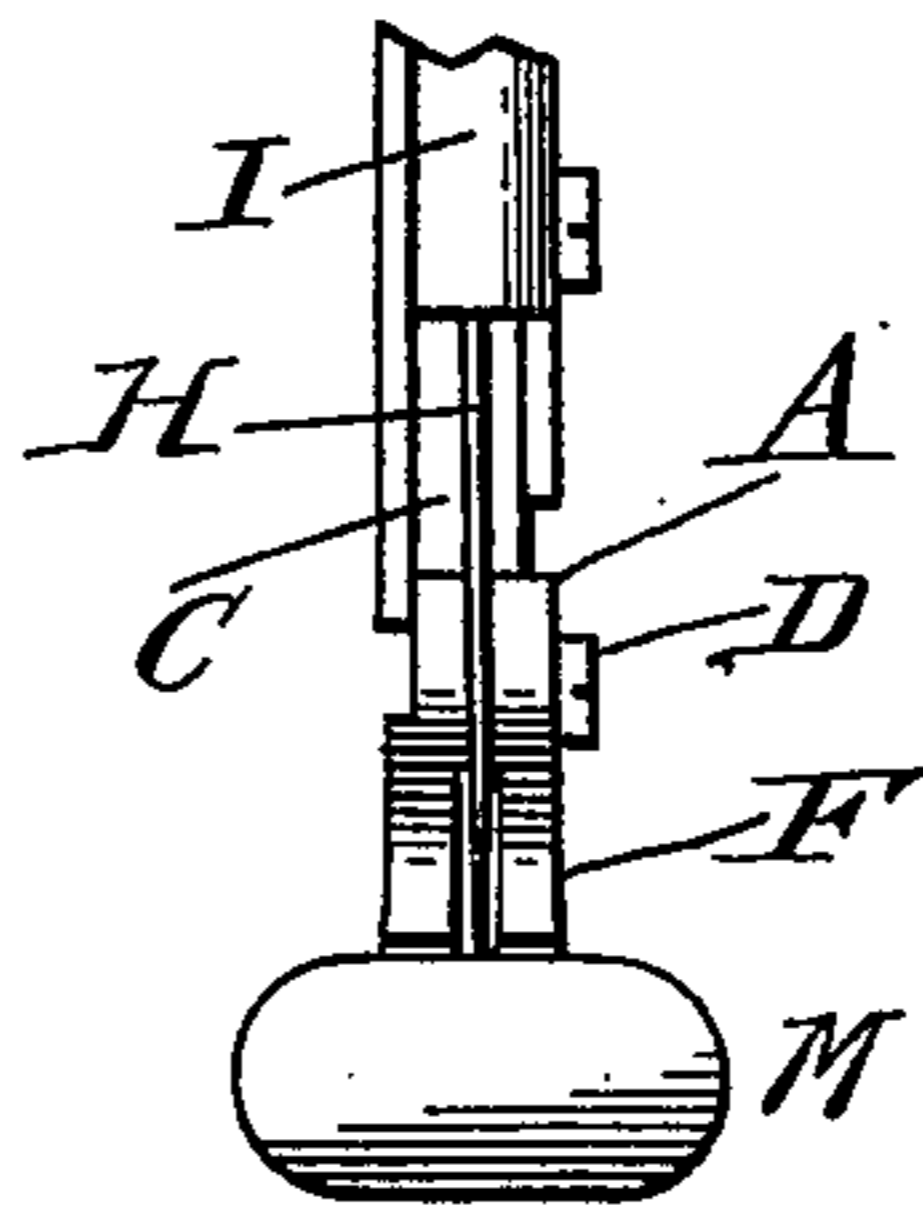


Fig. 6.

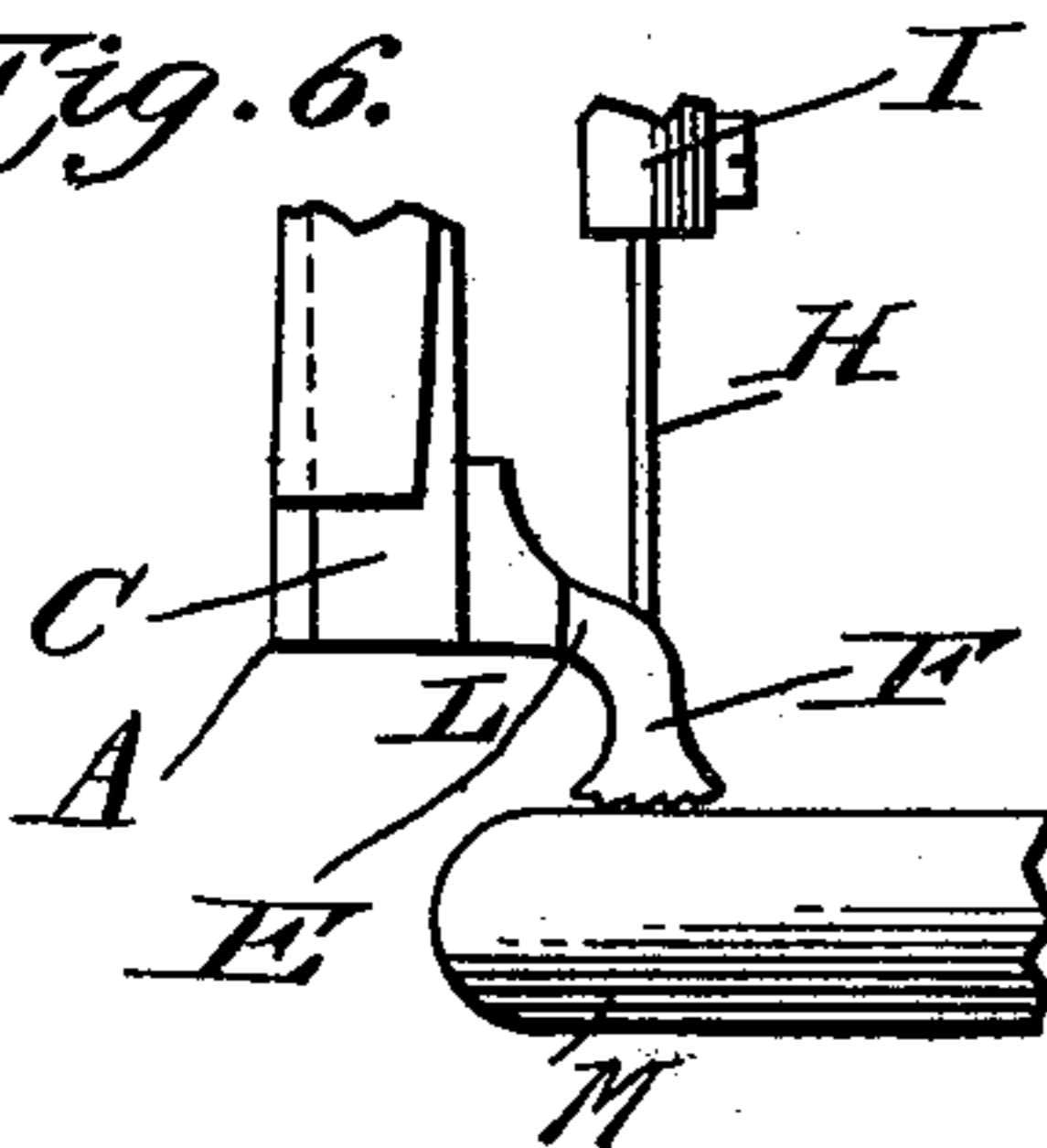


Fig. 5.

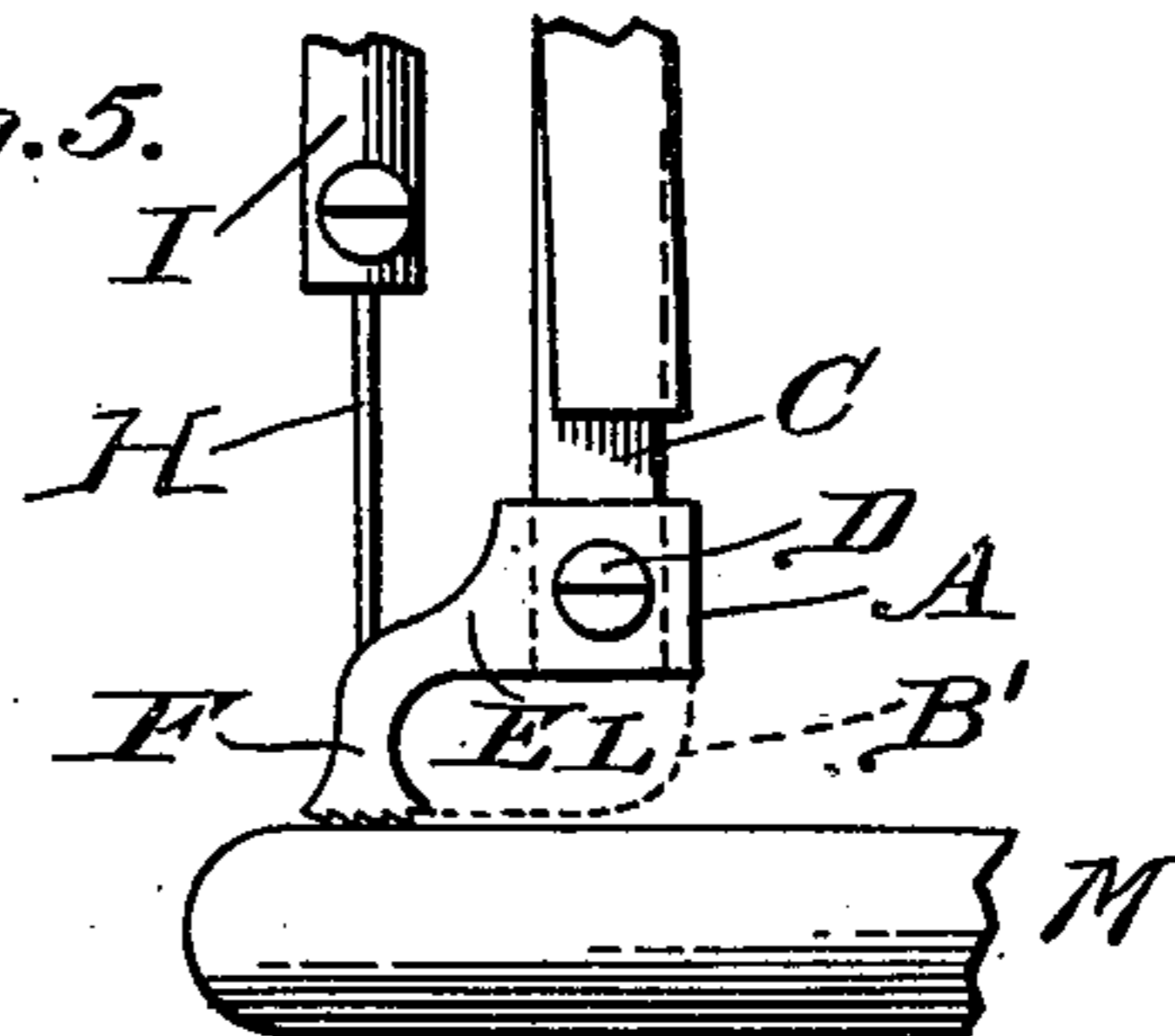


Fig. 7.

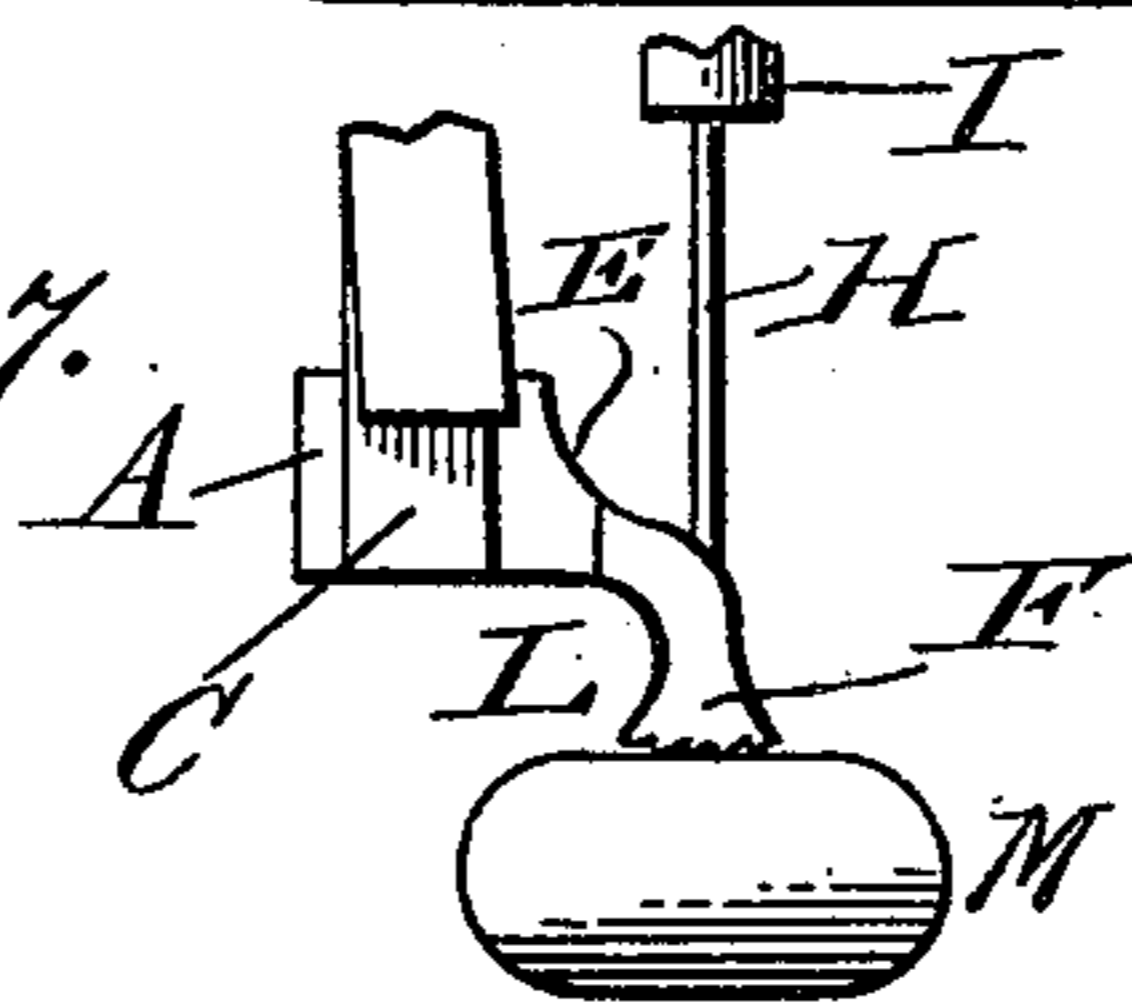


Fig. 8.

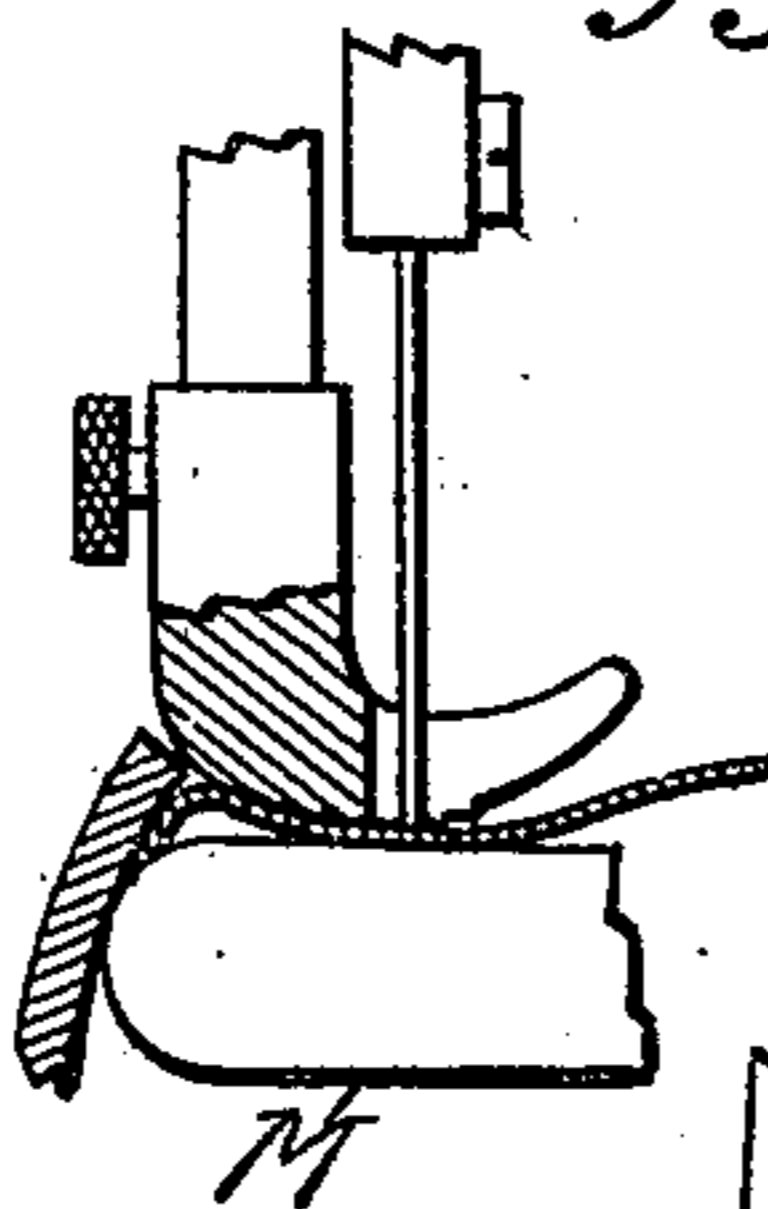
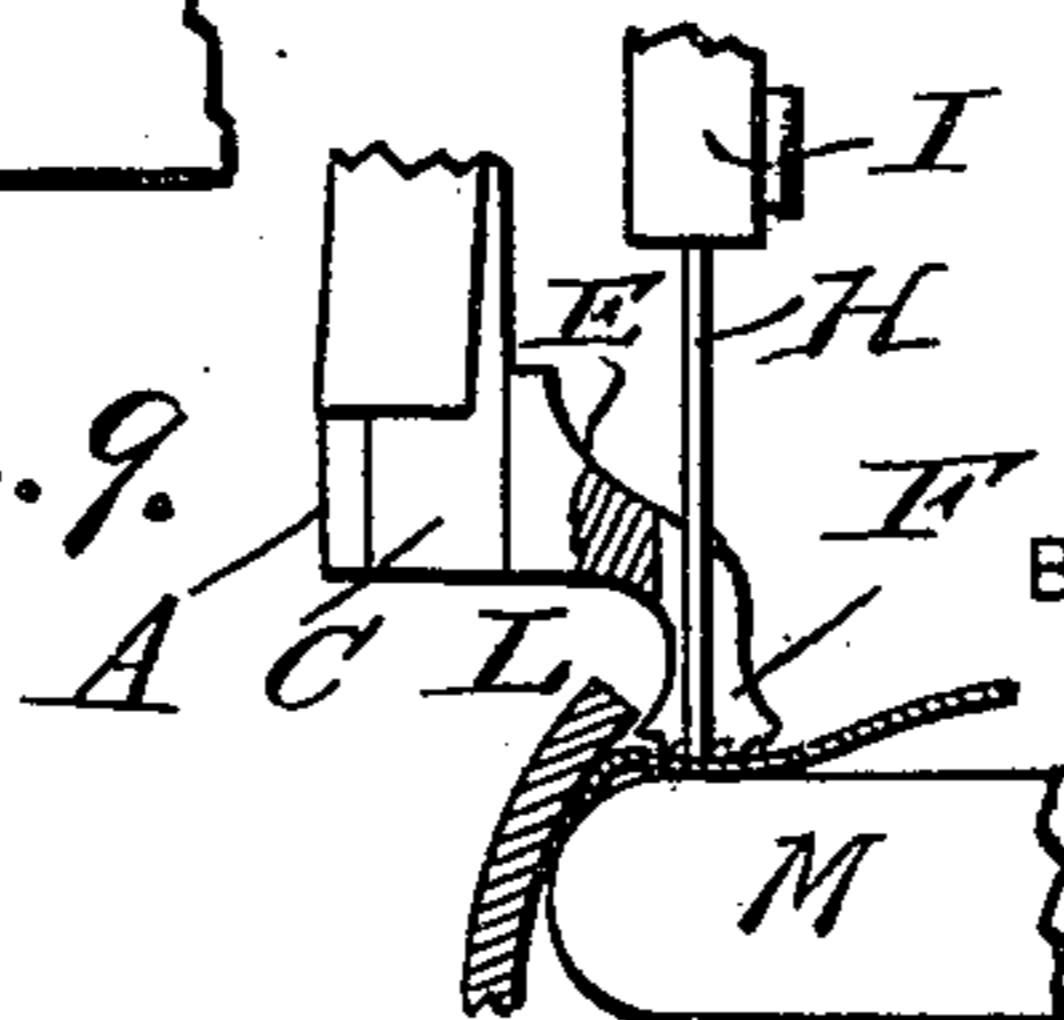


Fig. 9.



WITNESSES:

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ANDERS GUSTOF PETERSON, OF HOLDREGE, NEBRASKA.

PRESSER-FOOT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 659,317, dated October 9, 1900.

Application filed January 30, 1899. Serial No. 703,935. (No model.)

To all whom it may concern:

Be it known that I, ANDERS GUSTOF PETERSON, residing at Holdrege, in the county of Phelps and State of Nebraska, have invented
5 a new and useful Feed Mechanism for Shoe-Sewing Machines, of which the following is a specification.

My invention relates to feed mechanism for sewing-machines, and more especially to that
10 class of machines for sewing the uppers of shoes which are provided with horns over which the shoe is held while sewing and in which the presser-foot is provided with teeth on its lower face and forms a top feed. In
15 this class of machines now extensively used by shoemakers and repairers one of the greatest difficulties encountered is the inability with the machine as now constructed to sew a seam in the upper to reach close to the sole.
20 In most, if not all, of this class of machines it is impossible to begin or close up a side seam as near as a half-inch to the sole.

The object of my invention is to provide a feed mechanism for this class of machines by
25 the use of which this difficulty is reduced in extent, if not almost wholly obviated, and by means of which such seams may be begun and closed up as close as an eighth of an inch from the sole, if not closer.

30 With this object in view my invention consists in the improved feed mechanism, the construction and operation of which will be hereinafter fully described and the particular points of novelty specifically set forth in
35 the claim.

In order that others skilled in the art to which my invention most nearly appertains may make and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying
40 drawings, forming part hereof, in which—

Figure 1 is a perspective view of the presser-foot detached. Fig. 2 is a view in side elevation of the presser-foot and part of the machine, the foot being partially broken away and turned to the position necessary to feed the work inward on the horn. Fig. 3 is a view in end elevation of the same parts in the same positions. Fig. 4 is a bottom plan view
45 of the presser-foot detached. Fig. 5 is a view in side elevation of the same parts as shown in Fig. 2 in the same positions. Fig. 6 is a

view of the same parts in side elevation with the foot reversed in position to feed the work outward on the horn. Fig. 7 is a view in end
55 elevation with the foot in position to feed the work transversely on the horn. Fig. 8 is a fragmentary view showing the difficulty encountered in ordinary machines of this character when beginning a side seam. Fig. 9 is a
60 similar view showing the practical operation of my invention under similar circumstances.

Like letters of reference mark the same parts in all the figures of the drawings.

Referring to the drawings by letters, A indicates the main body of my improved presser-foot, which is provided with a vertical groove B in its rear face to embrace the lower end of the presser-bar C and is secured thereto
65 by a screw D. From the main body A, which terminates at some distance above the horizontal plane of the feeder-teeth, the presser-foot is extended horizontally, as at E, and thence downwardly, as at F, the vertical extension being bifurcated, leaving a vertical
70 slot or deep groove G, in which the needle H works, the needle depending from the needle-bar I. The bottom of the bifurcated vertical extension is toothed, as at J, the teeth being
75 arranged to engage and feed the work toward the presser-bar.

M indicates the horn, and L the space provided between the main body of the presser-foot and the horn.

In this class of shoe-sewing machines the
80 mechanism is so arranged that the presser bar and foot are oscillated in a vertical plane extending through the needle, and the head carrying the presser-bar and needle-bar is rotatable on the center of the needle-bar as an
85 axis, so that the oscillatory motion of the presser bar and foot may be in any vertical plane radiating from the needle. In this way the work on the horn may be fed in any direction, but always from the needle toward
90 the presser-bar.

Presser-feet of such machines as heretofore made have lacked the horizontal extension at the top of the body and no space L has been provided, the horizontal extent of the presser-
95 bar having been about the same as mine, measuring from the edge of the main body, as at A', Fig. 4, to A'', Fig. 4, but the main body extended down close to or in contact
100

with the horn, as shown in dotted line B', Fig. 5. This, as above stated, left no space L, and the feeding-teeth extended from the extreme heel to the toe.

5 The shortening of the feeding-surface and the construction of the foot so as to afford the space L are the important points of my invention, and the operation of the invention may be described as follows:

10 In the ordinary construction the situation of the sole N and upper O when beginning a side seam is illustrated in Fig. 8, in which it is evident that the sole cannot be made to approach the needle closer than half an inch
15 at least, the needle being shown in this figure in the root of the slot or groove G of the presser-foot at its nearest approach to the outer edge of the body of the presser-foot and end of the horn, the presser-foot itself preventing the sole from being bent over or laid
20 upon the top of the horn.

It being desired to sew a side seam in a shoe with my presser-foot, the shoe is stretched over the horn with the presser-foot in the
25 position shown in Fig. 9, the edge of the sole N resting in space L and the upper O extending along the top of the horn below the presser-foot. The needle will now be in the root of the space G, between the bifurcated
30 ends of the presser-foot, and will pass through the upper very close to the sole, making the first stitch. The presser-foot will next feed the work outward and in any desired direction, according as the head is turned, until

the seam is to be ended or closed up close to 35 the sole on the other side of the shoe. In such closing up the parts will be in the position as shown in Figs. 2 and 5, the last stitch being made just as close to the sole as the first. 40

The advantages of the invention will be obvious at a glance to persons skilled in the art, and while I have been very exact in the description and illustration of my presser-foot and have shown it in what I consider 45 the preferred form I hold that any slight changes or variations such as might be made by an ordinary mechanic after inspection of the invention would clearly fall within the limit and scope of my invention. 50

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a presser-foot mechanism for sewing-machines, the presser-bar, the presser-foot, 55 the vertical groove B, in its rear face to embrace the lower end of the presser-bar, the bifurcated vertical extension, the rounded toothed bottom of the foot bisected its entire length forming a pair of toothed feet, on either 60 side of the needle, in combination with a suitable work-support, substantially as and for the purposes set forth.

ANDERS GUSTOF PETERSON.

Witnesses:

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