R. EVISTON.

COMBINATION SEWING MACHINE ATTACHMENT.

APPLICATION FILED APR. 29, 1909.

959,126. Patented May 24, 1910.

Fig. 1.

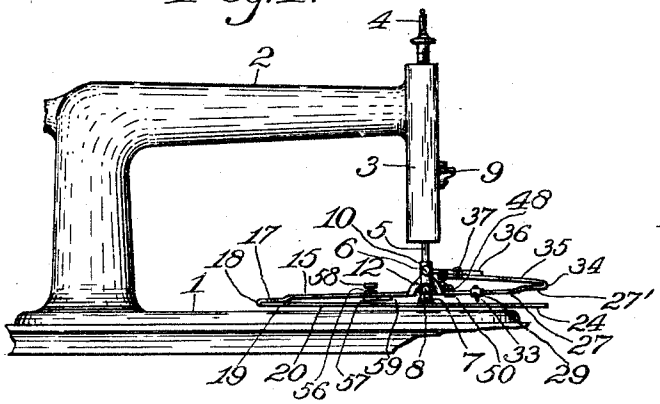


Fig. 2.

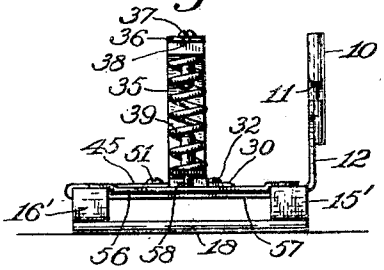


Fig. 3.

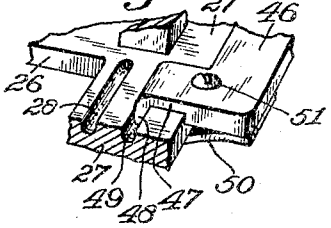


Fig. 4.

Fig. 5.

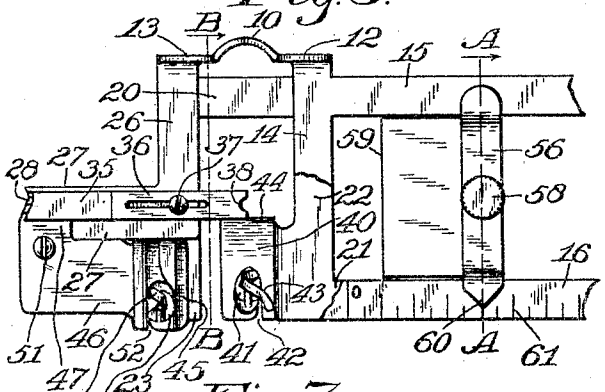


Fig. 6.

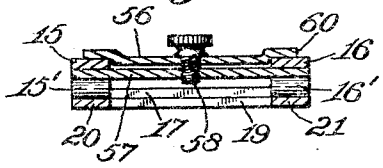


Fig. 7.

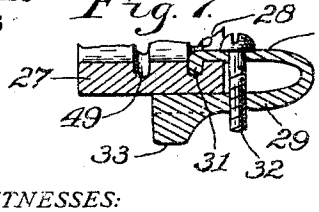
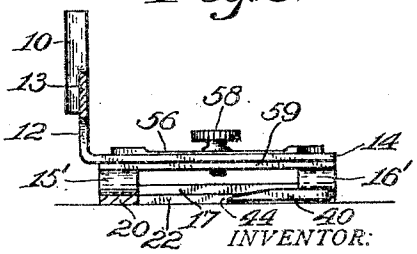


Fig. 8.



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COMBINATION SEWING-MACHINE ATTACHMENT.

959,126. Specification of Letters Patent. Patented May 24, 1910.

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To all whom it may concern:

Be it known that I, ROSA EVISTON, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in a Combination Sewing-Machine Attachment; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a combination implement that is adapted to be readily connected to a sewing machine whereby to perform several kinds of operations in sewing without the necessity of connecting and disconnecting various kinds of attachments heretofore used; the invention having reference particularly to an implement that is adapted to be attached to the presser foot bar of a sewing machine and to be readily disconnected therefrom, the implement carrying two hemmers whereby the machine is enabled to make either narrow or very broad hems, the implement being adapted to also perform marking operations.

The object of the invention is to provide a combination attachment for sewing machines whereby various kinds of operations may be expeditiously performed alternately without necessitating troublesome changing and adjustments of various separate attachments, especially for use by dress-makers when it is desired to use only one sewing machine for a variety of different kinds of operations.

With the above-mentioned and other objects in view, the invention consists in an improved sewing machine attachment constructed in a novel manner for hemming and other operations, the invention consisting further in the novel parts, and in the combinations and arrangements of parts, as hereinafter particularly described and then pointed out in the accompanying claims.

Referring to the drawings, Figure 1 is a fragmentary rear elevation of a sewing machine having the improved implement connected therewith; Fig. 2, an end elevation of the implement; Fig. 3, a fragmentary sectional detail of the implement; Fig. 4, a perspective view of the implement; Fig. 5, a fragmentary top plan of the implement; Fig. 6, a transverse sectional view on the line A A in Fig. 5; Fig. 7, a fragmentary sectional view showing portions of the marking devices; and Fig. 8, a sectional elevation approximately at the plane of the line B B in Fig. 5.

Similar reference characters in the different figures of the drawings indicate like parts or features of construction referred to herein.

In the drawings, the numeral 1 indicates the base or cloth plate on which the arm 2 is mounted, and having a head 3 in which is mounted a vertical needle-bar 4 and presser foot bar 5 provided with a thumb screw 6, a foot 7 being connected to the lower end of the bar by a thumb screw 8, the bar being adapted to be raised or lowered by a lifter 9, all being of well known or suitable construction.

The combination attachment comprises a shank having a concavo-convex plate 10 adapted to have a bearing against the rear side of the presser foot bar 5, the plate having a slot 11 therein to receive the thumb screw 6 whereby the plate may be secured detachably to the bar, or obviously the plate may be so proportioned that it may be fastened to the rear side of the shank of the presser foot by means of the thumb-screw 8, if desired, the shank having two oppositely projecting arms 12 and 13 that extend downward a suitable distance toward the base 1. The arm 12 has a member thereon formed of a plate that extends in a plane approximately at right angles to the axis of the shank, the plate being suitably stamped out to form apertures so that unnecessary weight is avoided, a portion of the plate being turned under the remaining portion thereof, and thus the member comprises a bar 14 extending forward from the arm 12, two bars 15 and 16 extending laterally from the bar 14 and having inclined end portions 15′ and 16′ respectively that are connected to a plate 17 that is connected to a curved portion 18 to which a plate 19 is connected that extends under the plate 17, two bars 20 and 21 extending from the plate 19 under the bars 15 and 16 respectively beyond the bar 14, a bar 22 connecting the bars 20 and 21 under the bar 14, and a bar 23 extending from the bar 20 beyond the bar 22 and parallel thereto, there being a gage-bar 24 extending from the bar 23 and having shallow grooves 25 in the upper side thereof to serve for gage marking. The plate 19 and the bars 20, 21, 22, 23 and 24 are designed to

rest on the top of the base 1 or may be lifted slightly therefrom by the presser foot bar 5. The proportions are such that the bars 22 and 23 will be at opposite sides of the presser foot, and the portion of the bar 20 from which the bars 22 and 23 extend will be behind the presser foot. The arm 13 has a bar 26 thereon that extends forward in approximately the same plane as the bar 14 and it has a guide bar 27 thereon that extends from its end laterally above the bar 24, the outer part of the bar 27 having an off-set portion 27′ that stands up slightly higher than the main portion of the bar 27 from the bar 24. The top of the bar 27 has a groove 28 therein extending longitudinally, and a marker head 29 engages the under side of the bar 27 and has a clip 30 extending onto the top of the bar 27, the clip having a lug 31 thereon that extends into the groove 28, the marker head being secured to the bar 27 by a screw 32, the under side of the marker head having a projection 33 thereon adapted to press the cloth into one of the grooves 25. The curved portion 34 is formed on the end of the offset portion 27′ and has a spring arm 35 extending therefrom which is preferably provided with an adjustable plate 36 on its end and secured by a screw 37, the end of the plate having a notch 38 therein adapted to clear the needle, the end of the plate being designed to be engaged by the lower end of the needle bar. A spring 39 is suitably seated on the bar 26 and has its top in connection with the arm 35 so that when the arm is pushed down by the needle bar the bar 27 will also be pushed down to produce the marking on the cloth. The plate 36 may, if desired, be adjusted so as to be engaged by the set screw with which the needle bar is provided for securing the needles thereto.

In the space between the bars 22 and 23 a hemmer plate 40 is suitably supported by the bars 21 and 22 jointly with a suitable amount of space between the plate 40 and the bar 23 to permit cloth to pass between them. The hemmer is of the ordinary construction having an aperture 41 therein and a slot 42 extending from the front of the plate into the aperture, the plate having a scroll 43 secured to the top thereof and extending into the aperture over the slot 42. With this construction cloth will pass over the bar 23 and under the plate 40, and the edge of the cloth will pass through the slot 42 and be turned over and under against the main portion of the cloth by the scroll and pass to the presser foot and feeder from beneath the hemmer plate, to be sewed down by the needle and thread in the usual manner, the cloth passing rearward over the end portion of the bar 20 which as will be understood is composed of relatively thin metal. The end of the hemmer plate 40 that is nearest to the bar 20 has a beveled upper portion 44 adapted to clear the nose of the presser foot.

In order to produce relatively broad hems, as when the cloth is turned over several inches in width and the edge of the cloth turned under and sewed down to the body of the cloth several inches from the line at which it is turned over, another hemmer is provided that is substantially like the hemmer above described, but is inverted and comprises a hemmer plate 45 which is provided with a lateral supporting shank 46 that is guided against the forward edge of the bar 27, and has a bearing part 47 in contact with the top of the bar 27 and provided with a lug 48 that extends into a groove 49 which is formed in the top of the bar 27 longitudinally thereof, the shank being secured to the bar 27 by a clamp plate 50 and binding screw 51, so that the hemmer plate may be secured in various positions along the bar when not in use, and is moved over so as to be above the plate 40 for use. The plate 45 has a slot 52 therein extending to an aperture 53 in the plate, a scroll 54 being secured to the under side of the plate 45 and extending into the aperture, the arrangement being such that if the cloth is passed over the top of the plate 45 and the edge passed into the slot 52 it will be turned under the cloth, the end of the plate 45 that is presented toward the presser foot having a beveled upper portion 55 to enable the cloth to pass from the top of the plate under the nose of the presser foot. The plate 45 does not extend as near to the presser foot or the needle as does the hemmer plate 40, so that the cloth may pass from the plate 45 down onto the plate 40 and off of the beveled top 44 and thence under the presser foot. It will be observed that the slot 42 is in the right hand side of the plate 40 and the slot 52 is in the left hand side of the plate 45, so that the cloth will be turned over in opposite directions by the two hemmers at different operations.

In order to guide the cloth when making relatively broad hems and in other operations, two clamp bars 56 and 57 are connected to the bars 15 and 16 by means of the thumb screw 58, the bar 57 having a projection that extends toward the position of the needle and forms a guide 59, the bar 56 having a point 60 thereon that may be set relatively to a scale 61 stamped on the top of the bar 16, so that the guide 59 may be set at any number of inches or fractions thereof from the right hand side of the needle.

In practical use, cloth may be operated upon in various ways by passing the bulk of the goods over the bars 23 and 24 and over the top of the hemmer plate 40 and under the presser foot, and if it be desired to form a relatively narrow hem the operation may

be performed by passing the edge of the goods under the plate 40 and through the slot 42 to be turned over as above described. In case it be desired to turn over the goods to a greater extent than can be done in the hemmer plate 40, the guide 59 should be set at the desired position and then the cloth may be folded over so that the folded part will pass along the guide 59 between the bars 21 and 16, the main part of the cloth passing above the plate 23, and the turned-over part passing between the bar 13 and the plate 45 with the edge of the cloth on the top of the plate 45 and in the groove 52 to be turned under, the turned-under part then passing from the beveled part 55 down onto the main part of the cloth and with it under the presser foot to be stitched together.

It will be understood, of course, that in the operations of sewing or hemming, separate pieces of strips of cloth may be sewed together at one operation, and the operations of attaching lace to the cloth, cording, and also making creased lines on the cloth for various purposes may be accomplished with the improved combination attachment in proper position on the machine.

Having thus described the invention, what is claimed as new, is—

1. A combination sewing machine attachment including a support comprising an apertured upper plate, an apertured under plate connected at one end portion thereof to one end portion of the upper plate, the plates being slightly elastic, a hemmer plate on the lower plate, a guide bar connected with the upper one of the plates and supported in a plane that is opposite the plane of the under plate, and a hemmer plate mounted adjustably on the guide bar to be moved to a position opposite the other hemmer plate or away therefrom, each hemmer plate having an aperture therein and a slot extending to the aperture, and a scroll attached to the plate and extending into the aperture.

2. A combination sewing machine attachment including a supporting shank having a lateral bar and also a supporting plate thereon, the plate being turned under itself and having a hemmer thereon, a guide mounted adjustably on the supporting plate, a guide bar on the lateral bar extending at right angles to the adjustable guide and in a plane opposite the plane of the hemmer, and a hemmer mounted adjustably on the guide bar to be moved above the first-mentioned hemmer or away therefrom.

3. A combination sewing machine attachment including a supporting shank having a member thereon comprising a plate that is turned under to form an under portion which has a gage-bar thereon with grooves in its top, the shank having also a bar thereon provided with a lateral bar that extends oppositely above the gage-bar, a marker-head adjustable on the lateral bar to cooperate with the grooves, a spring-arm on the lateral bar, and a spring between the lateral bar and the spring-arm.

4. A combination sewing machine attachment including a supporting shank having two members thereon, a hemmer plate mounted on one of the members and having an aperture therein and also a slot extending to the aperture, the plate having also a scroll on the under side thereof that extends into the aperture, and a guide mounted on the other one of the two members and adjustable thereon toward or from the hemmer-plate.

5. A combination sewing machine attachment including a supporting shank having a member thereon comprising a guide-plate that is turned under itself and having a hemmer-plate mounted on the turned under portion, the hemmer-plate having an aperture therein and a slot extending to the aperture, and a scroll attached to the top of the hemmer-plate and extending into the aperture, the guide-plate supporting the hemmer-plate at a distance from the shank to clear the presser-foot of a sewing machine.

6. A sewing machine attachment comprising a supporting shank having a lateral bar and also a supporting plate thereon, the plate being turned under itself and having a turning-over plate thereon serving in hemming operations, a guide mounted adjustably on the plate, a gage-bar on said turned-under portion of said plate and having grooves in the top thereof, a guide-bar on said lateral bar of the shank opposite the gage-bar, a marker-head adjustable on the guide-bar to coöperate with the grooves, a spring-arm on the guide-bar, a spring between the guide-bar and the spring-arm, and a turning-over plate mounted adjustably on the guide-bar to be moved above the first-mentioned turning-over plate and serve in hemming operations.

In testimony whereof, I affix my signature in presence of two witnesses.

ROSA EVISTON.

Witnesses:

HARRY D. PIERSON,

E. T. SILVIUS.