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A. J. A. OESTERREICH.

TRIMMING ATTACHMENT FOR SEWING MACHINES.

APPLICATION FILED OCT. 6, 1902.

NO MODEL.

Fig. 4.

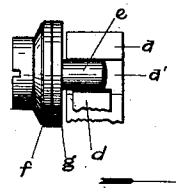


Fig. 1.

Fig. 5.

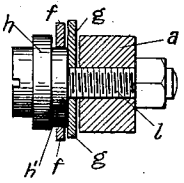


Fig. 2.

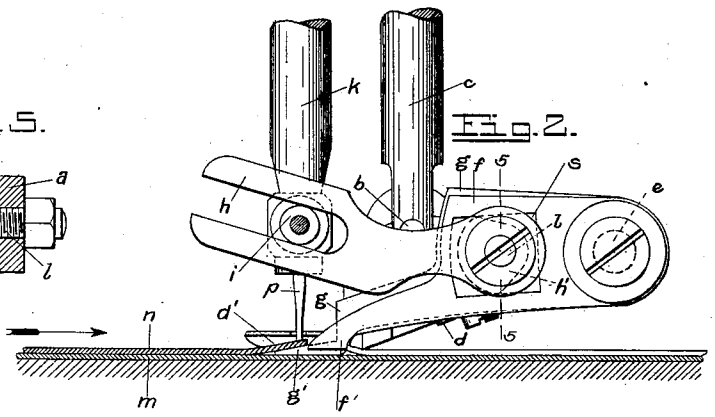
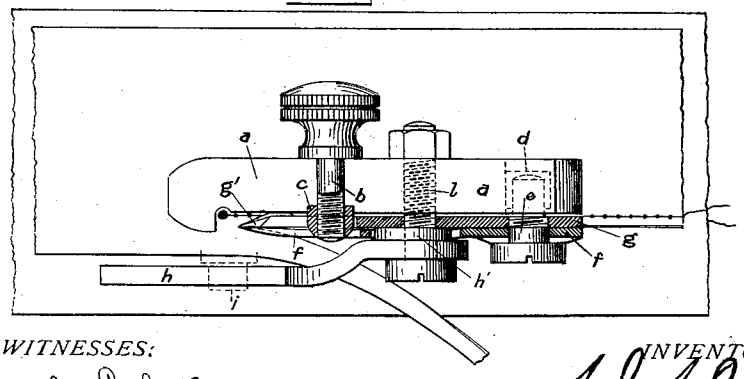


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 735,572. Patented August 4, 1903.

UNITED STATES PATENT OFFICE.

AMANDUS JOHANN AUGUST OESTERREICH, OF HAMBURG, GERMANY, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

TRIMMING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 735,572, dated August 4, 1903.

Application filed October 6, 1902. Serial No. 126,160. (No model.)

To all whom it may concern:

Be it known that I, AMANDUS JOHANN AUGUST OESTERREICH, a citizen of the German Empire, residing at Hamburg, Germany, have invented certain new and useful Improvements in Trimming Attachments for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a trimming attachment for sewing-machines, adapted to cut out patterns or figures on one ply of material while being stitched to another ply in forming what is known as "appliqué-work," now extensively employed as ornamental designs on ladies' dresses and cloaks, the invention having for its object to provide an attachment of the class referred to which is simple in construction and which will do the work perfectly in following sharp curves in the seams.

In the accompanying drawings, Figure 1 is a side view of the attachment in operative relation to parts of a sewing-machine, but with the upper shear-blade lifted. Fig. 2 is a similar view with the upper shear-blade depressed. Fig. 3 is a plan view of the attachment, partly in horizontal section, illustrative of its operation. Fig. 4 is a rear end view of the device; and Fig. 5, a rear view, partly in section, on line 5 5, Fig. 2.

Referring to the drawings, *a* denotes a block or bracket rigidly attached to the presser-bar *c* by a set-screw *b*, said block or bracket having a presser-foot portion *d'*.

The improved trimming attachment, as herein illustrated, comprises an upper reciprocating shear-blade *f'* and a lower relatively stationary shear-blade *g'*, the latter being in the form of a slender finger adapted to enter between the upper ply of material *n* and the lower ply of the material *m* closely adjacent to the vertical path of the needle *p*, as shown in the drawings. The said lower shear-blade *g'* is formed at the forward end of a plate *g*, pivotally mounted on the block or bracket *a* by means of the screw *l*, which serves as an axis-pin for the operating-lever *h*, forked to embrace a pin or roller-stud *i* in the needle-bar *k*. The upper shear-blade is formed as a part of a plate *f*, pivoted by the screw *e* rearward of the pivot *l* to the plate *g*, and is provided forward of its pivotal point with a rectangular opening *s*, in which works a cam *h'*, moving with the operating-lever *h* to impart vertical movements to the upper shear-blade. Attached to the lower part of the block or bracket *a* is a spring *d*, which presses on the inner projecting stud end of the pivot-screw *e*, so as to press the lower blade *g'* yieldingly downward on the lower ply of material *m*, while permitting said blade to adjust itself to varying thicknesses of material or thick places in the work, as in passing over cross-seams, said screw *e* serving as the fulcrum of the plate *f* as the latter is operated by the lever *h* in actuating the upper blade *f'*.

Owing to the fact that the acting cutting portion of the upper reciprocating blade *f'* is relatively short and is closely adjacent to the needle the trimming attachment is well adapted to follow short curves in making ornamental patterns in the production of appliqué-work, while the yieldingly-mounted lower blade readily adapts itself to different thicknesses of material or inequalities in the work.

It will be observed that the plates *g* and *f*, carrying, respectively, the lower and upper blades *g'* and *f'*, are pivotally connected together by the screw *e*, so that as the lower blade adjusts itself to varying thicknesses of work the plate *g* turns on the screw *l* as a pivot and in such turning movement carries the plate *f*, also pivoted on the screw *l*, with it, so that the relative vertical positions of the two shear-blades remain the same notwithstanding any change of position of the lower blade. This feature is of some importance in a trimming device in which the movable blade is operated from the needle-bar and has therefore an unvarying throw, as it causes the upper reciprocating blade to be lifted somewhat higher at the upward limit of its stroke when the lower ply of material or the work beneath the lower blade is thick than when it is thin. In other words, the construction under consideration permits of a variation of the working position of the reciprocating upper blade without varying

the working throw thereof, thus well adapting the attachment for use in different thicknesses of work.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A sewing-machine trimming attachment comprising a yieldingly-mounted, normally stationary, lower blade consisting of a slender finger adapted to enter between upper and lower plies of material, a reciprocating upper blade having a short cutting edge, so as to trim the goods in sharp curves, said upper blade being pivotally connected with said lower blade, so as to be adjustable therewith as said lower blade adapts itself to varying thicknesses of work, a pivot on which the plates carrying said blades can turn together as the said blades are adjusted, and means for operating the said upper blade from the needle-bar of a sewing-machine.

2. In a sewing-machine trimming attachment, the combination with a block or bracket adapted for attachment to a sewing-machine, of two plates pivotally mounted at a common point on said block or bracket and each provided at its forward part with a cutting-blade, said plates being pivotally connected together at a point rearward of their pivotal connection with said block or bracket, a spring which yieldingly presses the lower blade downward on the lower ply of material, and means for reciprocating the upper blade from the needle-bar of a sewing-machine.

3. In a sewing-machine trimming attachment, the combination with the block or bracket a, of the plate g provided at its forward end with the lower blade g' and pivotally mounted on the said block or bracket, the plate f provided at its forward part with the upper blade f' and also pivotally mounted on said block or bracket at a point coincident with the pivotal point of the said plate g, said plate f being also pivoted to the said plate g, as at e, a spring yieldingly pressing said blades downward toward the work, and means for operating said upper blade from the needle-bar of a sewing-machine.

4. In a sewing-machine trimming attachment, the combination with the block or bracket a, of the plates f and g provided, respectively, with the upper and lower blades f' and g', said blade g' consisting of a slender finger adapted to enter between two plies of material and said blade f' having a short cutting edge to permit trimming in sharp curves, the pivot l at which said plates are mounted on said block or bracket, the pivot e connecting said plates together and serving as a fulcrum for the reciprocating upper blade, the spring d, and the lever h adapted to be operated from the needle-bar of a sewing-machine and provided with means for actuating said upper blade.

5. In a sewing-machine trimming attachment, the combination with a block or bracket adapted for attachment to a sewing-machine and provided with a pivotal pin, of two plates mounted upon said pivotal pin and each provided at its forward part with a cutting-blade, said plates being pivotally connected together at a point rearward of the pivotal pin upon which they are mounted, a spring operating to yieldingly press the said blades toward the lower ply of material, and a forked operating-lever mounted upon said pivotal pin and provided with a cam entering a suitable opening in one of said levers and having its forked end portion adapted to embrace a stud upon the needle-bar of the sewing-machine.

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

AMANDUS JOHANN AUGUST OESTERREICH.

Witnesses:

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OTTO W. HELLMRICH.