No. 684,990. Patented Oct. 22, 1901.

A. LAUBSCHER.

COMBINED FOLDER AND GUIDE FOR SEWING MACHINES.

(Application filed Nov. 3, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

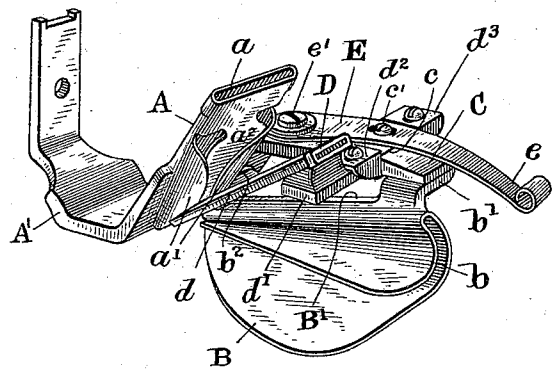


Fig. 2.

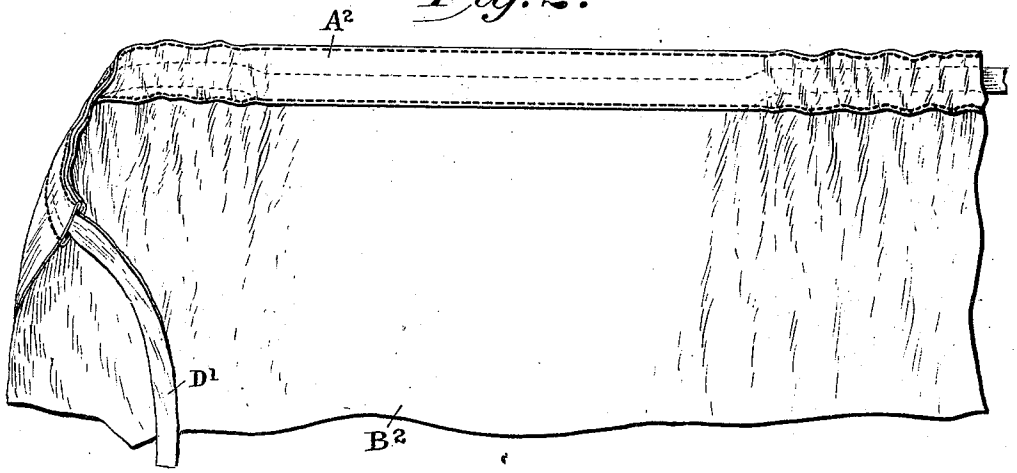
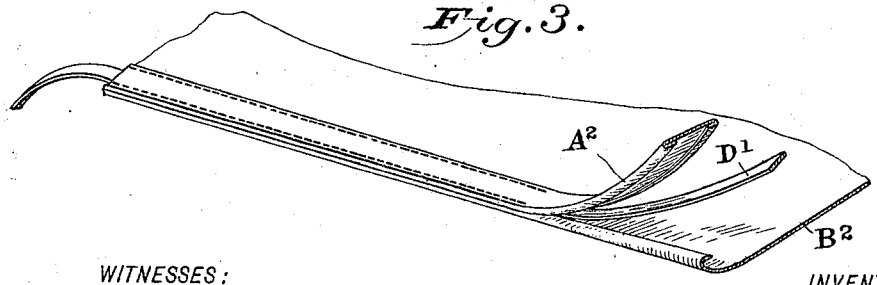


Fig. 3.



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Fig. 4.

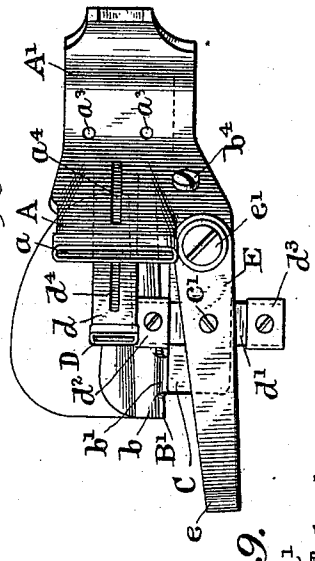


Fig. 5.

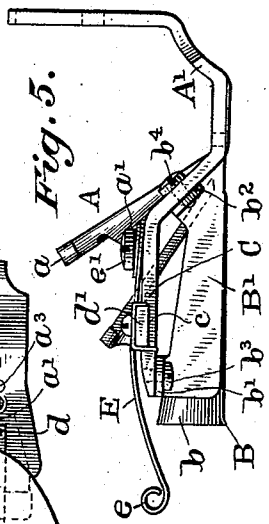


Fig. 9.

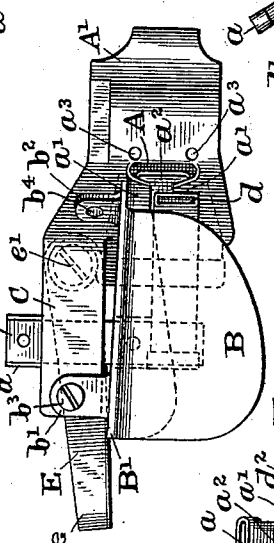


Fig. 7.

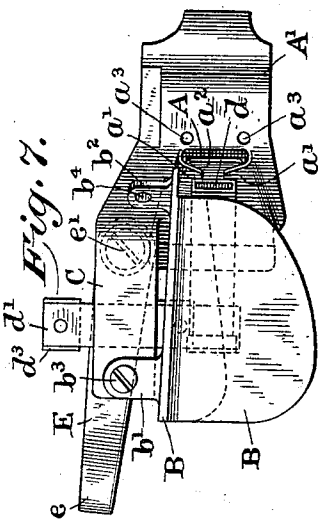


Fig. 6.

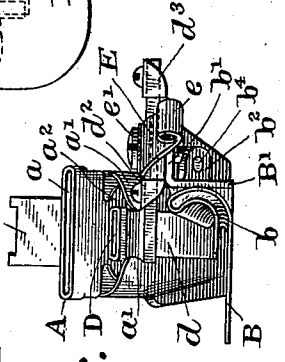
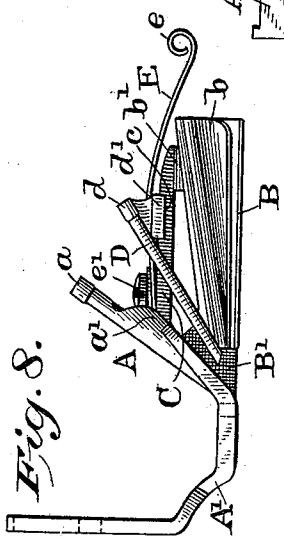


Fig. 8.



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UNITED STATES PATENT OFFICE.

ALEXANDER LAUBSCHER, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE WHEELER AND WILSON MANUFACTURING COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

COMBINED FOLDER AND GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 684,990, dated October 22, 1901.

Application filed November 3, 1900. Serial No. 35,392. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER LAUBSCHER, a citizen of the United States, and resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Combined Folders and Guides for Sewing-Machines, of which the following is a specification.

My invention relates to folders and guides for two-needle sewing-machines, and has for its object to enable an operator to accomplish quickly and neatly by one operation what formerly required several operations to perform. This operation consists, first, in overturning the edge of an under ply of fabric; second, covering said overturned edge with a strip of fabric whose two edges are underturned and stitched down upon the said under ply, and, third, interposing a band or tape between said plies and securing the same by its engagement with the stitches or confining the same loosely between the rows of stitches, at the pleasure of the operator, as occasion may require, for purposes hereinafter explained.

In the accomplishment of my purpose I employ a sewing-machine having two needles sewing parallel seams and so attach my appliance that the fabrics may be guided in respect to the needles to place the rows of stitching where desired upon the garment.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is a perspective view of my improved folder and guide combined with a sewing-machine presser-foot; Fig. 2, a similar view, partly broken away, illustratiug the character of work for which my folder and guide is employed; Fig. 3, a view similar to Fig. 2, but illustrating more particularly the manner in which the several strips are applied to the garment; Fig. 4, a plan view of my improved folder and guide, the parts being in proper position for inclosing the intermediate tape between the superimposed outer strip and the garment without stitching said tape thereon; Fig. 5, a side elevation looking from the bottom of Fig. 4; Fig. 6, an end elevation looking from the left of Fig. 5 in the direction in which the material travels through the folder and guides to the needles; Fig. 7, a bottom view; Fig. 8, a side elevation, but looking in the opposite direction from that illustrated in Fig. 5; and Fig. 9, a bottom view similar to Fig. 7, but showing the movable guide thrust to one side, so as to deliver the intermediate tape in the pathway of the needle.

Similar letters of reference designate like parts in the several figures of the drawings.

A is the band-guide, which consists of a flattened tube a, whose aperture is of sufficient size to admit the upper strip or band A^2 freely, and yet guide the same with the necessary accuracy. Said guide A is provided at each edge with a scroll a', whose office is to turn the passing band down around the edge of an intervening tongue a^2, the guide narrowing proportionately as it approaches the needle-apertures a^3 and delivering the band in such relation to the needle that each underturned edge will be stitched down upon the underlying fabric B^2, as in a hem. The band-guide is preferably attached to or made integral with the sewing-machine presser-foot A^3; but it is evident it can be otherwise applied without changing the character of my invention.

The garment-folding guide B is provided with a scroll b, whose office is to turn over the edge of the passing fabric in the manner of a hemmer, except that the edge is folded but once upon itself and not turned again and under, as in hemming. Said guide B is secured to a sheet-metal frame B', as by soldering, which latter is provided with ears b' b^2, by means of which said guide is secured to an arm C, formed integral with and extending from the presser-foot A', as by screws b^3 b^4. The position in which said guide B is secured with respect to the needle-holes a^3 in the presser-foot is such that the overturned edge of the garment will be stitched down by the right-hand needle of the sewing-machine. Interposed between the folding-guides A and B is the movable tape-guide D, which consists of a flattened tube d of suitable size to carry a tape of the requisite size and strength, which tube is attached to the end of a short slide d', which latter works within a groove c cut within the upper surface of the arm C

transversely to the direction of the feed of the material. The delivery ends of the several guides extend within close proximity of the needle-holes a^3 to insure the proper delivery of the material with respect thereto.

E is a spring, whose forward end is shaped into an operating-lever e and is at its rear end pivoted to the arm C by a screw e'. The spring E rests and exerts a pressure upon the slide d' to keep the latter within the groove c, and thereby furnishes sufficient friction to retain the guide D in either of its operative positions against accidental displacement. Said spring is attached to the slide d' by the screw c', the hole through which the latter passes being sufficiently elongated to prevent any cramping in the movement.

d^2 d^3 are adjustable stops carried by the slide d', which contact with the arm C to arrest the movement of said slide, whereby the operative positions of the slide and tape-guide D, carried thereon, may be easily and accurately obtained.

a^4 d^4 are elongated openings cut within the guides A D, respectively, for the purpose of enabling the operator to have access to the material to advance the latter to the needles during the initial threading of the device.

My attachment is applied to the well-known two-needle sewing-machine by simply adjusting the presser-foot A' within the usual presser-bar in the ordinary manner, and a further description in this connection is deemed unnecessary.

The operation of my improvement is as follows: The band A^3, leading from a reel or otherwise, is passed through the band-guide A and the tape D' passed through the movable tape-guide D, while the edge of the garment B^2 is passed through the garment-folding guide D, and all are advanced to the needle and beneath the presser-foot. The location of the tape-guide D upon the apparatus is such that if the spring-handle thereof is moved to the right until the stop d^2 abuts against the stationary arm C, as shown in Figs. 4 and 7, the tape will be delivered between the two needles and will be engaged by neither, while if the handle be turned to the left hand to its limit, as shown in Fig. 9, the tape-guide D will be carried so far to the left as to guide the edge of the tape into the path of the left-hand needle and cause it to be stitched thereby, and thus secured to the garment. In the finishing of such a garment as a corset-cover, for instance, the bottom of the garment, the covering-band, and the tape are entered into the guides in the manner before described and the tape-guide so set as to lay the tape between the two lines of stitches. When the stitching has progressed, say, one-third of the distance across the garment, without stopping the sewing-machine the lever of the tape-guide is moved to the left, causing the tape to be engaged by the needle, as before described, and the stitching allowed to progress across what is the back of the garment, when the handle is again turned to the right to guide the tape between the needles and the two lines of stitching continued to the end, thus securing the results illustrated in Fig. 2. As thus secured the tape is inseparable from the garment, the latter being held plain at the back, as is desirable, while the front corners running free are left to be gathered in to the size of the wearer and secured by tying the tape in the usual manner. In some instances it is desirable to use my attachment with the cloth-folding guide B removed, which may be done by removing the screws b^3 b^4. When used without the cloth-folding guide, the band A^2 and inclosed tape D' will be stitched upon the underlying garment, as previously described, without folding the edge of the latter, as will be readily understood.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a sewing-machine attachment, the combination of a cloth-folding guide, a superimposed band-guide, with an interposed, adjustably-secured tape-guide whereby a band may be stitched upon the overturned edge of a garment and a tape laid between said band and garment, and between the rows of stitches, and means for supporting said guide in operative position.

2. In a sewing-machine attachment, the combination of a tape-guide mounted upon a horizontally-disposed slide adapted to move in a direction transverse to the line of the feed of the material, with a superimposed band-guide, and means for supporting said slide and guide in operative position, substantially as set forth.

3. In a sewing-machine attachment, the combination of a cloth-folding guide, and a superimposed band-guide, with an interposed tape-guide mounted upon a horizontally-disposed slide adapted to move in a direction transverse to the line of the feed of the material, and means for supporting said guides and slide in operative position, substantially as set forth.

4. In a sewing-machine attachment, the combination of a tape-guide, mounted upon a horizontally-disposed slide adapted to move in a direction transverse to the line of the feed of the material, stops carried by the said slide and coöperating with a stationary member to limit the movement of said slide, with a superimposed band-guide and means for supporting said guides and slide in operative position, substantially as set forth.

5. In a sewing-machine attachment, the combination of a cloth-folding guide, a superimposed band-guide, and an interposed tape-guide, mounted upon a horizontally-disposed slide adapted to move in a direction transverse to the line of the feed of the material, stops carried by said slide and coöperating with a stationary member to limit the movement of said slide, and means for supporting said guides and slide in operative position, substantially as set forth.

6. In a sewing-machine attachment the combination of a presser-foot, a band-guide mounted on said presser-foot, a horizontally-disposed slide mounted on an arm rigid with said presser-foot, said slide being adapted to move in a direction transverse to the line of the feed of the material, a tape-guide mounted on said slide and adapted to deliver tape beneath said band-guide and stops carried by said slide and coöperating with a stationary member to limit the movement of said slide, substantially as set forth.

7. In a sewing-machine attachment, the combination of a presser-foot, a band-guide mounted on said presser-foot, with a horizontally-disposed slide mounted on an arm rigid with said presser-foot, said slide being adapted to move in a direction transverse to the line of the feed of the material, a tape-guide mounted on said slide and adapted to deliver tape beneath said band-guide, stops carried by said slide and coöperating with a stationary member to limit the movement of said slide, and a cloth-folding guide removably secured to said presser-foot, substantially as set forth.

8. In a sewing-machine attachment, the combination of a presser-foot, a band-guide mounted on said presser-foot and adapted to deliver a band in the pathway of the needles, a horizontally-disposed slide mounted on an arm rigid with said presser-foot, said slide being adapted to move in a direction transverse to the line of the feed of the material, a tape-guide mounted on said slide and adapted to deliver tape in close proximity to the needle-holes and beneath said band-guide, stops carried by said slide and coöperating with a stationary member to limit the movement of said slide, and means, as a spring, for retaining said slide in either of its operative positions, substantially as set forth.

9. In a sewing-machine attachment, the combination of a presser-foot, a band-guide mounted on said presser-foot and adapted to deliver a band in the pathway of the needles, a horizontally-disposed slide mounted on an arm rigid with said presser-foot, said slide being adapted to move in a direction transverse to the line of the feed of the material, a tape-guide mounted on said slide and adapted to deliver tape in close proximity to the needle-holes and beneath said band-guide, stops carried by said slide and coöperating with a stationary member to limit the movement of said slide, and a resilient operating-lever pivoted on said presser-foot and connected with said slide, substantially as set forth.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 31st day of October, A. D. 1900.

ALEXANDER LAUBSCHER.

Witnesses:

A. STEWARD,

J. S. FINCH.