Aug. 25, 1936. R. J. SAILER 2,052,122

SEWING MACHINE HEMMER

Filed May 28, 1935

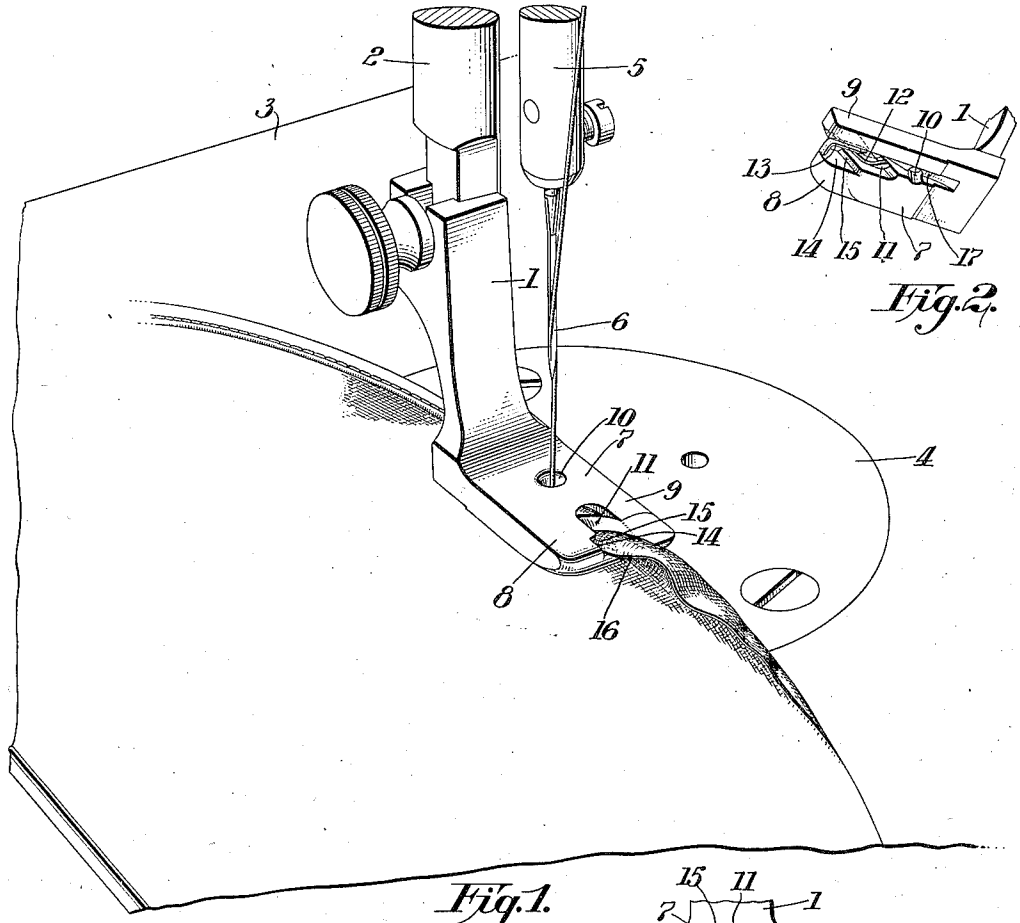


Fig. 1.

Fig. 2.

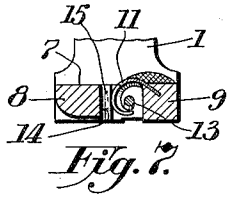


Fig. 7.

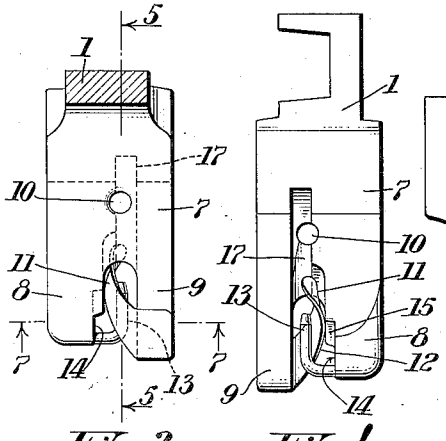


Fig. 3.

Fig. 4.

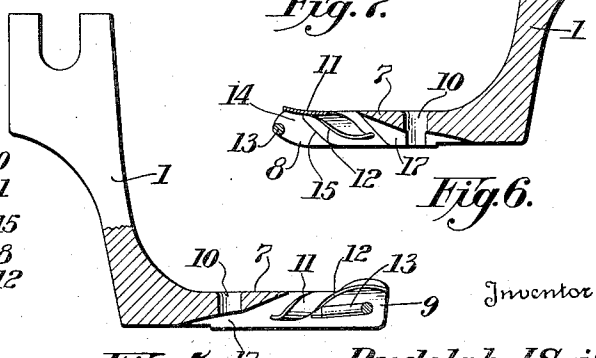


Fig. 5.

Fig. 6.

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SEWING MACHINE HEMMER

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3 Claims. (Cl. 112—151)

This invention relates to sewing machine hemmers of the presser-foot type. With hemmer feet, as heretofore constructed, it is difficult to rapidly sew a perfect hem around a curved cut edge, as such edge tends to become distorted or wrinkled in advance of the hemmer scroll and is not smoothly and evenly folded by the latter to form a hem. This wrinkling tendency of a curved cut edge of fabric being presented to a hemmer is troublesome to the operator and necessitates careful hand-manipulation of the work at reduced sewing speed to avoid imperfections in the finished hem.

The present invention has for an object to provide an improved hemmer foot in which the possibility of failure of the hemmer foot to fold a perfect hem and deliver it to the sewing machine needle under various sewing conditions is materially reduced.

With the above and other objects in view, as will hereinafter appear, the invention comprises the devices, combinations and arrangements of parts hereinafter set forth and illustrated in the accompanying drawing of a preferred embodiment of the invention, from which the several features of the invention and the advantages attained thereby will be readily understood by those skilled in the art.

In the accompanying drawing Fig. 1 is a perspective view of a hemmer foot embodying the invention and shown as applied to a sewing machine. Fig. 2 is a perspective view of the under side of the tread portion of the hemmer foot. Fig. 3 is a top plan view of the foot. Fig. 4 is a bottom plan view of the foot. Fig. 5 is a section substantially on the line 5—5, Fig. 3. Fig. 6 is a similar section but looking in the reverse direction and Fig. 7 is a section on the line 7—7, Fig. 3.

In the drawing the numeral 1 represents the shank of the hemmer foot attached to the usual presser-bar 2 of a sewing machine having the usual cloth-plate 3, throat-plate 4, and reciprocatory needle-bar 5 carrying the needle 6. The hemmer foot has a tread 7 which is formed at its forward end with spaced toes 8 and 9. The tread 7 also has the needle-aperture 10.

Soldered or otherwise suitably secured to the toe 9 is the usual hemmer scroll 11 having a leading edge 12 which extends spirally rearwardly between the toes 8 and 9 toward the needle-aperture 10. Secured to the other toe 8 is the hemmer arbor 13 the free end of which is also directed toward the needle-aperture 10.

The toe 8 of the foot is provided with a fabric-edge-guiding wall 14 and is undercut to provide a rearwardly and downwardly inclined fabric-edge-deflecting shoulder 15 which terminates at the bottom face of the tread 7 and constitutes means for deflecting downwardly an edge 16 of fabric folded over the arbor 13 and guided by the wall 14, before the fabric is acted upon by the hemmer scroll 11. It is found that the provision of means such as disclosed, practically eliminates all risk of failure of the hemmer to form a perfect hem of uniform width around a curved edge of fabric. The means in question also materially reduces the risk of failure of the hemmer to conceal the raw edge of fabric within the hem fold. The foot is further preferably provided with the guiding passageway 17 for the hem-fold leading to and past the needle-aperture 10.

By referring particularly to Figs. 3, 4, and 7, it will be seen that the leading spirally formed edge 12 of the hemmer scroll 11 preferably substantially touches the toe 8 rearwardly of the shoulder 15. By "substantially touching" is meant a sufficiently close juxtaposition to prevent the accidental passage therebetween of an upturned raw edge of fabric entering the hemmer. Any such edge cannot pass between the scroll 11 and the toe 8 and will be forced or curled downwardly initially by the inclined shoulder 15 and subsequently curled into and concealed within the hem-fold by the scroll 11. It is understood that the fabric is fed under the hemmer foot by the usual four-motion feed-dog (not shown) common to sewing machines.

It will be obvious to those skilled in the art to which the invention appertains that modifications may be made in the details of construction and in the forms and relative arrangements of parts without departure from the spirit of the invention which is not limited to such details and matters of form or otherwise than the prior art and the appended claims may require.

Having thus set forth the nature of the invention, what I claim herein is:—

1. A sewing machine hemmer foot having a tread-portion formed with spaced toes, a hemmer scroll carried by one of said toes and having a spirally formed leading edge, a hemmer arbor carried by the other of said toes, said arbor carrying toe being undercut to provide a downwardly and rearwardly inclined shoulder for deflecting downwardly an edge portion of fabric folded over said arbor before it engages the spirally formed leading edge of said hemmer scroll.

2. A sewing machine hemmer foot having an attaching shank and a tread-portion formed with a needle-aperture and spaced toes in advance of

said needle-aperture, a hemmer scroll disposed between said toes and attached at its forward end to one of the latter, said scroll extending spirally toward said needle-aperture, a hemmer arbor attached to the other toe and extending toward the needle-aperture, said arbor-supporting toe having a fabric-edge-guiding wall and a downwardly and rearwardly inclined shoulder in position to deflect downwardly in advance of said hemmer scroll a folded edge-portion of fabric.

3. A sewing machine hemmer foot having a tread-portion provided with a needle-aperture and at its forward end with spaced toes, a hemmer arbor carried by one of said toes, a hemmer scroll carried by the other of said toes and having a spirally formed leading edge extending rearwardly in the space between said toes toward said needle aperture, said edge substantially touching the arbor-carrying toe, said arbor-carrying toe having a fabric-edge-guiding wall in advance of the portion substantially touched by said hemmer scroll and spaced further from the scroll-carrying toe than said last mentioned portion.

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