

(Model.)

A. JOHNSTON.
HEMMER FOR SEWING MACHINES.

No. 455,535.

Patented July 7, 1891.

FIG. I.

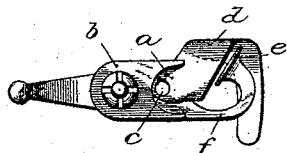


FIG. II.

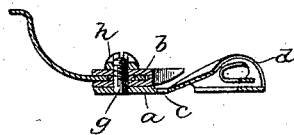


FIG. III.

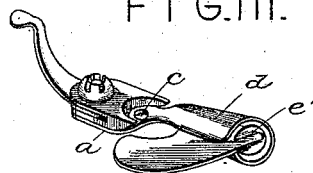


FIG. IV.

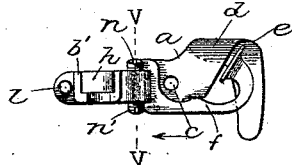
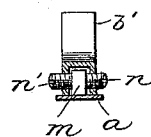


FIG. V.



Witnesses

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HEMMER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 455,535, dated July 7, 1891.

Application filed March 26, 1891. Serial No. 386,537. (Model.)

To all whom it may concern:

Be it known that I, ALLEN JOHNSTON, a resident of Ottumwa, county of Wapello, and State of Iowa, have invented a new and useful Improvement in Hemmers and Binders, which improvement is fully set forth in the following specification.

The present invention relates to the construction of a certain class of sewing-machine attachments whose distinguishing feature is a scroll in front of the needle for folding over the edge of the fabric to form a hem or for lapping over said edge a separate strip for binding. Such attachments are known as "hemmers" and "binders."

One object of this invention is to form the fold of the hem or binding as close as possible to the needle, so as to avoid the tendency of the goods to unfold or get out of shape before the edge is stitched.

Another object is to make the attachment more compact and to avoid the soldering or riveting of the scroll to the presser-foot, as heretofore, thereby lessening the cost of manufacture.

These objects are attained by forming the foot and scroll of one piece of sheet metal of uniform thickness, the scroll portion being thus brought immediately in front of the needle-hole. The core by which the goods are guided into the scroll, instead of being made a part of the latter, as heretofore, is carried by a separate stem, whereby a better guiding action is secured.

A further improvement consists in connecting the combined foot and scroll to the clamping device or part which is attached to the presser-bar of the sewing-machine by a pivotal connection. The object of this improvement is that the operator, after having secured the clamping device to the presser-bar, can adjust the attachment accurately, so that the needle will pass through the center of the needle-hole. This arrangement provides for slight irregularities which are incident to the manufacture of such attachments. In connection with such pivotal connection a clamping device—such as a screw or nut—is provided to fasten the adjustable part in the position to which it is set.

The details of construction of the attachments are varied somewhat for sewing-ma-

chines of different manufacture; but such variations do not affect the essential features of construction, which are in substance the same for all.

In the accompanying drawings, which form part of this specification, I have shown several forms of hemmers and binders constructed in accordance with the invention.

Figure I is a top plan view of a hemmer adapted for attachment to a Wheeler & Wilson sewing-machine, and Fig. II is a longitudinal section thereof. Fig. III is a perspective view of a binder adapted to the same style of machine. Fig. IV is a top view, and Fig. V a cross-section, of a hemmer as constructed for a Singer machine.

The foot portion of the attachment may be considered as consisting of two parts—namely, the foot proper, or that portion which holds the work against the feed, which portion is marked *a* on the drawings, and the clamping part *b*, which serves to attach the device to the presser-bar of the machine.

The foot *a*, as shown in all the figures, is formed of a strip of steel or other metal and provided with the needle-hole *c*. Directly in front of this hole the strip of which the foot is formed is bent up from the work-plate and then folded laterally upon itself, forming the scroll *d*, which is of the form common in hemmers and binders. By thus forming the foot and scroll in one piece not only are the amount of material and the work of construction lessened, but the fold in the cloth is made close to the needle and stitched before it can possibly be displaced.

The core *e* of the hemmer, Figs. I and IV, which is usually formed on the edge of the scroll, is carried by an independent stem *f*, attached to the upper side of the foot *a*. The binder shown in Fig. III has the scroll *d* formed integral with the foot *a*; but the core *e'* extends nearly the full length of the scroll and is formed of a plate bent over to receive and guide the edge of the main piece of goods, while the binding-strip passes between it and the scroll, as is well understood.

In Figs I, II, and III the clamping part *b* is a block or plate which rests upon the foot portion and is adapted for attachment to the presser-bar of a Wheeler & Wilson machine in the usual way. This clamping part

is pivoted upon a screw-pin *g*, attached to the foot part *a* in the rear of the needle-hole, and has its upper end screw-threaded for engagement of clamping-nut *h*. By tightening nut *h* the parts *a* and *b* can be rigidly held together; but when the nut is loose the part *a* can be turned to one side or the other, as may be necessary to secure an accurate adjustment.

10 In the hemmer shown in Figs. IV and V the clamping part *b'* is a block having a groove *h* on one side to fit over the end of the presser-bar. The foot *a* is pivoted to the part *b'* at *l*. The foot has a lip *m*, which projects

15 up into a chamber in the underside of block *b'* between the two set-screws *n n'*. When the desired adjustment is obtained, these screws are tightened against lip *m* and hold the foot and scroll firmly in place.

20 The mode of using the improved hemmer or binder will be readily understood. The operator first attaches the clamping part to the presser-bar in the usual way, and then turns the scroll and foot portion to the right

25 or left until he brings the needle-hole directly under the point of the needle, and finally turns the proper fastening screw or nut until the foot and clamping part are firmly connected together. The cloth is then

30 inserted and the hemming or binding is done in the usual well-known manner.

It is obvious upon perusal of the foregoing description that modifications can be made in details of construction without departing from the spirit of the invention, and that the improvements may be used separately, if desired.

I claim as my invention—

1. In a hemmer or binder for sewing-machines, the combination of the foot and scroll 40 formed of a single piece of sheet metal bent upward from a point immediately in front of the needle-hole in the foot portion and folded under upon itself to form the scroll, whereby the fold is formed directly in front of the 45 needle and immediately stitched, and the core for guiding the goods into the scroll, substantially as described.

2. A hemmer or binder comprising in combination a scroll and foot portion, a clamping part or support to which the scroll and foot portion is attached by a pivotal connection, and fastening means, such as a screw or nut, for securing it in position when adjusted, substantially as described. 50

In testimony whereof I have signed this specification in the presence of two subscribing witnesses. 55

ALLEN JOHNSTON.

Witnesses:

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