

No. 641,098.

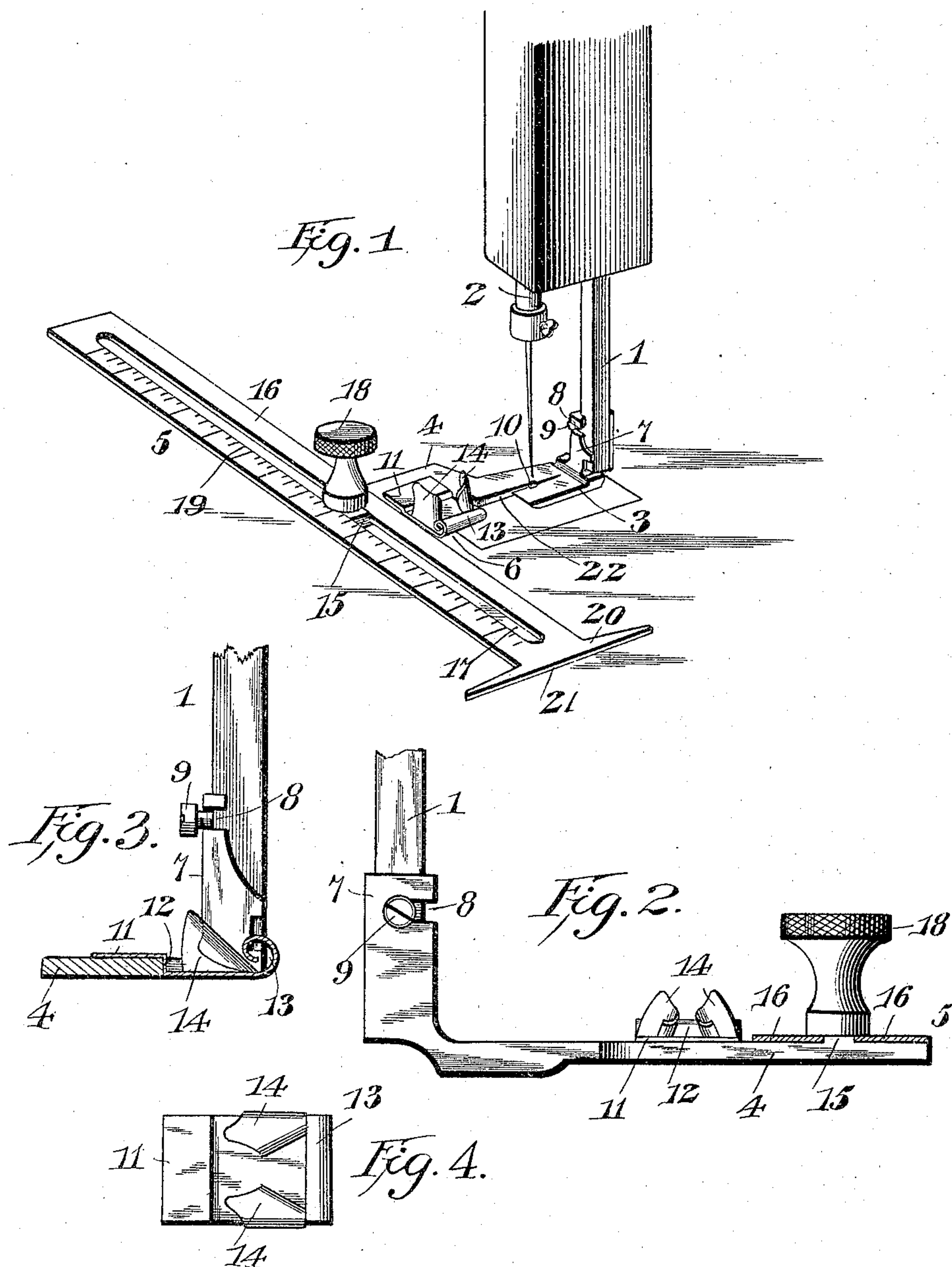
Patented Jan. 9, 1900.

J. J. GILLIS.

HEMMER.

(Application filed July 3, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN J. GILLIS, OF HATTIESBURG, MISSISSIPPI, ASSIGNOR OF ONE-HALF
TO JOHN F. BENNETT, OF SAME PLACE.

HEMMER.

SPECIFICATION forming part of Letters Patent No. 641,098, dated January 9, 1900.

Application filed July 3, 1899. Serial No. 722,715. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. GILLIS, a citizen of the United States, residing at Hattiesburg, in the county of Perry and State of Mississippi, have invented a new and useful Hemmer, of which the following is a specification.

This invention relates to hemmer attachments for sewing-machines; and the purpose of the same is to combine in a single device means for making any width of hem, and thereby overcome the disadvantages arising from the necessary application of separate attachments to form hems of different widths, as heretofore customary, and also to provide an effective device of a strong and durable nature that may be quickly attached or disconnected.

The invention consists of the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a sewing-machine, showing the improved hemmer attachment connected thereto in operative position. Fig. 2 is an edge elevation of the attachment, showing a portion of the gage in section. Fig. 3 is a transverse vertical section of the improved attachment, taken through the center of the edge-turner and between the guides. Fig. 4 is a top plan view of the edge-turner and guides and devices co-acting therewith, shown disconnected or removed from the remaining portion of the attachment.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a presser-bar, and 2 a needle-bar, of any preferred or ordinary sewing-machine. The attachment comprises a foot 3, an arm 4, a gage 5, and a cloth-edge-turning device and guides 6 as the essential parts and which will now be definitely explained. The foot 3 has a socket 7 to fit over the end of the presser-bar 1 and is provided with an upper slot 8 at its outer side for the reception of a set-screw 9, which enters an adjacent portion of the said presser-bar. The said foot has in the present instance a nee-

dle-hole 10 extending therethrough for the passage of a needle carried by the needle-bar 2, though at times the slot might equally well be used, both forms of foot being commonly known in the art to which this invention pertains. From the front end of one side of the foot the laterally-deflected arm 4 extends toward the front and thereon is secured the cloth-edge-turning device and guides 6. The arm 4, which is arranged at one side of the central line of the foot, considered longitudinally, allows the hem being formed to be fed directly under the foot 3 in line with the needle-opening therein. The fellers consist of a sheet-metal plate having its inner end 11 rested on the arm 4 and the adjacent portion bent downwardly, as at 12, over the inner edge of said arm, and then in a horizontal plane at right angles to the latter, so as to bear firmly on the plate of the machine adjacent the feed devices ordinarily used. The inner free end of the plate, of which the cloth-edge-turning device and guides form a part, is bent upward into a tubular spiral edge-turner 13 by having the free end turned up and then inward, the front end of the said edge-turner being in practice of slightly less dimension than the rear portion. The said edge-turner 13 is directed toward the foot 3, and on the horizontal portion of the plate adjacent the said edge-turner are secured a pair of oppositely-disposed feeding-guides 14, which are of spiral conical form and arranged in planes at right angles to the direction of the said edge-turner 13. The guides are spaced apart from each other and have their lower ends located under the adjacent portion of the said edge-turner to cause the cloth on which the hem is formed to be led under the edge-turner without catching.

The upper surface of the forward termination of the arm 4 has a guide-lug 15 formed thereon, having opposite parallel edges, and over said lug is adjustably fitted an elongated gage 16, having a slot 17 extending there-through in a longitudinal direction. The width of the slot 17 is a trifle greater than the lug 15 to permit sliding adjustment of the gage, and to hold the latter in its desired po-

sition a set-screw 18 of any preferred form is loosely positioned in the said lug 15 and bears on opposite portions of the gage, as will be readily understood. The front side of the
 5 gage has a scale 19, and at the inner end is a transverse arm 20, having a straight edge 21, adapted to be alined with the free edge of the hem, which is formed by the attachment when the cloth is properly arranged in con-
 10 nection therewith.

In operation the gage is adjusted to indicate the width of hem desired. This may be accomplished in several different ways, but preferably from the line of the guide-tube 13
 15 to the outer straight edge 21 of the arm 20. This will bring the turned or felled edge of the hem directly in line with the needle hole or slot in the foot 3, and the guiding of the edge of the hem is assisted by the straight edge
 20 22 at the inner portion of the arm 4 between the cloth-edge-turning device and guides 6 and the rear termination of the foot. When the cloth is brought down over the guides 14, arranged in planes at right angles to the tube
 25 13, said guides lead the cloth under the tube and assist in forming the inner edge of a hem in a positive and accurate manner. After the edge of the hem has been located in the tube 13 it will be fed regularly and adjust
 30 itself and particularly when the cloth is held straight by the operator. In changing the width of the hem the gage is moved over the lug 15 either to widen the distance between the latter and the outer edge 21 of the arm 20 or
 35 to shorten the distance between these points, and thereby increase or decrease the width of the hem. This operation can be carried on without disconnecting the attachment from the presser-foot, and other advantages
 40 will appear from time to time to those using the device.

The guides 14 have a downward inclination toward the edge-turner 13, as clearly shown, and by this means the cloth is more effectually
 45 guided under the said edge-turner and prevented from being pulled outwardly, and thereby thoroughly crease or inturn the edge of the cloth and assist the edge-turner in carrying out its function.

50 Changes in the proportions, size, and minor details of construction can be resorted to without in the least departing from the spirit

of the invention or sacrificing any of the advantages thereof.

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

1. An attachment for a sewing-machine of the character set forth, comprising a foot having an arm extending forwardly from one side portion thereof and provided with a flat plate
 60 projecting in the plane of the foot at a right angle to and in advance thereof, the inner end of the plate having an edge-turner approximately in line with the needle-eye of the
 65 said foot, feeding-guides on the plate of a conical form and directed at a downward incline toward the under portion of the said edge-turner and positioned in a plane at right angles to the latter, and a gage movably mounted
 70 on a projecting portion of the arm in advance of the edge-turner and guides and having a guiding edge in a plane parallel with the said edge-turner.

2. An attachment for a sewing-machine of the character set forth, comprising a foot supporting an edge-turning tube approximately
 75 in line with the needle-eye and feeding-guides in planes at right angles to the said tube and directed downwardly toward the under portion of the latter, and a gage also adjustably
 80 supported by said foot in operative relation to the edge-turning tube.

3. An attachment for a sewing-machine of the character set forth, comprising a foot having an arm extending therefrom provided with
 85 a flat plate projecting in a plane at right angles thereto, said plate having a terminal spirally-bent tube to form an edge-turner and downwardly-directed conical feeding-guides leading to the lower portion of the said tube,
 90 a space being formed between the edge-turner and the foot proper, and a gage adjustably mounted on a portion of the arm in advance of said edge-turner and guides and provided with a guiding edge in a plane parallel with
 95 the said edge-turner.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN J. GILLIS.

Witnesses:

JOHN F. BENNETT,
 HORACE G. CULPEPPER.