

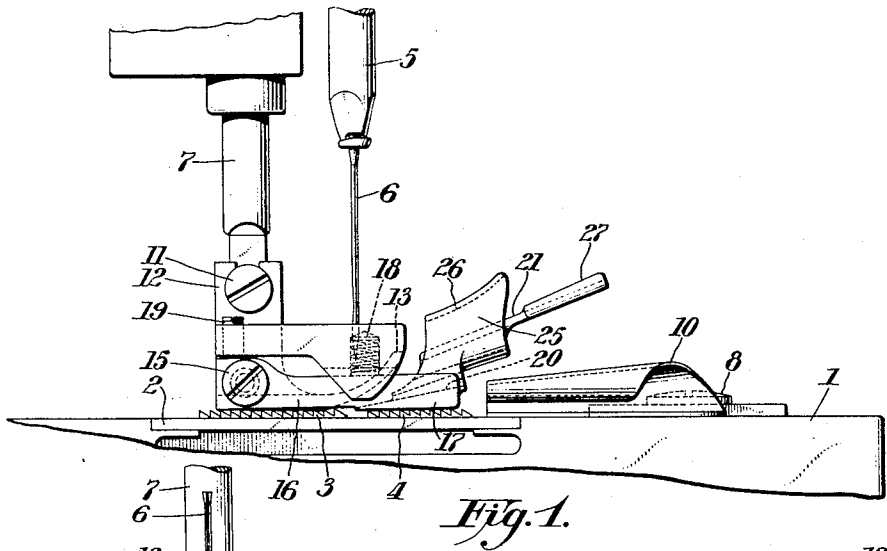
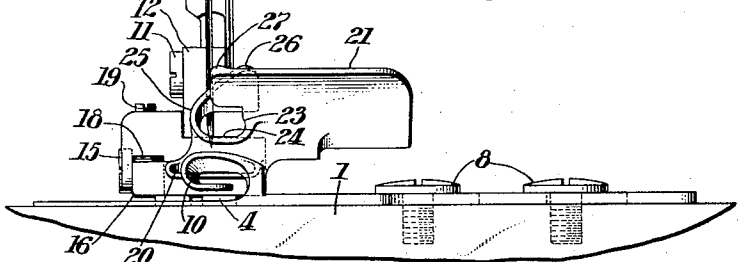
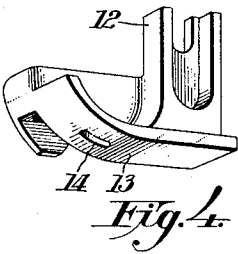
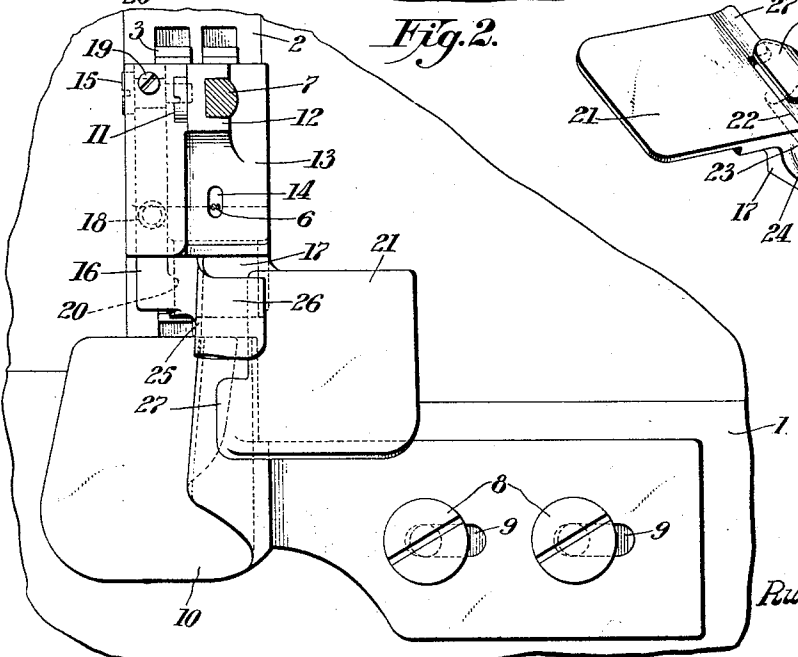
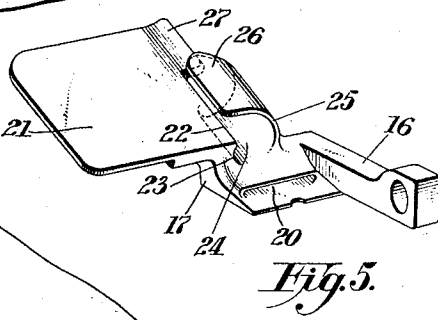
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1,930,665

FOLDER FOR SEWING MACHINES

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FOLDER FOR SEWING MACHINES

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4 Claims. (Cl. 112—147)

This invention relates to folding attachments for sewing machines and has for its object to provide an improved folder the scroll of which is unobstructed, thus allowing free passage of the material through the scroll and preventing retardation of the material by the cross-seams.

Another object of this invention is to construct a work-supporting plate or apron and a folding lip or arbor from a single piece of sheet-metal thus providing a simple and inexpensive folder.

A further object of this invention is to attach the folder to the presser-device in such a manner that the work is under complete control of the presser-device and folder at all times.

With the above and other objects in view, as will hereinafter appear, the invention consists in 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:

Figure 1 is a side elevation showing the improved folder and presser-foot in operative position.

Figure 2 is a front elevation of the attachment.

Figure 3 is a top plan view.

Figures 4 and 5 are perspective views showing the details of the presser-foot and folder.

In the embodiment of this invention selected for illustration, 1 is the base of the well known "Singer" sewing machine which carries the throat-plate 2 through which the main feed-dog 3 and the gathering or differential feed-dog 4 operate. Above the base of the machine is the usual needle-bar 5, needle 6, and presser-bar 7. Adjustably attached to the base 1 by screws 8 and the elongated slots 9 is a felling attachment 10.

To the lower end of the presser-bar 7 is secured by means of a fastening screw 11 the slotted shank 12 of the presser-foot 13 provided with a needle-hole 14. Pivoted to the presser-foot 13 by the shouldered pivot-screw 15 is an arm 16 provided with an auxiliary presser-device 17. The arm 16 and auxiliary presser-device 17 are urged downward by the compression-spring 18, the extent of movement of which is controlled by the set-screw 19.

Carried by the presser-device 17 is a strip-guide 20. Above the strip-guide 20 and also carried by the presser-device is a folder comprising a work-supporting apron 21 with its edge 22 off-

set downward and substantially at right angles to the horizontal plane forming the wall 23 and the lower flange 24, said lower flange having an upstanding wall 25 and an overhanging flange 26. The lower flange 24, upstanding wall 25 and overhanging flange 26 form substantially a horizontal U-shaped scroll.

Formed from the same piece of sheet-metal as the work-supporting apron lip 21 is a folding lip or arbor 27 which extends in front of and terminates in advance of the work-receiving end of the scroll.

In using my improved folder the lower layer of material is inserted in the felling attachment 10 and under the auxiliary presser-device 17. A strip is inserted in the strip-guide 20 and the edge of the upper layer of material is folded around the folding lip or arbor 27 and forced down through the scroll. The strip and upper layer of material are fed over the auxiliary presser-device and under the presser-foot 13. The upper layer of material is folded about the arbor 27 prior to its insertion in the scroll as the arbor terminates in advance thereof. This construction leaves the scroll free of obstructions and permits cross-seams to pass freely there-through. The free and easy passage of the cross-seams through the scroll prevents retardation of the material and its consequent disadvantages.

It will also be observed that the cross-seams passing under the presser-foot 13 do not affect the auxiliary presser-device 17. When a cross-seam passes under the presser-foot 13 the foot is raised, the auxiliary presser-device being pivoted at 15 and urged downward by the compression-spring 18 does not partake of this movement but continues to hold the lower layer of material in contact with gathering feed-dog 4, thus the feeding of the lower layer of material continues in the same manner irrespective of the presence or absence of a cross-seam.

From the foregoing description considered in connection with the accompanying drawing, the construction, manner of operation and several advantages of my improved folding attachment will be clearly and fully understood. It is apparent that such a device has a wide variety of uses, and it will be understood that the form, construction and arrangement of the several elements employed may be varied. Therefore, the privilege is reserved of resorting to all such legitimate changes therein as may be fairly embodied within the spirit and scope of the appended claims.

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

1. In a sewing machine attachment the combination of a presser-foot, a folder comprising
5 a scroll formed with a work-supporting apron, an arbor in front of and terminating in advance of the work-receiving end of said scroll, means for attaching said folder to said presser-foot, and resilient means for urging said folder downwardly.
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2. In combination, a presser-foot, an auxiliary presser-device pivoted for vertical movement to said presser-foot, and a folder carried by said auxiliary presser-device said folder comprising
15 a scroll formed with a work-supporting apron and an arbor extending in front of and terminating in advance of said scroll.

3. A sewing machine folder comprising a scroll, a substantially flat work-supporting apron having a free edge portion around which the edge of the material to be folded is turned, said work-supporting apron being fixed to one limb of said scroll and having its free edge portion disposed entirely in front of said scroll. 80

4. A sewing machine folder comprising a substantially flat work-supporting apron having a free edge portion around which the edge of the material to be folded is turned downwardly, and a folding scroll portion disposed entirely in rear of said free edge portion and adapted to externally engage the folded portion of the material after it has passed said free edge portion. 85 90

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