

Jan. 30, 1951

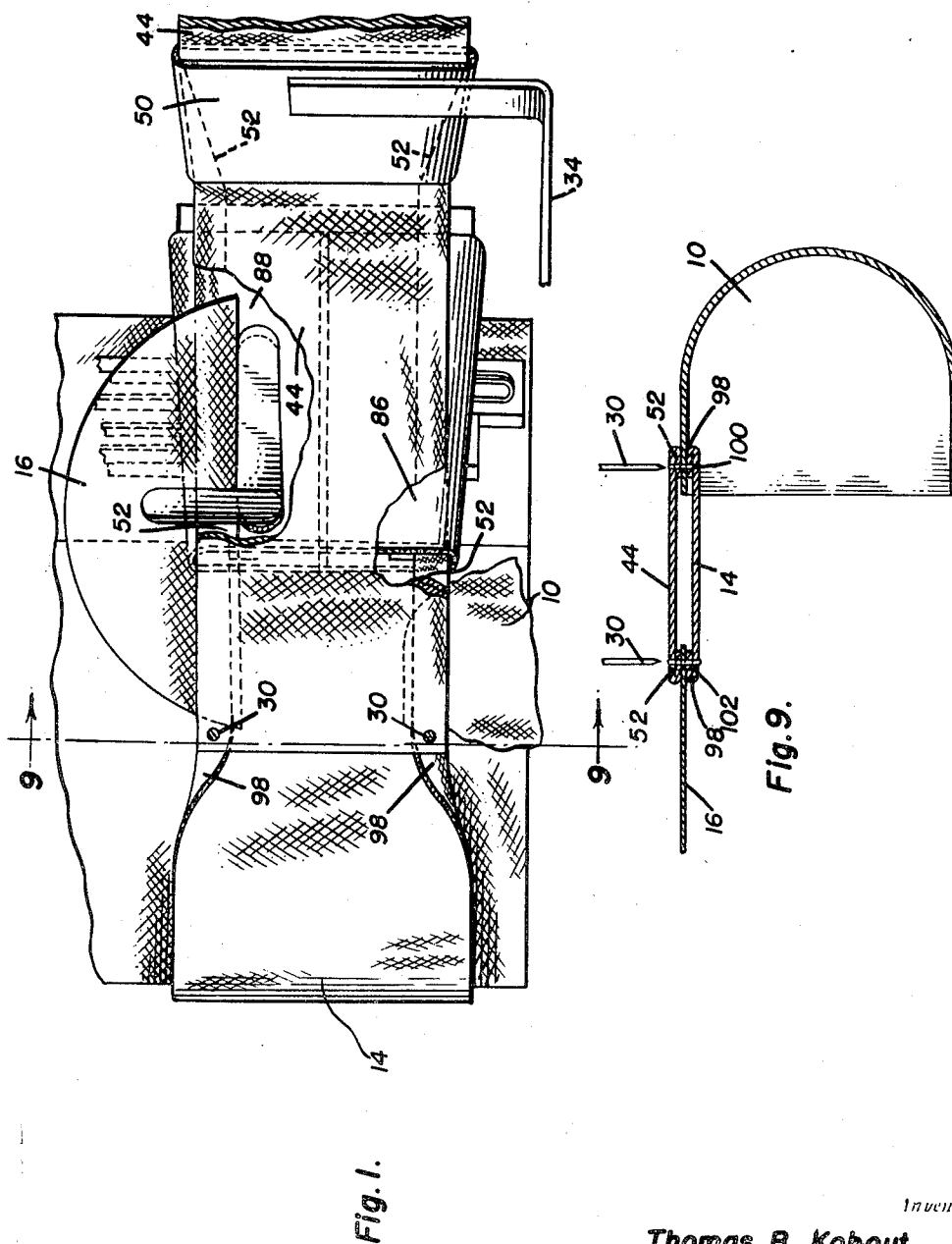
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METHOD AND APPARATUS FOR MAKING SHOP CAPS

Filed Dec. 16, 1946

4 Sheets-Sheet 1



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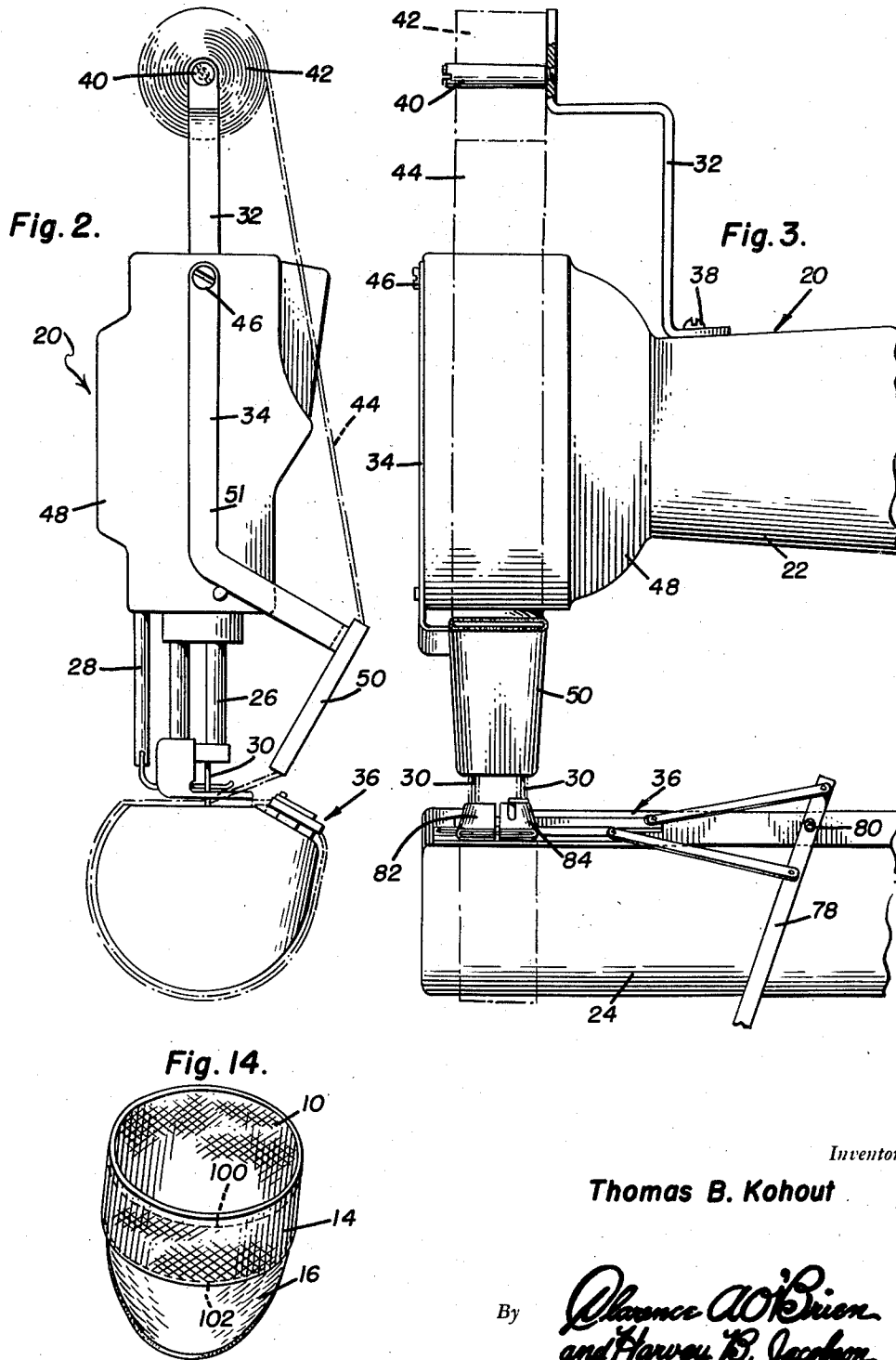
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METHOD AND APPARATUS FOR MAKING SHOP CAPS

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4 Sheets-Sheet 2



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METHOD AND APPARATUS FOR MAKING SHOP CAPS

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4 Sheets-Sheet 3

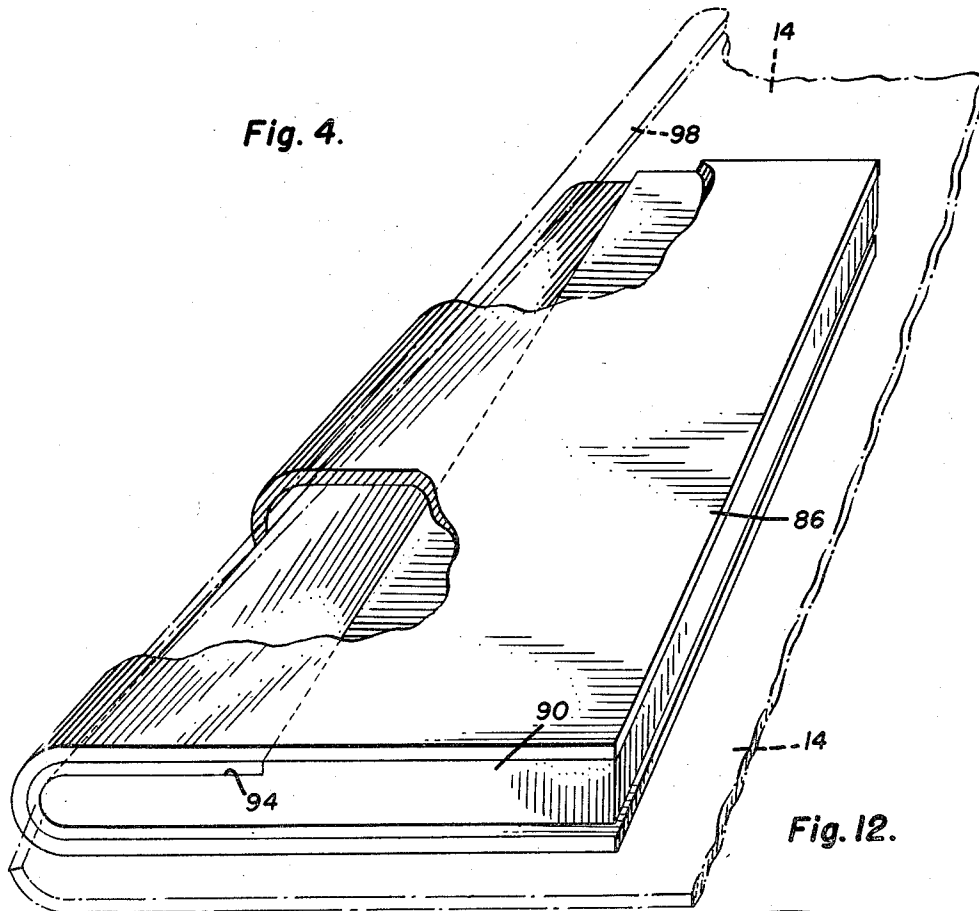
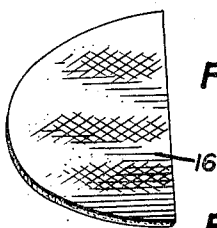


Fig. 10.

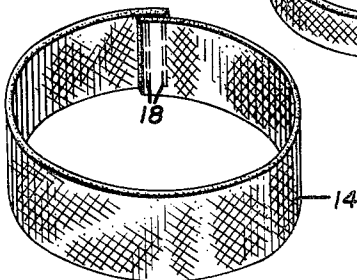
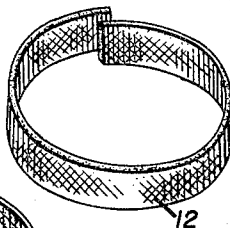
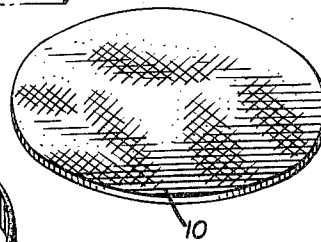


Fig. 11.



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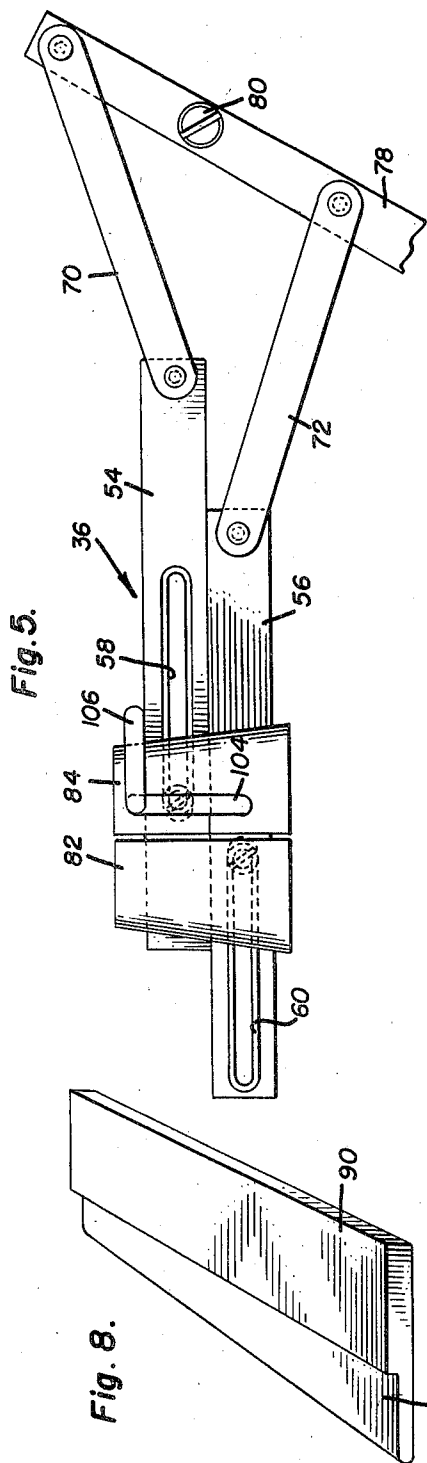
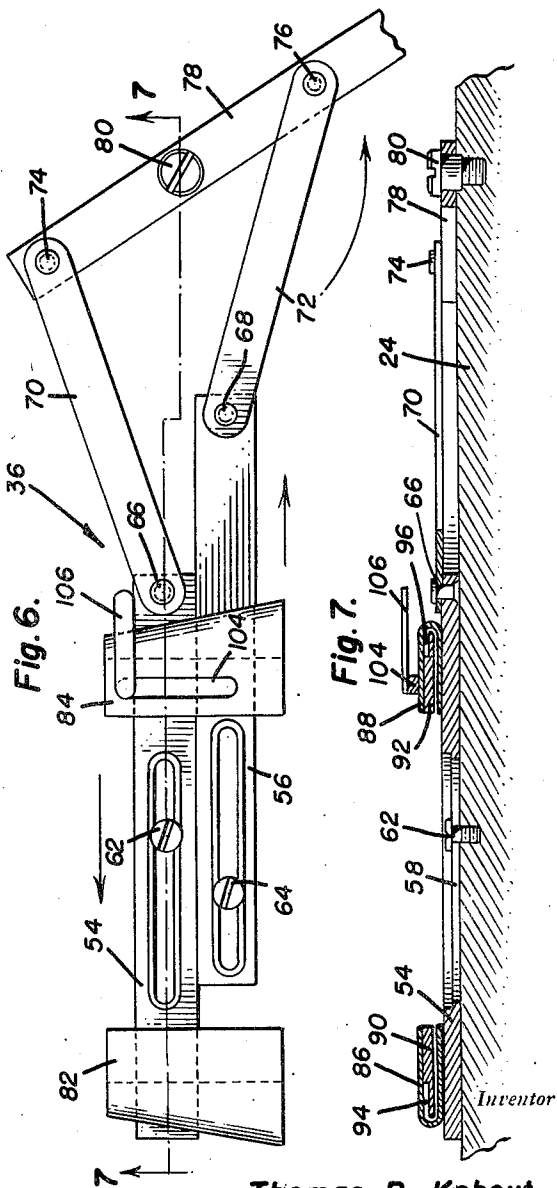
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METHOD AND APPARATUS FOR MAKING SHOP CAPS

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4 Sheets-Sheet 4



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UNITED STATES PATENT OFFICE

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METHOD AND APPARATUS FOR MAKING SHOP CAPS

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22 Claims. (Cl. 112—136)

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This invention comprises novel and useful improvements in a method and apparatus for making shop caps and more specifically pertains to an attachment applicable to a conventional sewing machine for assembling the pre-formed parts of a cloth cap in one sewing operation.

A shop cap, with whose manufacture this invention is primarily concerned, is a pliable cap of cloth or similar material and is customarily worn by mechanics, painters, and other manual laborers to protect their hair and faces from dust, dirt, and the like. Usually, such a cap consists of a crown, a bill or beak, an outer band and a sweat band or inner lining.

Heretofore, the above mentioned four components of a shop cap have been assembled by four successive steps, as follows: First, the outside band is sewed at its ends to form a ring; then the ring is sewed to the crown; next the bill is sewed to the outside band or ring and, finally, the inside band or sweat band is sewn into the ring or outside band.

In contrast to this four-step operation, this invention contemplates sewing the two bands together and sewing in the crown and bill in one operation with a considerable saving in the time usually required to finish the article.

The principal object of the invention is to provide a construction of sewing machine whereby a single operation will form a shop cap, the crown, inner and outer bands, and beak or bill being formed and sewn at one operation.

An important purpose is to provide an attachment in accordance with the foregoing object, which may quickly be applied to conventional sewing machines to thereby adapt them to perform the foregoing operation.

An additional object is to devise a construction which will form folds upon the marginal edges of the inner and outer bands prior to the sewing operation.

Another purpose is to effect an arrangement pursuant to the preceding object which may be operable with pre-formed endless outer bands, and may be readily engaged thereupon prior to the sewing operation and removed therefrom after the completion thereof.

Yet another intention of the invention is to provide a construction for insuring the proper positioning of the beak as it is fed into the needles for sewing between the inner and outer bands.

Still another object of the invention resides in providing a practical method for assembling and sewing the crown, peak, inner and outer bands

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of a cap upon one sewing machine, in one operation and with a minimum requirement of time and expert skill by the sewing machine operator.

And a final object of the invention to be specifically enumerated resides in the fabrication and arrangement of an attachment for effecting the above set forth objects which shall be of simple and dependable construction, easily applied to existing conventional sewing machines, readily incorporated into the design and construction of new machines, and is withall inexpensive and of light weight construction.

These, together with numerous ancillary objects which will later become apparent from the following description, are realized by this invention, one embodiment of which has been illustrated, by way of example only, of the principles of the invention in the annexed drawings, wherein:

Figure 1 is a top plan diagrammatic view of the attachment applied to a sewing machine, parts being broken away to illustrate details of construction and operation;

Figure 2 is an end elevation depicting the manner of applying the attachment to a sewing machine;

Figure 3 is a side elevation of Figure 2;

Figure 4 is a perspective view of one of the die elements employed in the invention, parts being broken away to disclose the interior construction thereof;

Figure 5 is a top plan view of the sectional, movable dies with their operating mechanism, the parts being shown in their opposed and operative position;

Figure 6 is a view similar to Figure 5 but showing their parts in their open or inoperative position;

Figure 7 is a vertical sectional view taken upon the line 7—7 of Figure 6;

Figure 8 is a perspective view of an inner element of one of the die sections;

Figure 9 is a detail view in transverse vertical section substantially upon the line 9—9 of Figure 1;

Figures 10—13 are perspective views of the pre-formed outer band, inner band, crown, and bill, respectively, of the components of a shop cap which this device is designed to assemble; and

Figure 14 is a perspective view of the completed cap.

Attention is directed first to Figures 10—14 disclosing the component parts in the assembled article and wherein the shop cap whose manu-

facture forms the subject of this invention is shown as composed of a crown piece 10 preferably consisting of a circular or oval shaped piece of fabric which, as indicated in Figure 14, is attached to the upper margins of the inner and outer band members 12 and 14, respectively, both of these members consisting of strips of fabric or like material, and a beak or bill 16 secured to the lower marginal edges of the inner and outer band members. The beak 16 may likewise be formed of cloth or any other suitable material and may include a material to which a stiffening element or substance has been applied to lend semi-rigidity to the beak. Preferably, the inner lining 12 which constitutes the sweat band of the article is dispensed from a roll of web-like material during operation of this device as set forth hereinafter, while the outer band member 14 is preferably stitched at its adjacent ends as shown at 18 in Figure 10 to form a complete annular ring for use as an element in this device.

Attention is next directed more specifically to Figures 2 and 3 wherein 20 indicates a portion of a conventional type of sewing machine having an upper arm 22 and a lower arm or work support 24, a pair of needle bars 26, see Figure 2, and a presser bar 28 being suitably supported and operated from the upper arm 22 in a known and conventional manner in the art.

A pair of spaced needles 30 are supported by the needle bars 26 in proper position for sewing a pair of parallel seams, as will be set forth hereinafter.

In order to carry out the purposes of this invention, the sewing machine 20 is provided with three attachments as indicated at 32, 34, and 36. The attachment 32 constitutes a bracket or support arm which is removably secured upon the upper arm 22 of the sewing machine, as at 38, and supports a horizontally extending pin or axle 40 which is intended to receive a roll 42 of a band-like shape of material 44 which is intended to furnish the inner lining or sweat band of the cap.

The element 34 consists of a hanger arm which is pivoted, as at 46, to the head 48 of the sewing machine, and has an angular bend 54 intermediate its ends to properly position a guide element 50 attached to the lower end thereof. As will be understood, the hanger arm 34 is oscillatable about the pivot 46 at the will of the operator for a purpose to be later set forth.

The member 50, as shown best in Figures 1 and 3, constitutes a tapered guide or die through which passes the webbing or band 44. During its passage through the guide, the band 44 is intumed marginally to provide marginal folds 52, as shown in Figures 1 and 9, which folds constitute an allowance for making a seam to be set forth hereinafter.

For a clear understanding of the construction and operation of the member 36, which constitutes the most important element of this invention, attention is directed chiefly to Figures 5-7. A pair of parallel sliding bars 54 and 56 are disposed in side-by-side relation, and are provided with longitudinally extended slots 58 and 60, respectively, through which extend fastening means 62 and 64, respectively, for slidably securing the bars upon a suitable portion of the surface of the support or lower arm 24. The sliding bars are pivotally connected, as at 66 and 68, to a pair of connecting links 70 and 72 which are fulcrumed at 74 and 76 to a lever 78 journaled upon the lower support arm, as at 80, to any convenient point upon the lower support-

ing arm 24. If desired, the operating end of the lever 78 may be suitably disposed for operation by pressure from the knees of the sewing machine operator, to thereby permit full use of the hands of the operator for a purpose to be later set forth.

Secured to the operating slides 54 and 56 are a pair of die sections 82 and 84, each of which is attached to one of the sliding bars but at opposite ends of the elongated slots therein. In their entirety, the two die sections when in the closed position illustrated in Figure 5, form a tapered guide or die which is adapted to fold over the marginal edge of the outer band member 14 as the latter is drawn therethrough, as will be more fully set forth hereinafter. As shown best in Figures 4, 7 and 8, the die members 82 and 84 are composed of outer, U-shaped channel members or casings 86 and 88, respectively, which are positioned upon the sliding bars in such a manner as to have the channel open portions facing each other. Secured within the die casings 86 and 88, from the upper, inner surface thereof, are a pair of inner die members of generally similar shape, and which are secured thereto in any suitable manner, these inner members being designated by the numerals 90 and 92, respectively, and which are provided with a tapered or recessed and shouldered upper and inner surface portion 94 and 96, respectively, which are disposed adjacent to but spaced from the inner surface of the channel casings 86 and 88. As will be clearly seen from Figures 7 and 4, the lower surface of the inner die members 90 and 92 are spaced above the lower, inner surface of the casing members 86 and 88, to provide a continuous channel extending the length of the members 82 and 84, this channel extending below the members 90 and 92 and around the outer surfaces thereof and including the shouldered portions 94 and 96. This channel member is adapted to receive the outer band 14, the channel being so tapered that as the band is drawn therethrough the marginal edges thereof are turned upon themselves to form a fold 98, as shown in Figures 1, 4 and 9.

As so far described, the operation of the sectional die members 82 and 84 is as follows: The operating lever 78 is first moved to the position shown in Figure 6, whereby the die sections are opened, and the annular outer band 14, as shown in Figure 10, is inserted in the open die sections in substantially the position shown in Figure 2, and by proper manipulation of the lever 78 the die sections are closed to the position of Figure 5. The entrance and exit inner diameters of the die members are such as to cause the band 14 to be folded upon itself as the same travels through the die members by reason of the taper of the dies, and by reason of the clearance provided by the tapered shouldered portions 94 and 96, respectively.

The die members 50 and 36 are so positioned relative to each other, as shown in Figure 2, that the continuous web of inner band material 44 is delivered from the die 50 to a position immediately above the folded outer band 14 as it emerges from the die member 36. This arrangement of the material handled by the two dies is best shown in Figures 1 and 9, wherein it will be seen that the inner and outer band members are brought into juxtaposition with each other at a position just before they reach the needles 30. It will be noted, by reference to Figure 9, that the intumed marginal edges of the inner and outer band members are placed adjacent to

each other, and the crown 10 placed between a pair of the juxtaposed marginal folds, and sewed therebetween by one of the needles 30 as by stitches 100. As will be evident, the band 14 is rotated upon the support arm 24 during this sewing operation and the crown portion 10 is likewise rotated, until the seam has been completely made around the entire circumference of bands and crown. During this sewing operation, at an appropriate point therein, the beak or bill member 16 has its flat end inserted between the other pair of marginal folds, as shown in Figures 1 and 9, and is attached therebetween by the stitches 102 of the other seam sewn by the other needle 30. In order that the bill or beak may be properly positioned between the folds of the two bands, a guide means is provided upon the die casing 84. This guiding means comprises a longitudinally extending bar or strip 104 which may be secured in any suitable manner such as by welding to the upper surface of the die casing 84, which strip has its outer edge disposed a suitable distance inwardly of the seam allowance or fold 98, and has a laterally extending arm 106 spaced slightly above the surface of the die casing. The beak or bill 16, at the appropriate part of the sewing process, is now placed directly upon the die casing 84, below the laterally disposed arm 106 and in direct contact with the outer edge of the longitudinal bar 104, whereby the straight edge of the bill will be held the proper distance inwardly from the outer edge of the fold 98. The laterally spaced bar 106 serves to press the bill downwardly against the die casing 84 and also between the inner and outer bands as the bill is fed with the bands through the sewing needles 30. As will be seen, in one sewing operation, the inner and outer bands, the crown and the bill, are sewn together by the two seams or stitches 100 and 102, in one operation of the device, to form the completed article.

It should be here noted that just before the seams have been completed, the continuous strip of inner band material 44 is severed at the desired length thereof, by raising the die 50 and its hanger 34 by pivoting the same about the fulcrum 46, and by any suitable means the continuous strip of material 44 is severed at the required length, and the sewing operation completed.

In order to more clearly understand the exact functioning of the mechanism, attention is directed to Figure 1, wherein it will be seen that the outer band 14, as it emerges from the die casings 86 and 88, has intumed marginal flanges 98 which constitute seam clearance for the seam to be subsequently formed. The inner band material 44 which will subsequently form the inner band 12, as it emerges from the die member 50, passes immediately above the surface of the sectional die 36 and is superimposed, with its folded seam 52 immediately above the folded seam portion 98 of the outer band. The beak or bill of the cap is disposed below the continuous strip 44 of the inner band member, and immediately above and in contact with the upper surface of the sectional die 36, and is guided, as it travels with said inner band member, by the longitudinal guide surface of the bar 104 and the lower surface of the lateral guiding arm 106. The periphery of the crown member 10 is of course constantly maintained between the inner and outer band members during the entire sewing operation.

From the foregoing, it will be seen that an attachment is provided which may be readily installed upon any conventional type of sewing

machine for the purpose of folding the inner and outer band members to provide seam clearances, positioning the parts in the desired position and then simultaneously sewing all of the parts together in one sewing operation. The sectional die member is controlled by the knee of the operator, whereby both hands may be employed for manipulating the crown and the beak during the sewing operation.

Since various modifications of the principles of this invention will be readily apparent to those skilled in the art from a study of the foregoing description and attached drawings, it is to be distinctly understood that the invention is not limited to the exact construction shown and described, but all suitable modifications and equivalents may be resorted to within the scope of the appended claims.

What is claimed as new is:

1. An attachment for adapting sewing machines to sew caps comprising an oscillatable rotary strip guide pivoted to a sewing machine for folding the marginal edges of sweat bands to produce seam allowances, a reciprocating sectional die secured to the support arm of the sewing machine and disposed below the strip guide to fold the marginal edges of an annular outer band to produce seam allowances, said dies being positioned in advance of the sewing instrumentalities, and operating means for bodily moving said sectional die in a rectilinear course, comprising a pair of parallel bars attached to said support arm for longitudinal sliding movement thereon, a complementary die section carried by each bar, and an operating linkage for simultaneously moving said parallel bars in opposite directions.

2. An attachment for adapting sewing machines to sew caps comprising an oscillatable rotary unitary die pivoted to a sewing machine in advance of the sewing instrumentality for folding the marginal edges of sweat bands to produce seam allowances, a sectional die secured to the support arm of a sewing machine to fold the marginal edges of an annular outer band to produce seam allowances, said dies being positioned below the unitary die in advance of the sewing instrumentalities, and operating means for selectively sliding said sectional die in and out of complementary contact in a rectilinear course comprising a pair of parallel bars attached to said support arm for longitudinal sliding movement thereon, a complementary die section carried by each bar, and an operating linkage for simultaneously moving said parallel bars in opposite aligned directions and guide means carried by one of said die sections for spacing a cap beak relative to the marginal fold formed by said die sections.

3. In combination with a sewing machine having a support arm, an attachment for use in sewing a cap having a pre-formed outer band, a web like sweat band, a beak and a crown, comprising a unitary guide pivoted to the sewing machine above and in advance of the sewing instrumentality for imparting a marginal fold to the sweat band drawn through the guide, a complementary die section secured to the support arm and positioned in advance of the sewing instrumentalities, channel members housed in the die sections and provided with longitudinally disposed recesses for receiving and folding the marginal edges of the annular band, horizontally disposed guide arms supported by one of the die sections for positioning the beak relative to the marginal fold in the annular band, common operating means for selectively sliding the die sections bodily

in and out of engagement in a rectilinear course.

4. In combination with a sewing machine having a support arm, an attachment for use in sewing a cap having a pre-formed outer band, a web like sweat band, a beak and a crown, comprising a unitary guide pivoted to the sewing machine for imparting a marginal fold to the sweat band drawn through the guide, a rectilinearly reciprocating complementary die section secured to the support arm and positioned in advance of the sewing instrumentalities and below the unitary guide, channel members housed in the die sections for folding the marginal edges of the annular band, angular guide arms supported by one of the die sections for positioning the beak relative to the marginal fold in the annular band, common operating means for selectively sliding the dies in and out of engagement in the same plane, said die sections including U-shaped casings having opposed open sections, wherein the channel members include inner die members secured to the upper wall of the opposing casings and having a longitudinal recess formed on the side adjacent the closed ends of the casings, said channel members and casings tapering gradually towards one end, wherein said operating means includes a pair of parallel arms longitudinally slidable on the support arm, a connecting linkage pivoted to said arms for simultaneously reciprocating said die sections in the same plane.

5. An attachment for a sewing machine having a support arm comprising a reciprocating sectional die secured to the support arm in advance of the sewing instrumentalities and including a pair of complementary U-shaped casings having opposed open sides, channel members having a longitudinal recess secured within the casings, a pair of spaced protruding guide lugs on the machine, a pair of parallel arms longitudinally slidable on the lugs and secured to the die sections, a linkage system connected to the arms for selectively reciprocating the die sections in the same plane, an angular guide bar supported by one of the guide sections and, an oscillatable rotary strip guide pivoted to the sewing machine above and adjacent to the sectional die.

6. A method of forming a cap consisting in forming opposing inturned marginal folds on the longitudinal edges of the outer band and sweat band, placing said bands into aligned registry with their folds in juxtaposition, inserting the perimeter of a crown between one pair of juxtaposed marginal folds and stitching a portion of the said pair of juxtaposed marginal folds and inserted crown together, simultaneously stitching a portion of the other pair of juxtaposed marginal folds together, inserting a beak between an unstitched portion of the last named folds and thereafter simultaneously stitching the remaining portion of both pairs of juxtaposed marginal folds and inserted parts together in one operation.

7. In a sewing machine for caps, a rectilinearly reciprocating sectional folder for forming marginal folds on the outer band of a cap, a strip guide pivotally disposed cooperatively above the sectional folder for forming marginal folds on the sweat band of a cap, horizontally disposed guide arms mounted on said sectional folder for positioning a cap beak between the marginal folds of the outer band and sweat band and sewing means for simultaneously forming seams upon ends of the marginal folds for securing said outer band, sweat band and beak in position in the cap.

8. In combination with a sewing machine having a support arm, an attachment for use in

forming a cap comprising an oscillatable rotary strip guide pivoted to the machine in advance of the sewing instrumentalities, a guide folder having complementary rectilinearly reciprocating casings disposed below the strip guide and horizontally disposed guide arms superimposed on one of said sections.

9. In a sewing machine for caps, a guide folded carried by the machine and disposed in advance of the sewing instrumentalities, said guide folder including complementary sections having contacting open sides and inner fold forming die members bodily slidable in a rectilinear course for receiving the outer band of a cap and forming marginal folds thereon, an oscillatable rotary strip guide pivoted to the machine and disposed adjacent to the guide folder for forming marginal folds on the sweat band of a cap, horizontally disposed guide arms mounted on one of the sections of the guide folder for positioning a cap beak between the marginal folds of the outer band and sweat band and sewing means for simultaneously forming seams upon ends of the marginal folds for securing said outer band, sweat band and beak in position in the cap, said strip guide including a rectangular tapered sleeve disposed above the guide folder for placing said sweat band in superincumbent position on said outer band as the latter emerges from the guide folder.

10. For use with a sewing machine, a guide folder comprising complementary U-shaped casings having contacting open sides, die members housed within the casings and having a longitudinal recess disposed adjacent the web of the casings, means for moving said casings in and out of cooperative engagement in a rectilinear course, said means including a pair of guided parallel arms individually supporting one of the casings, and a pivoted oscillatable actuating bar operatively associated with said arms for moving the arms longitudinally in opposite parallel directions.

11. In combination with a sewing machine having a support arm, an attachment for use in sewing a cap comprising a strip guide pivoted to the sewing machine and supported thereby in advance of the sewing instrumentalities for imparting marginal folds to a sweat band moved through the guide, complementary U-shaped casings having contacting open sides slidably secured to the support arm and positioned in advance of the sewing instrumentalities, die members disposed in said casing, each of said die members being provided with a longitudinal recess disposed in spaced fashion adjacent the web of the casings for receiving and folding the marginal edges of an outer band, horizontally disposed guide means superimposed on one of said casings for positioning a cap beak between the marginal folds in the sweat band and outer band and common operating means for selectively sliding the casings in and out of engagement in a rectilinear path.

12. In combination with a sewing machine having a support arm, an attachment for sewing a cap comprising a strip guide pivoted to the sewing machine and supported thereby in advance of the sewing instrumentalities, for imparting marginal folds to a sweat band moved through the guide, complementary U-shaped casings having contacting open sides slidably supported upon said support arm and positioned in advance of the sewing instrumentalities, die members disposed in said casings and spaced

from the lower wall thereof, each of said die members being provided with a recess disposed in a spaced manner adjacent the web of each of the casings for receiving and folding the marginal edges of an outer band, horizontally disposed guide means superimposed in a spaced fashion on the outer face of the upper wall of one of the casings for positioning a cap beak between adjacent marginal folds of the sweat band and outer band and common operating means for selectively sliding the casings bodily in and out of engagement in a similar rectilinear path.

13. In combination with a sewing machine having a support arm, an attachment for sewing a cap comprising an oscillatable strip guide pivoted to the sewing machine and supported thereby in advance of the sewing instrumentalities, said guide being longitudinally tapered for imparting marginal folds to a sweat band moved through the guide; complementary longitudinally tapered casings having contacting open sides and opposed closed sides slidably supported on the support arm in advance of the sewing instrumentalities, die members secured to the upper walls of the casings, each of said members being formed with a recess disposed adjacent the closed side of each of the casings for receiving and folding the marginal edges of an outer band, horizontally disposed guide arms supported by one of the casings for positioning a cap beak between adjacent marginal folds on the outer band and sweat band and common operating means for selectively sliding the casings in and out of engagement in a similar rectilinear path.

14. In combination with a sewing machine having a support arm, an attachment for sewing a cap comprising an oscillatable strip guide pivoted to the sewing machine and supported thereby in advance of the sewing instrumentalities, said guide being longitudinally tapered for imparting marginal folds to a sweat band moved through the guide, complementary longitudinally tapered casings having contacting open sides and opposed closed sides slidably supported on the support arm in advance of the sewing instrumentalities, die members secured to the upper walls of the casings, each of said members being formed with a recess disposed adjacent the closed side of each of the casings for receiving and folding the marginal edges of an outer band, horizontally disposed guide arms supported by one of the casings for positioning a cap beak between adjacent marginal folds on the outer band and sweat band and common operating means for selectively sliding the casings in and out of engagement in a similar rectilinear path, said operating means including a pair of guided parallel arms individually supporting each of said casings, a pivoted actuating bar and links pivotally connected between said bar and arms.

15. An attachment for a sewing machine having a support arm comprising a reciprocating sectional guide slidably secured to the support arm in advance of the sewing instrumentalities and including a pair of complementary casings having contacting open sides and opposed closed sides, channel members having a longitudinal recess disposed adjacent the closed sides of the casings mounted within the casing, a pair of parallel longitudinally slidable arms slidably guided on said support arm and individually supporting one of the casings, a common actu-

ating bar and connecting links pivotally secured to said arms and bar.

16. An attachment for a sewing machine having a support arm comprising a reciprocating sectional guide slidably supported on the support arm in advance of the sewing instrumentalities and including a pair of complementary casings having contacting open sides and opposed closed sides and opposing open ends, die members mounted on the inner face of the upper walls of the casings, each of said die members being formed with a longitudinal recess spaced inwardly from the closed side of each of the casings, said casings and inner members being longitudinally tapered toward one end, guide means carried by the machine, a pair of parallel arms longitudinally slidable on the guide means and individually supporting the casings, a common actuating member and means connecting said member and arms.

17. An attachment for a sewing machine having a support arm comprising a reciprocating sectional guide slidably supported on the support arm in advance of the sewing instrumentalities and including a pair of complementary casings having contacting open sides and opposed closed sides and opposing open ends, die members mounted on the inner face of the upper walls of the casings, each of said die members being formed with a longitudinal recess spaced inwardly from the closed side of each of the casings, horizontally disposed guide means mounted on the outer face of the upper wall of one of the casings, a pair of parallel slidable arms individually supporting each of the casings, a pivoted common actuating bar and means operatively connecting said bar and arms.

18. In a sewing machine for caps having sewing instrumentalities, a first means supported by the machine and including complementary casings having fold forming means housed therein for forming marginal folds on the outer band of a cap, said casings being slidably supported in advance of the sewing instrumentalities and having open contacting sides, means for supporting said casings in a common plane and for moving said casings into and out of engagement in a similar rectilinear path, a second means pivotally secured to the machine above the first means, said second means including a tapered strip guide for forming marginal folds on a sweat band passed therethrough and placing said sweat band with inturned edges in superincumbent position on the outer band as the latter emerges from the first means and a third means horizontally superimposed on one of the casings for positioning a cap beak between the adjacent marginal folds of the sweat band and outer band.

19. In a sewing machine for caps, rectilinearly reciprocating means disposed in advance of the sewing instrumentalities for forming marginal folds on the outer band of a cap, said means including a pair of complementary casings having inner fold forming die members mounted therein provided with edge recesses for receiving and folding over the opposing marginal edges of an outer band, common operating means for moving said casings in and out of engagement, a unitary strip guide pivoted to the machine above the complementary casings, said guide being downwardly inclined and tapered for forming marginal folds on a sweat band and delivering the sweat band into position on the outer band and horizontally disposed guide means mounted on one

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of said casings for positioning a cap beak between adjacent marginal folds of the bands.

20. In a sewing machine for caps having sewing means, rectilinearly reciprocating sectional means disposed in advance of the sewing means for forming marginal folds on the outer band of a cap, guide means pivoted to the sewing machine and disposed above the sectional means and in advance of the sewing means for forming marginal folds on the sweat band of a cap, a second guide means carried by said sectional means for positioning a cap beak between the marginal folds of the outer band and sweat band, whereby said outer band, sweat band, and beak are simultaneously secured in position in a cap by the sewing means, said sectional means including a pair of complementary casings and common control means for sliding said casings in and out of engagement in a similar rectilinear path, said control means being supported by the sewing machine for knee operation by the user.

21. The combination of claim 19, wherein said last means includes a first arm superimposed longitudinally on the upper wall of one of the casings and a transverse second arm extending

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from the first arm and raised above the upper wall whereby the cap beak is movably supported between the wall and second arm.

22. The combination of claim 19, wherein said last means includes a first arm mounted on the upper wall of one of the casings and a second arm integrally extending transversely from the first arm and uniformly spaced vertically above the upper wall.

THOMAS B. KOHOUT.

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