

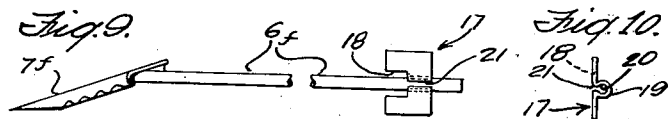
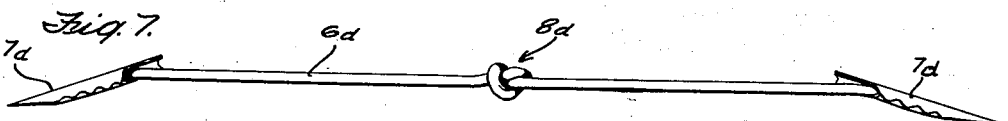
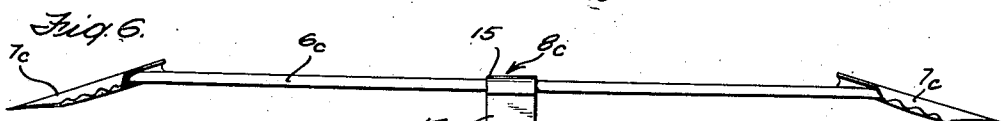
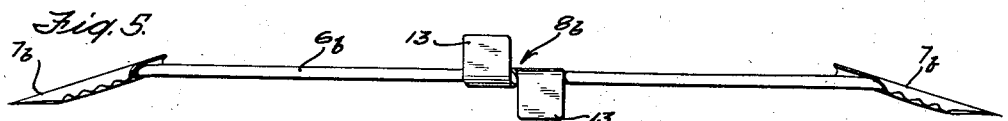
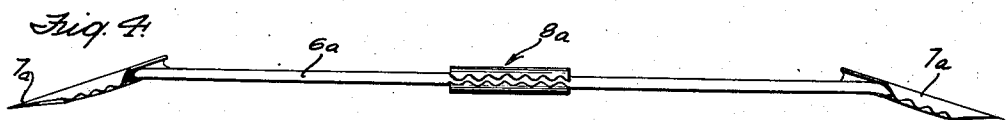
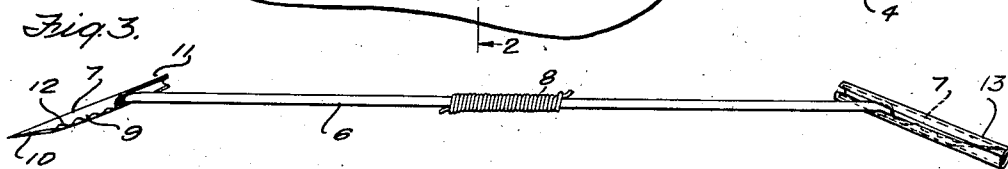
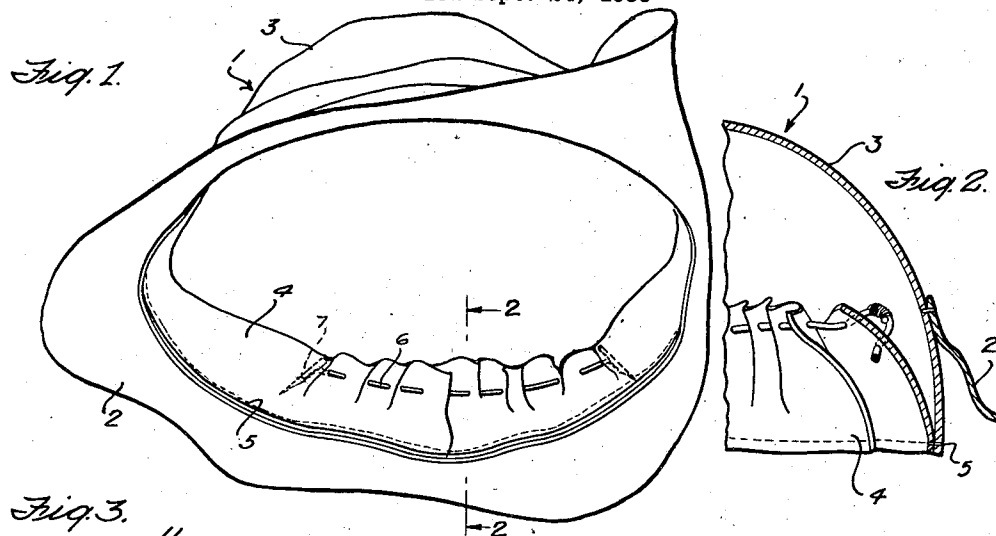
Sept. 14, 1937.

S. LIPTON

2,092,808

HAT ADJUSTING MEANS

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## UNITED STATES PATENT OFFICE

2,092,808

## HAT ADJUSTING MEANS

Sarah Lipton, New York, N. Y.

Application September 24, 1936, Serial No. 102,276

10 Claims. (Cl. 2-183)

This invention relates to hats and to means for adjusting a hat to the head of the wearer.

In millinery shops a great variety of styles must be carried, and since there are many different head sizes, the amount of stock which must be kept on hand is very large. Then too, the ordinary hat has no provision for adjustment to the head of the wearer so that between two standard sizes the customer is forced to elect the size which is nearest to a fit without securing an exact fit.

It is an object of the present invention to enable a hat to be quickly and conveniently modified, without alteration of the external appearance, so that it will snugly fit a head somewhat smaller than that for which it was designed. The adjustment is desirably made by stitching an elastic cord through the upper or free margin of the hat band within the crown so as to contract the upper margin of the hat band somewhat while leaving it free to expand in response to the pressure of the head.

It is a further object of the invention to cause the contraction of the band to be distributed substantially equally at opposite sides of the middle of the back of the hat.

For the accomplishment of these objects provision is made, in accordance with the present invention, of an elastic cord having a center stop and needles at its ends, the needles being also designed to serve as end stops after they have been used for stitching the cord to the hat band.

In applying the cord the operator first locates the center of the back of the hat and stitches outward in one direction and then, using the other needle and the other end of the cord, stitches outward in the opposite direction. By providing the center stop the contraction of the hat band may be distributed equally between the two sides of the band. The needles are adapted to be left with the cord to serve as end stops or anchors after the stitching is completed.

It is a further object of the invention to provide an elastic cord provided with a needle at one end to facilitate its attachment to a hat band and with an adjustable end stop at the opposite end to provide for adjustment of tension after the cord has been attached.

Other objects and advantages will hereinafter appear.

In the drawing forming part of this specification, and illustrating certain preferred embodiments of the invention,

Fig. 1 is a front view of a hat looking underneath the brim and into the crown;

Fig. 2 is a fragmentary sectional view taken on the line 2-2 of Fig. 1 looking in the direction of the arrows;

Fig. 3 is a view showing the elastic cord and appurtenant parts as used in Figs. 1 and 2;

Figs. 4, 5, 6 and 7 are all views similar to Fig. 3, but each illustrates a different form of center stop;

Fig. 8 is a view similar to Fig. 3 showing a construction in which the cord is without a center stop and in which an end stop is employed at one end of the cord in lieu of one of the needles provided in the outer embodiments; and

Fig. 9 is a view similar to Fig. 3 showing an elastic cord put through the needle at one end and with an adjustable end stop at the opposite end, and

Fig. 10 is a view in sectional side elevation of the end stop employed in Fig. 9.

The hat 1 comprises a brim 2 and a crown 3. A band 4 is secured by a line of stitching 5 in the lower portion of the crown. The stitching 5 passes through the lower margin of the hat band, leaving the upper margin of the hat band free to be pulled away from the crown.

When a customer in a millinery store finds a hat to her liking which is not just the right size, the hat band is yieldingly contracted at its upper margin by means of a device as shown in Fig. 3. This device comprises an elastic cord 6 having needles 7 clamped to its opposite ends and having a center stop 8 provided in the middle. The center stop 8 may consist simply of a thread or string wrapped tightly about the middle portion of the cord 6 to form an enlargement which will not pull through the holes made by the needles 7. Thus the equal division of the cord between the right and left hand sides of the head may be assured. Each needle is formed of sheet metal and comprises a body portion 9 which is gripped around an end of the cord 6, a tip portion 10 which is adapted to penetrate the material of the hat band, and a channel shaped tail portion 11 which can receive the cord 6 but which may be swung away from the cord to a position like either of the needle positions illustrated in Fig. 1. Each needle is desirably provided with a notch or perforation 12 between the body portion 9 and tip portion 10 so that the tip portion may be broken off, if desired, after the stitching of the cord through the hat band has been completed. This leaves the ends of the needle of substantially equal length and eliminates the sharp point. The needle serves as an anchor or end stop, the body portion 9 consti-

tuting one end of the anchor and the tail portion 11 constituting the other end.

Preferably, however, each needle is equipped with a removable protective sheath 13 as illustrated at the right hand side of Fig. 3. This sheath consists of a sleeve of resilient sheet material such as celluloid which is split along one side. The sleeve is of about the same length as the needle but preferably a little longer. The edges of the sheath at the slit portion are desirably notched slightly at the point at which the cord emerges so that the notches embrace the cord and prevent accidental dislodgment of the sleeve. The device may be sold with sheaths for both needles, either applied or contained in the package with the device. If the sheaths are applied it is necessary to remove them for the application of the device to a hat band and then to re-apply them afterward. The sheath is of small enough diameter to grip the needle snugly when applied. In fact, it is necessary to expand the sleeve slightly in order to apply it to the needle. The use of sleeves 13 in connection with the forms shown in Figs. 4 to 9 is also contemplated but the sleeves have not been illustrated as applied because they would only tend to obscure the other facts of construction. The feature of the removable protective sheath, as described above, is not claimed herein except in association with other features of the invention herein covered. In its broader and more general aspects and uses it forms the subject matter of my copending application for Improvements in fastening devices, filed July 7, 1937, Serial No. 152,285.

It will be seen that the milliner can very quickly adjust the hat to the satisfaction of the customer without resorting to the use of any special equipment and without in any way attempting to remake the hat.

The embodiments of Figs. 4 to 7 are the same as the embodiment of Figs. 1 to 3 with the exception that different forms of center stops are provided in the various structures.

In Fig. 4 the same reference numerals have been applied to the corresponding parts as in Fig. 3 with the letter "a" added in each instance. The center stop 8a of Fig. 4 is in the form of a metallic sleeve similar to a shoelace tip, which is simply wrapped around and clamped onto the middle of the cord 6a.

In Fig. 5 the same reference numerals have been employed as in Fig. 1 with the letter "b" added in each instance. The center stop 8b comprises two disaligned metallic tabs 13 which are connected through a body portion having a length equal to the combined widths of the tabs 13. The body portion is only wide enough, however, to wrap substantially half-way around the cord so that each of the tabs 13 is wrapped around the cord for another quarter turn to cause the tabs to extend from the cord in opposite directions.

In Fig. 6 the same reference numerals have been employed as in Figs. 1 to 3 with the letter "c" added. The center stop 8c consists of a metallic tab 14 and an integral sleeve portion 15. This center stop is substantially like the center stop 8a of Fig. 4 with one of the ends of the sleeve member extending beyond the sleeve portion.

In Fig. 7 the same reference numerals have been employed as in Figs. 1 to 3 with the letter "d" added. The center stop 8d consists of a simple knot formed in the cord at the middle of the cord.

In the embodiment of Fig. 8 the needle 7e is of the same construction as the needles of the other

figures, but the cord 6e is not provided with a center stop. One end of the cord 6e has attached to it a flat button 16 which is designed to serve as an end stop. In applying this form of device the operator starts the stitching from one side of the hat band, and stitches toward the center of the back of the hat and beyond that point so as to divide the stitching substantially equally between the two opposite sides of the hat.

In the embodiment of Fig. 9 the needle 7f is of the same construction as the needles of the other figures. The elastic cord 6f is not provided with a center stop but is provided with an adjustable end stop 17 at the end remote from the needle. The adjustable end stop may consist of a resilient metallic plate having a notch 18 formed in one end and extending for about one-half the length of the plate. The plate is stamped or otherwise formed to provide a sleeve portion 19 along the middle of the plate, the sleeve defining a channel or passage 20 of somewhat smaller diameter than the normal diameter of the cord. The passage is entered through an open slot 21 through which the cord can be forced when the cord is stretched. As soon as the cord is seated in the passage 20 and released, however, it expands so as to fill the passage and be firmly gripped by the passage walls. When the cord has been applied to the hat band the adjustable stop 17 can be shifted in either direction along the cord as desired. This is accomplished by seizing the side edges of the stop with the thumb and third finger of the hand, and at the same time pressing the sleeve portion 19 at its outer or rear side so as to distort and enlarge the passage 20 sufficiently to enable the cord to be moved along the passage. As soon as the stop is released by the fingers it will spring back to its initial or normal position and again grip the cord firmly.

The purpose of providing the notch 18 is to cause the cord, when applied to a hat band, to extend away from the end stop 17 at about the middle of the end stop so that the tension of the cord will cause the end stop to lie flat against the hat band in a position which is sure to be comfortable to the wearer.

With this form of the invention the milliner can be sure of securing the exact adjustment which is most comfortable to the wearer of the hat. By applying the cord to the hat band in such a manner that the cord will not be initially under tension, adjustment can be readily effected to increase the tension to the proper extent by shifting the clip 17 along the cord. The milliner is not committed to any specific setting, but may re-adjust the clip as many times as necessary in either direction until a proper fit is secured. In fact, the wearer may re-adjust the clip after the hat has been worn for a time and the cord has lost some of its elasticity.

The adapting of a hat to the head of the wearer by the means disclosed herein is an extremely simple and expeditious operation which involves little expense and which accomplishes the desired result in a very satisfactory manner.

The present invention is in the nature of an improvement upon the invention disclosed and claimed in my pending application Serial No. 71,828 filed March 31, 1936 for Wearing apparel.

While I have illustrated and described in detail certain preferred forms of my invention, it is to be understood that changes may be made therein and the invention embodied in other structures. I do not, therefore, desire to limit myself to the

specific constructions illustrated, but intend to cover my invention broadly in whatever form its principles may be utilized.

I claim:

5 1. In a hat, in combination, a crown, a band secured along its lower margin to the lower portion of the crown, but having its upper margin free, and an elastic cord having a center stop and equipped with needles at its ends, said cord being  
10 stitched through the free margin of the band with the center stop located at the rear center of the band.

15 2. A device for adjusting a hat to the wearer's head comprising an elastic cord having a center stop provided midway between its ends and needles permanently attached to the ends of the cord, each needle comprising a body portion which encircles and grips a cord end, and a point which extends beyond the cord end.

20 3. A device for adjusting a hat to the wearer's head comprising an elastic cord having a center stop provided midway between its ends and needles permanently attached to the ends of the cord, each needle comprising a body portion which  
25 encircles and grips the cord, a point which extends beyond the cord end, and a tail which extends from the body portion in the direction away from the point, the needle being weakened between the point and body to facilitate breaking  
30 off of the point.

4. A device as set forth in claim 2 wherein the center stop consists of threads wrapped around the cord at its middle portion.

35 5. A device as set forth in claim 2 in which the center stop consists of a metallic sleeve placed in binding relation about the middle portion of the cord.

40 6. A device as set forth in claim 2 in which the center stop consists of a knot formed in the middle of the cord.

7. In a hat, in combination, a crown, a band secured along its lower margin to the lower portion of the crown but having its upper margin free, an elastic cord stitched through the free margin of the band, a needle at at least one end  
5 and a metal strip placed on the cord at a spaced interval from the needle.

8. In a hat, in combination, a crown, a band secured along its lower margin to the lower portion of the crown but having its upper margin free, an elastic cord equipped at at least one end  
10 with a needle, the needle being provided with a removable protective sheath of resilient material, a metal stop placed on the cord at a point removed from the needle, said cord being stitched through  
15 the free margin of the band with said stop in holding engagement with the band.

9. In a hat, in combination, a crown, a band secured along its lower margin to the lower portion of the crown, but having its upper margin free, and an elastic cord having a center stop  
20 and equipped with needles at its ends, the needles being provided with removable protective sheaths of resilient material, said cord being stitched through the free margin of the band with the  
25 center stop located at the rear center of the band.

10. In a hat, in combination, a crown, a band secured along its lower margin to the lower portion of the crown but having its upper margin free, and an elastic cord stitched through the  
30 band substantially parallel to the free margin thereof and extending circumferentially part way around the band, said cord having an element at each end forming an anchorage for the cord, the  
35 material of the band being held in gathered or contracted condition between the two anchorage elements, at least one of the anchorage elements being a needle element by which the cord may be stitched through the band.

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