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HEMMING ATTACHMENT FOR SEWING MACHINES.

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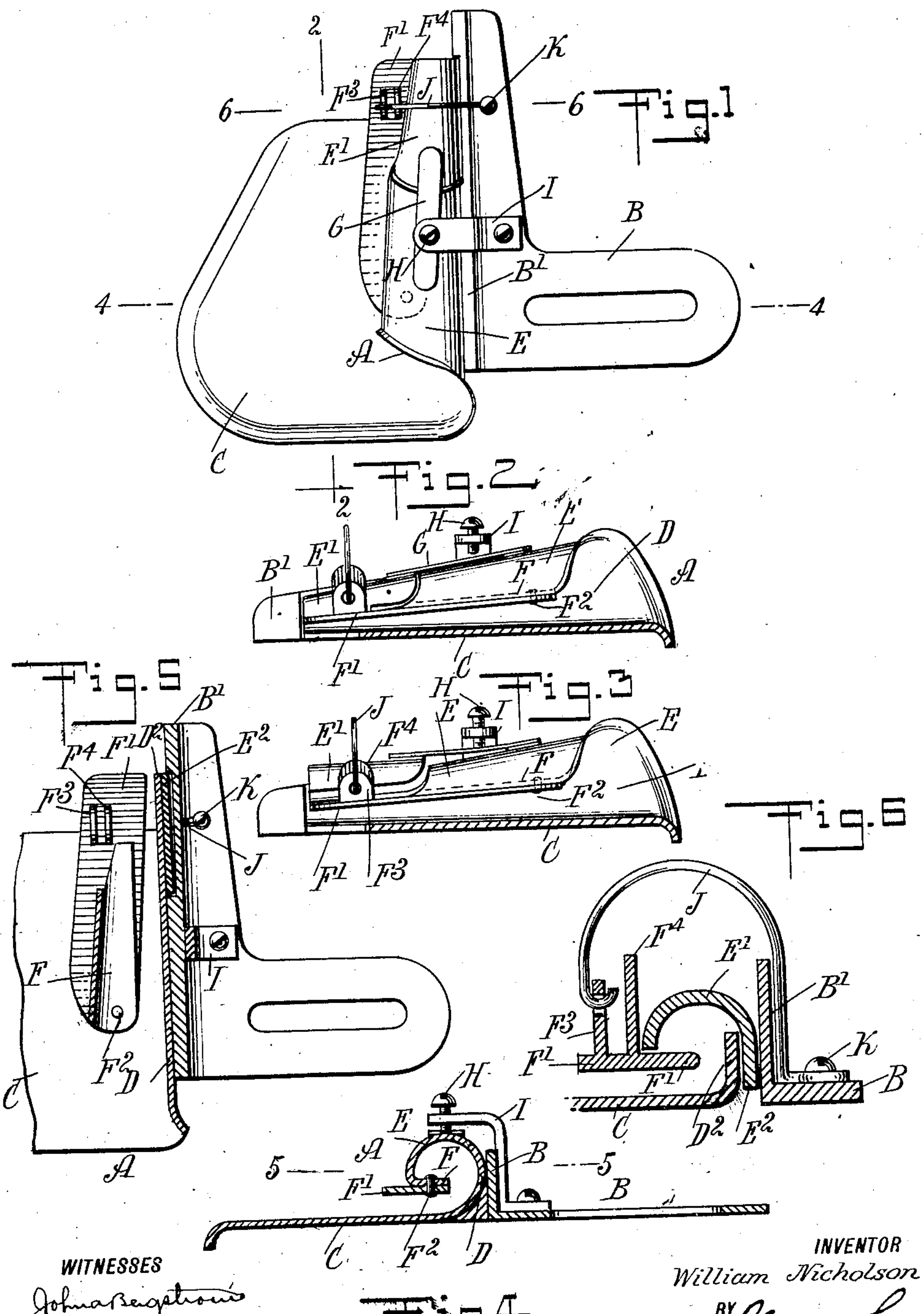

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HEMMING ATTACHMENT FOR SEWING-MACHINES.

1,044,413. Specification of Letters Patent. Patented Nov. 12, 1912.

Application filed March 27, 1912. Serial No. 686,653.

To all whom it may concern:

Be it known that I, WILLIAM NICHOLSON, a citizen of the United States, and a resident of San Francisco, in the county of San Francisco and State of California, have invented a new and Improved Hemming Attachment for Sewing-Machines, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved hemming attachment for sewing machines, arranged to permit of accurately passing the material through the scroll to insure the proper formation of the hem even if the material is provided with cross seams or other thickened portions.

For the purpose mentioned use is made of a scroll having a yielding roof portion and a yielding portion on the turn-under plate so that the said parts yield on passing a thick cross seam or other thickened material through the scroll.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the hemming attachment: Fig. 2 is a transverse section of the same on the line 2—2 of Fig. 1; Fig. 3 is a similar view of the same with the yielding roof portion in raised position: Fig. 4 is a sectional side elevation of the hemming attachment on the line 4—4 of Fig. 1: Fig. 5 is a sectional plan view of the same on the line 5—5 of Fig. 4; and Fig. 6 is an enlarged cross section of the same on the line 6—6 of Fig. 1.

A scroll A is soldered or otherwise fastened to an upright flange B′ of an attaching arm B adapted to be fastened to the sewing machine table in the usual manner. The scroll A consists of a bottom plate C terminating in an upwardly and inwardly curved side D leading to the roof E and terminating in a turn-under plate F intermediate the top of the roof E and the bottom plate C to turn under the raw edge of the fabric material as the latter is drawn through the scroll A. It is understood that the scroll A is provided with the usual flaring mouth for the convenient entrance of the fabric material, and the scroll A tapers rearwardly to insure a proper turning over of the material with a view to form a hem adapted to be sewed in place by the sewing needle of the machine, which is located adjacent to the discharge or small end of the scroll A when the hemming attachment is in position on the sewing machine table.

The roof E of the scroll A has its rear portion E′ separate from the front portion, and the said separate rear portion E′ is secured on top to one end of a spring G fastened at its other end to the forward or entrance part of the roof to allow the said roof portion E′ to yield in an up and down direction so as to readily accommodate cross seams and other thickened portions of the material when the latter is drawn through the scroll. The upward swinging movement of the scroll G is limited by a set screw H screwing in a bracket I attached to the attaching arm B.

The turn-under plate F is provided with a separate portion or a section F′ extending into the scroll at the discharge end thereof directly under the separate yielding roof portion E′, and the said portion F′ is made of a single length to extend under the plate F and is pivotally connected to the same at the front end thereof by a vertical pivot F^2 so as to allow the said plate portion F′ to swing sidewise to accommodate cross seams or other thickened material at the time the same pass through the scroll at the discharge end thereof. Normally the plate portion F′ is held in an inner position by the action of a bow spring J secured at one end to a lug F^3 extending upwardly from the plate portion F′ on the outside of the yielding roof portion E′, and the other end of the spring J is attached to the attaching arm B to exert an inward pressure against the lug F^3 and consequently against the plate portion F′. The plate portion F′ is further provided with a stop lug F^4 adjacent the lug F^3 and adapted to abut against the outer side of the yielding roof portion E′ to limit the inward movement of the plate portion F′. The outer edge of the yielding roof portion E′ extends in close proximity to the top of the yielding plate portion F′ and the inner edge E^2 of the yielding roof portion E′ extends freely between an upturned flange D^2 of the bottom plate C (see Fig. 6) and the upright flange B′ of the attaching arm B so that the material is not liable to be clamped or caught between the flange D^2 and the edge E^2.

It is expressly understood that the roof portion E' forms a yielding continuation of the roof E, and the plate portion F' forms an extension of the fixed turn-under plate F, and the said parts are so arranged to readily yield with a view to allow the ready passage of a cross seam or other thickened portion of the material while the latter is drawn through the scroll to form a hem in the usual manner.

The hemming attachment shown and described is very simple and durable in construction and can be readily applied to sewing machines in place of the ordinary hemmers now generally used.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A hemmer for sewing machines provided with a scroll having its roof made in sections comprising a large end section and a small end section, and a spring connecting the sections with each other to allow the small end section to yield in an up and down direction and means for limiting the upward swinging movement of said section.

2. A hemmer for sewing machines provided with a scroll having its roof made in sections, comprising a large end section and a small end section and a spring connecting the roof sections with each other at the top thereof to allow the small end section to yield in an up and down direction, the bottom of the scroll having an upturned flange at the small end and the said small end roof section being extended downward at the side to overlap the said flange.

3. A hemmer for sewing machines provided with an attaching arm having an upright flange, a scroll fastened to said flange and having its roof divided into a large end section and a small end section, and a spring connecting the sections with each other to allow the small end section to yield in an up and down direction, the bottom of the scroll having an upturned flange at the small end, and the said small end roof section being extended downward at the side between the said upturned flange and the upright flange of the attaching arm.

4. A hemmer for sewing machines provided with an attaching arm, a scroll fixed on the said attaching arm and having a bottom plate, a roof and a turn-under plate, the said roof having a small end portion and a large end portion, the small end portion being separated from the large end portion, a flat spring connecting the separated sections of the roof together to allow the small end section to yield in an up and down direction, a bracket on the attaching arm and a set screw carried by the said bracket for engagement by the said spring.

5. A hemmer for sewing machines provided with a scroll having a turn-under plate extending intermediate the roof and the bottom of the scroll, a section comprising a plate pivoted to the underside of the turn-under plate at the entrance end of the scroll and extending along the under side of said turn-under plate to th discharge end of the scroll, the said section being adapted to swing sidewise, and a spring pressing the said section inward.

6. A hemmer for sewing machines provided with a scroll having a turn-under plate extending intermediate the roof and the bottom of the scroll, a section comprising a plate pivoted to the under side of the turn-under plate at the entrance end of the scroll to allow the said section to swing sidewise, the said pivoted section extending into the scroll at the discharge end, a spring for normally holding the said section in an inner position, and means for limiting the inward movement of said section.

7. A hemmer for sewing machines provided with an attaching arm, a scroll fixed on the said attaching arm and having a bottom plate, a roof, and a turn-under plate, the said turn-under plate having a plate section pivotally connected thereto, and a spring attached to the said attaching arm and connected with the said plate section to allow the latter to yield laterally.

8. A hemmer for sewing machines provided with an attaching arm, a scroll fixed on the said attaching arm and having a bottom plate, roof and turn-under plate, the said roof having a separated forward section, a flat spring connecting the roof and its forward section with each other to allow the said section to yield in an up and down direction, the said turn-under plate having a forward section pivotally connected with the plate to swing sidewise, and a bow spring attached to the said attaching arm and connected with the said plate section to allow the latter to yield laterally.

9. A hemmer for sewing machines provided with an attaching arm, a scroll fixed on the said attaching arm and having a bottom plate, roof and turn-under plate, the said roof having a separated forward section, a flat spring connecting the roof and its forward section with each other to allow the said section to yield in an up and down direction, the said turn-under plate having a forward section pivotally connected with the plate to swing sidewise, a bow spring attached to the said attaching arm and connected with the said plate section to allow the latter to yield laterally, and a stop for limiting the inward swinging motion of the said plate section.

10. A hemmer for sewing machines provided with an attaching arm, a scroll fixed on the said attaching arm and having a bottom plate, roof and turn-under plate, the said roof having a separated forward sec-

tion, a flat spring connecting the roof and its forward section with each other to allow the said section to yield in an up and down direction, the said turn-under plate having a forward section pivotally connected with the plate to swing sidewise, a bow spring attached to the said attaching arm and connected with the said plate section to allow the latter to yield laterally, a bracket on the attaching arm, and a set screw in the said bracket and adapted to be engaged by the said flat spring.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM NICHOLSON.

Witnesses:
ARTHUR ELOESSER,
MATTHEW UNGER.