

J. S. JOHNSTON.
 PRESSER FOOT FOR SEWING MACHINES.
 APPLICATION FILED AUG. 26, 1908.

954,970.

Patented Apr. 12, 1910.

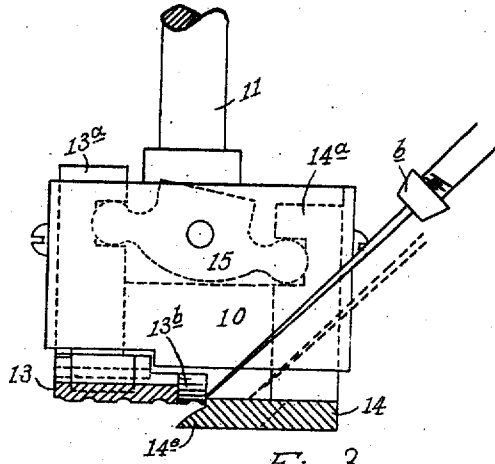


Fig. 3.

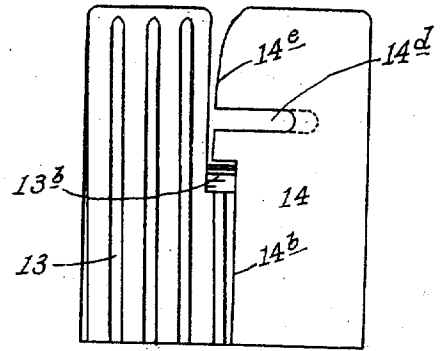


Fig. 4.

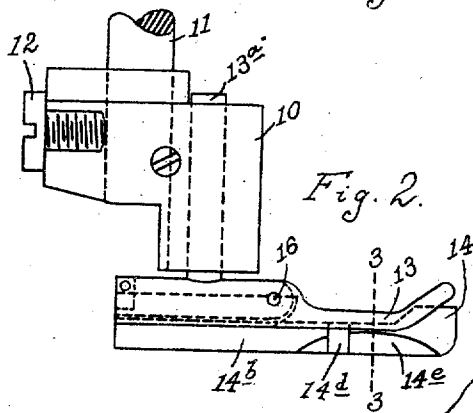


Fig. 2.

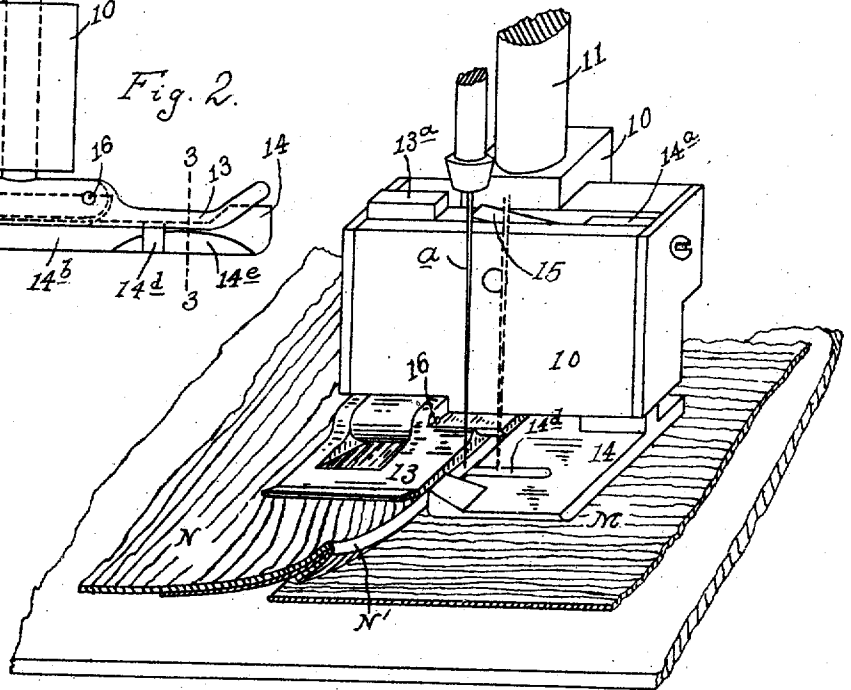


Fig. 1.

WITNESSES:
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JAMES S. JOHNSTON, OF UTICA, NEW YORK, ASSIGNOR OF ONE-HALF TO CHARLES A. POWELL, OF WHITESBORO, NEW YORK.

PRESSER-FOOT FOR SEWING-MACHINES.

954,970.

Specification of Letters Patent. Patented Apr. 12, 1910.

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To all whom it may concern:

Be it known that I, JAMES S. JOHNSTON, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Presser-Foot for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form part of this specification.

The object of my present invention is to provide an improved presser foot for sewing machines, which is simple in construction, efficient in operation and particularly adapted for work which when completed is practically felling.

Figure 1 shows a perspective view of a presser foot of my present improved construction on an enlarged scale in position on a piece of work and with the sewing machine needle shown in relative position to the presser foot and the work. Fig. 2 is a side elevation on an enlarged scale of the presser foot as seen from the left. Fig. 3 shows a sectional view taken on line 3, 3 of Fig. 2, together with an elevation of the parts to the rear of the sectional line and showing in dotted lines the relative position of a needle or a needle bar when used in an inclined position with reference to the presser foot. Fig. 4 is an enlarged bottom view of the presser foot.

Referring to the reference letters and figures in a more particular description, 10 indicates the body of the presser foot mounted on the lower end of a sewing machine presser bar 11 and secured thereto by a set screw 12. The presser is provided with two movable parts or feet 13 and 14 mounted on vertical slides 13^a and 14^a respectively in the body and connected for relative movement by an equalizing bar or lever 15 pivoted to the body. The member 13 is pivoted to a part rigid with the slide 13^a on a horizontal pivot 16 permitting a limited amount of swinging or floating movement with reference to its slide. The normal working position of the parts 13 and 14 is with the working face 13 more or less above the plane of the working face of the part 14. Indeed, if the machine were to be used continuously on the same work the relative movement of

the two parts might be dispensed with. Along one side the part 14 is provided with a shoulder 14^b against which one edge or a folded edge of the material to be operated on may be guided. Projecting laterally from the shoulder 14^b toward the part 13 the shoulder 14^b is provided with a beveled or inclined lip 14^c adapted to run under and throw up an edge or a folded edge of the material being operated on into more or less of a vertical position as it reaches the needle. The vertical guiding shoulder 14^b is mainly rearward of the beveled or inclined lip 14^c and of the needle slot 14^d, so as to guide the work properly. In the part 14 is provided a transverse slot 14^d through which the needle operates. The rear portion of the part 13 is wider than the forward portion as is clearly seen in Fig. 4, and the forward end of the side extension of said part 13 is provided with an inclined face 13^b adapted to ride down the seam. The working or lower face of the part 13 is also grooved or ribbed with grooves or ribs inclined rearwardly toward the part 14, said grooves or ribs engaging with the material operated upon and tending to force it against the guiding shoulder 14^b.

The terms "rear", "rearward" or "rearwardly", as herein used in connection with the improved presser foot, will be understood to have reference to that portion of said foot away from the toe portion thereof, while the term "forward", used in connection with said foot, will be understood to mean toward the toe portion.

This presser foot is adapted for use with a sewing machine having a vertical needle, as shown in Fig. 1, and indicated by *a*, but for certain work is perhaps preferably adapted for use on a sewing machine having an inclined needle and needle bar, as shown in dotted lines in Fig. 3 and indicated by *b*. The needle bar with the needle is adapted to be vibrated from the position shown in full lines in Fig. 1 to the position shown in dotted lines in the same figure more or less. Sewing machines having a vibrating needle bar of this character are well known. When an inclined needle and needle bar, as shown in Fig. 3, is used the needle and needle bar are also adapted to be vibrated as indicated in dotted lines in that figure.

The work which this presser foot is particularly adapted to may be briefly referred

to. A strip of cloth or of light material as M may be inserted under the presser foot from the right side and be extended more or less to the left past the needle, and fed through the machine in this position. A strip or piece of other material as N, preferably of a heavier character, has its edge folded or inturned as indicated at N' and is inserted under the presser foot from the left-hand side with the turned edge against the shoulder 14^b and fed through the machine in this position. The adjustment is such that the needle *a* penetrates close to its edge in one down stroke, the upturned edge of the part N and in the next down stroke is vibrated to penetrate the material M only, forming a set of stitches alternately engaging in the edge of the material N and in the material M only. When removed from the machine the part M is adapted to be folded in against the back of the part N, presenting what is to all appearances a felled seam well turned-under and particularly adapted for use on waist bands for garments.

When an inclined bar and needle are used, as shown in Fig. 3, either a lesser degree of upturning of the edge of the material can be practically used, or the stitches engaging in that portion of the material which is upturned will be carried farther under the edge and more at view in the finished work.

It is evident that other modifications and changes in and from the construction herein shown other than those hereinbefore suggested can be made without departing from the invention as hereinafter intended to be claimed.

What I claim as new and desire to secure by Letters Patent is:

1. A presser foot for sewing machines comprising two relatively adjustable pressing parts having horizontal lower faces, one of said parts having a beveled lip adapted to engage under and turn upwardly an edge

of material being fed under the foot, and a vertical guiding shoulder rearward of said lip.

2. A presser-foot for sewing machines comprising two connected, equalizing parts having horizontal working faces, one of said parts having a needle opening and being provided, forward of said opening, with a lip for turning up an edge of the material as it passes the needle, said part having, rearward of said lip, a vertical guiding shoulder.

3. A presser foot for sewing machines having two movable pressing parts connected for relative movement in opposite directions, one of said parts along its edge affording a guiding shoulder and having a lip adapted to engage under and turn upwardly an edge of the work at the needle, substantially as set forth.

4. A presser foot for sewing machines having two movable parts connected for relative movement in opposite directions vertically, one of said parts being pivoted horizontally and having on its lower or working face a rib or ribs inclined toward the other part, substantially as set forth.

5. A presser foot for sewing machines having two movable presser parts connected for relatively vertical movement in opposite directions, one of said parts having a transverse slot through which the needle is adapted to operate, said slotted part having a vertical guiding shoulder, along its side, and a lip adapted to engage under and turn upwardly at the needle an edge of the material, substantially as set forth.

In witness whereof, I have affixed my signature, in presence of two witnesses, this 12 day of August, 1908.

JAMES S. JOHNSTON.

Witnesses:

JAMES H. MERWIN,
EMMA S. HESSE.