A. THOMAS.

HEMMER.

APPLICATION FILED APR. 9, 1918.

1,279,177. Patented Sept. 17, 1918.

Fig. 1.

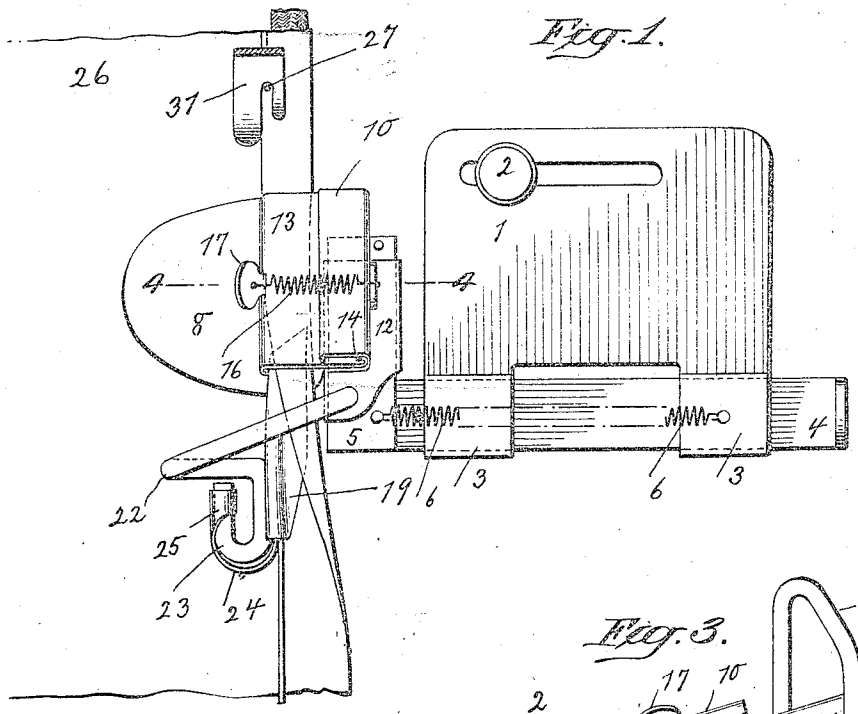


Fig. 3.

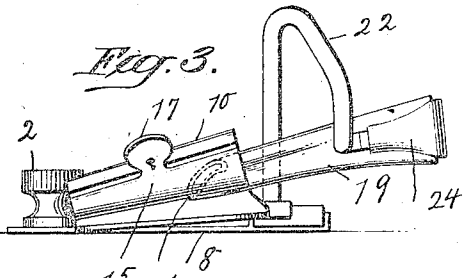


Fig. 2.

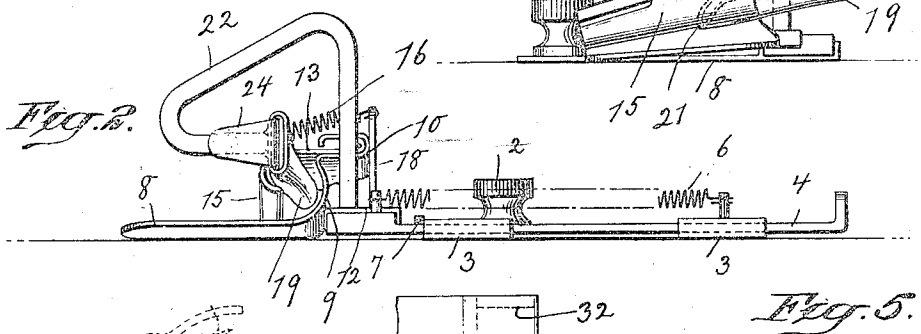
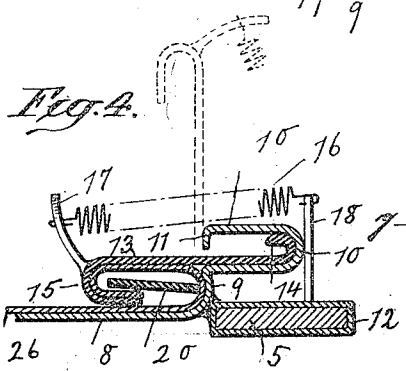


Fig. 4.



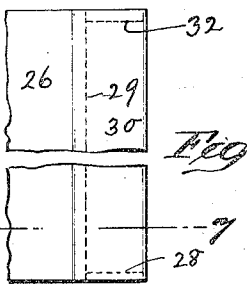


Fig. 6.

Fig. 7.

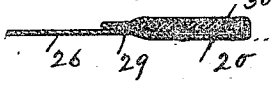
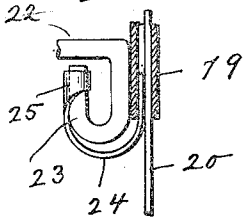


Fig. 5.



INVENTOR

August Thomas

BY Hauff & Briesen

ATTORNEY

UNITED STATES PATENT OFFICE.

AUGUST THOMAS, OF JERSEY CITY, NEW JERSEY.

HEMMER.

1,279,177. Specification of Letters Patent. Patented Sept. 17, 1918.

Application filed April 9, 1918. Serial No. 227,449.

To all whom it may concern:

Be it known that I, AUGUST THOMAS, a citizen of the German Empire, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Hemmers, of which the following is a specification.

This invention relates to a hemmer of novel construction, which is so constituted that while forming the hem, an elastic webbing under tension is simultaneously introduced into said hem, so as to form a shirred elastic top for a skirt or other garment.

In the accompanying drawing:

Figure 1 is a plan view of a hemmer embodying my invention;

Fig. 2, a front elevation;

Fig. 3, a left hand side elevation;

Fig. 4, a section on line 4—4 Fig. 1;

Fig. 5, a detail of the tension device;

Fig. 6 illustrates a piece of fabric, having an expansile hem made by the hemmer, the figure showing the hem stretched taut, for the sake of greater clearness, and

Fig. 7, a cross section on line 7—7 Fig. 6.

To the sewing machine table, is adapted to be attached a bed plate 1, by means of a clamp screw 2. The plate is provided with a pair of forwardly extending eyes 3 that receive one shank 4 of an angle bar, the other shank 5 of which extends along the left hand edge of plate 1. Angle bar 4, 5 is slidable from right to left, or in the direction of the axis of shank 4, the bar being normally retracted by a spring 6 one end of which is secured to shank 5, while the other end is secured to one of the eyes 3. A stop 7, on shank 4, which is adapted to engage the other of said eyes, limits the stroke of the bar. The parts thus far described, constitute more particularly, the means for slidably and removably securing the hemmer proper to the sewing machine bed.

The hemmer proper consists of a plate 8 (Fig. 4) which has a curved back 9 tapering off from the front toward the rear, while at the upper edge of said back, the plate is bent to form a grooved guide 10, that opens toward the left, and is here provided with a depending flange 11. From plate 8, there extends laterally a tubular casing 12, which forms part thereof, and is adapted to be slipped over shank 5 of angle bar 4, 5 so as to removably mount the hemmer on its securing device.

Grooved guide 10 receives the right hand end of a jaw 13, flanged as at 14, while the left hand end of the jaw is curved as at 15, to constitute a folder. By the means described, the jaw may be slid from right to left along plate 8, the length of its stroke being determined by the width of guide 10, and being checked by the engagement of flange 14 with flange 11. When the jaw is in its advanced position, it may likewise be thrown up so as to raise its folder 15 off plate 8, during which operation flange 14 constitutes a fulcrum that permits the necessary pivotal movement of the jaw. A spring 16, which is secured at one of its ends to a handle 17 of jaw 13, and at its other end to a post 18 of casing 12 tends to normally draw the jaw toward the right, or into its retracted position (Fig. 4). Into the curved back 9 of plate 8, there enters a flat nozzle 19, which serves for the introduction of the elastic webbing or insert 20 into the hem. This nozzle is likewise adapted to be encompassed by the folder 15 when the latter is in its retracted position, and delivers the webbing 20 through its mouth 21, between said back and folder. Nozzle 19, is secured to casing 12 of plate 8, by means of a rod 22 having a rearwardly bent end 23 that constitutes a guide. Upon this guide is movable, a friction brake, or tension device 24 coiled as at 25 to encompass the guide, and projecting with its flat operative end or blade a distance into the receiving end of nozzle 19. By means of this guide the elastic 20, is so held within the nozzle, that though it may be fed therethrough, the advance of the webbing through the nozzle will be under tension, so that the webbing will become stretched while being fed together with the fabric.

In operation, jaw 13 is pulled out and turned up, the fabric 26 to be hemmed is folded along back 9 and folder 15 to form the required tubular case at the edge of the fabric, the elastic 20 is threaded into nozzle 19, brake 24 is set, and jaw 13 is turned down and caused to be retracted by its spring 16. As the sewing operation starts, angle bar 4, 5 together with the hemmer proper is first drawn to the left and thence retracted so that the needle 27 will form a cross seam 28 by means of which the end of the elastic is secured to the fabric. As the sewing continues, a line of stitches 29 will be formed within the doubled section of the goods, and along the elastic, through the hem 30, the latter being during this operation engaged

by the feeder and the presser foot 31 as usual. During this operation, the feeder cooperating with brake 24 will subject the elastic to a tension, under which it is continuously held while the sewing goes on. When the hem has been finished, the hemmer is again reciprocated laterally, to form a second cross seam 32 which fixes the elastic in its distended position. While forming the cross seams 28 and 32, the presser foot 31 is swung up so that the fabric is not carried along by the feed dog, the necessary transverse movement of the fabric being effected manually. It will be seen that the hemmer constructed as described, will form a hem and will simultaneously incase a distended elastic within the hem in a simple and reliable manner, while furthermore, the degree to which the elastic is stretched, is under the full control of the operator. The device is of simple construction, can be readily manipulated, and is reliable in operation.

I claim:

1. A hemmer comprising a plate having a curved back, a jaw slidably and pivotally secured to said plate and a nozzle adapted to enter the jaw.

2. A hemmer comprising a plate having a curved back and a grooved guide, a jaw slidably and pivotally engaging said guide and having a curved section coöperating with said back, and means for introducing an elastic webbing between said back and curved section.

3. A hemmer comprising a plate, a jaw movable relatively to said plate, a nozzle, and a brake engaging said nozzle.

4. A hemmer comprising a slidable member, a plate adapted to be mounted thereon, a jaw slidably and pivotally secured to said plate, and means for introducing an elastic webbing between the plate and jaw.

5. A hemmer comprising a plate having a curved back, a jaw slidably and pivotally secured to said plate, a nozzle, a rod, and a brake slidable on said rod and engaging said nozzle.

6. A hemmer comprising a base plate, an angle bar slidably engaging said plate, a second plate having a casing that is mounted on said bar, said second plate having a curved back and a grooved guide, a curved jaw slidably and pivotally engaging said guide, a spring engaging said jaw, a nozzle projecting between said second named plate and jaw, and a brake engaging said nozzle.

AUGUST THOMAS.