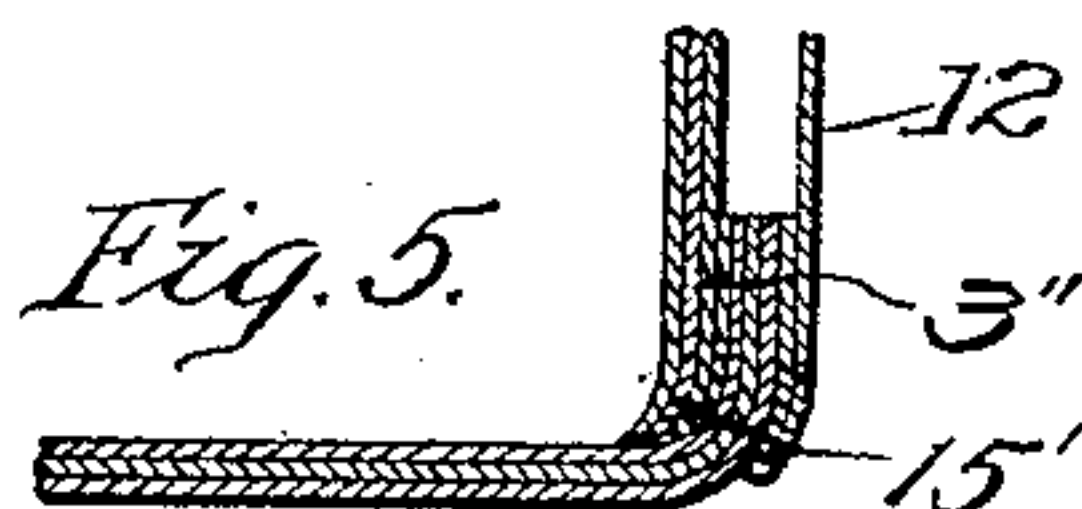
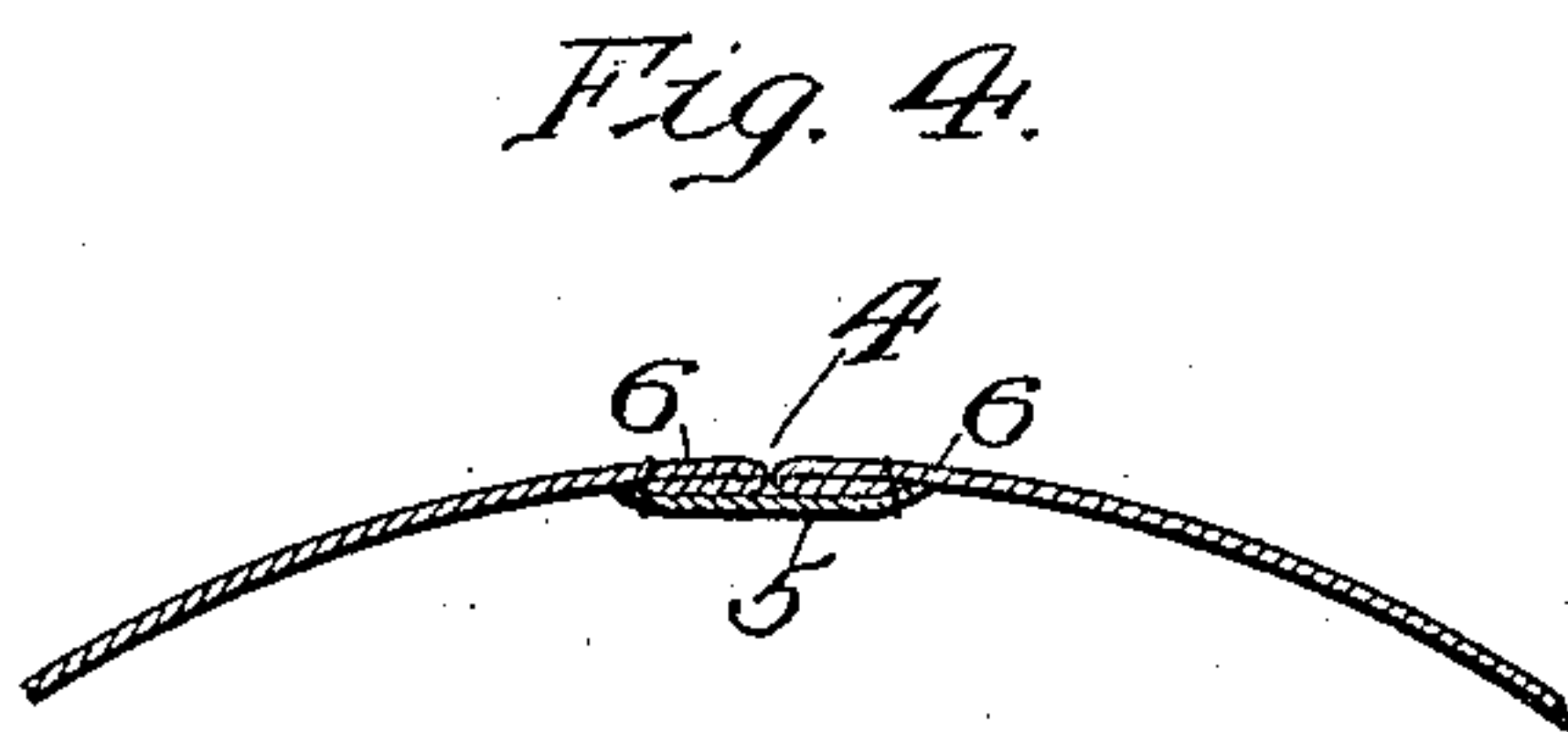
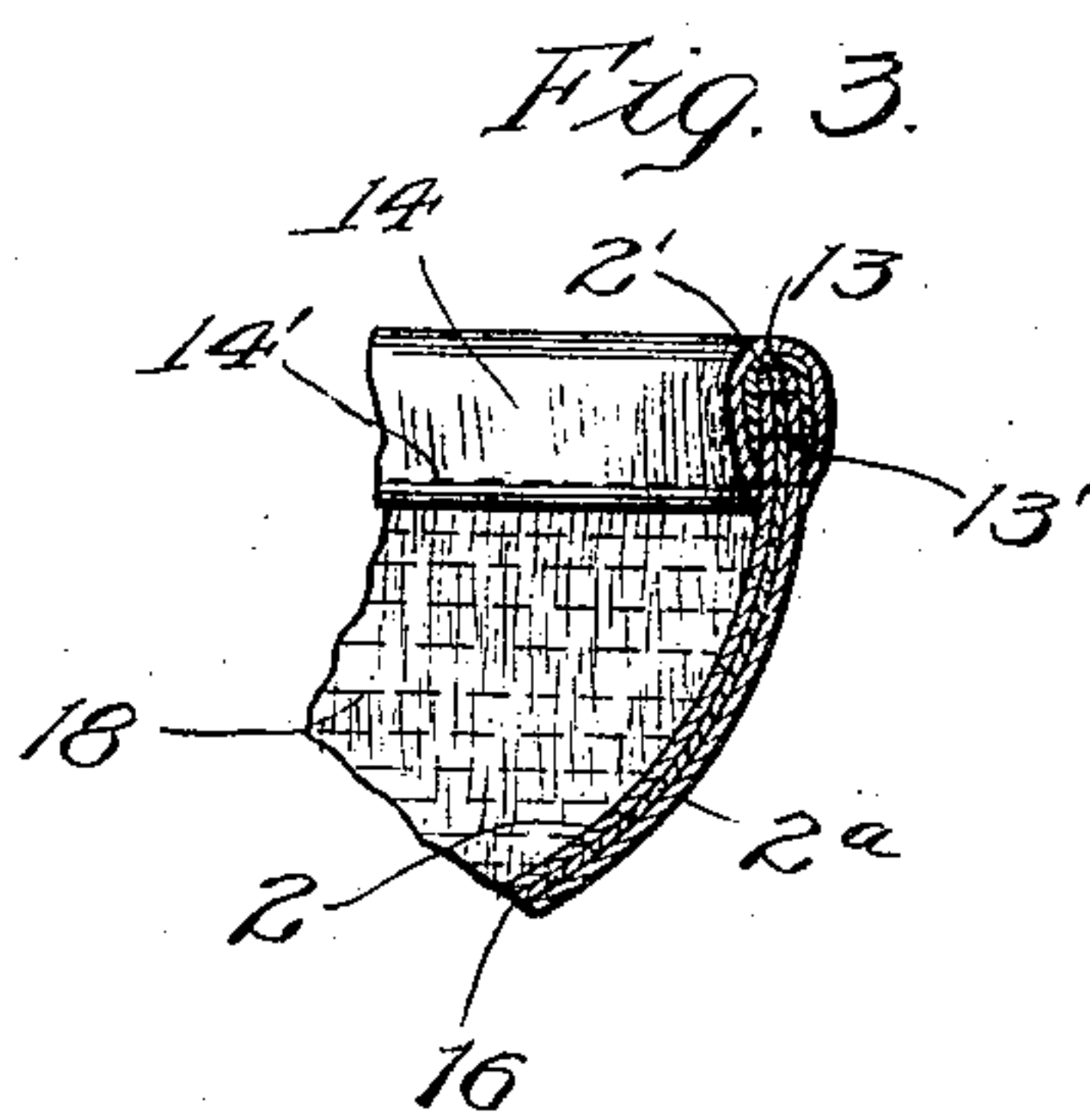
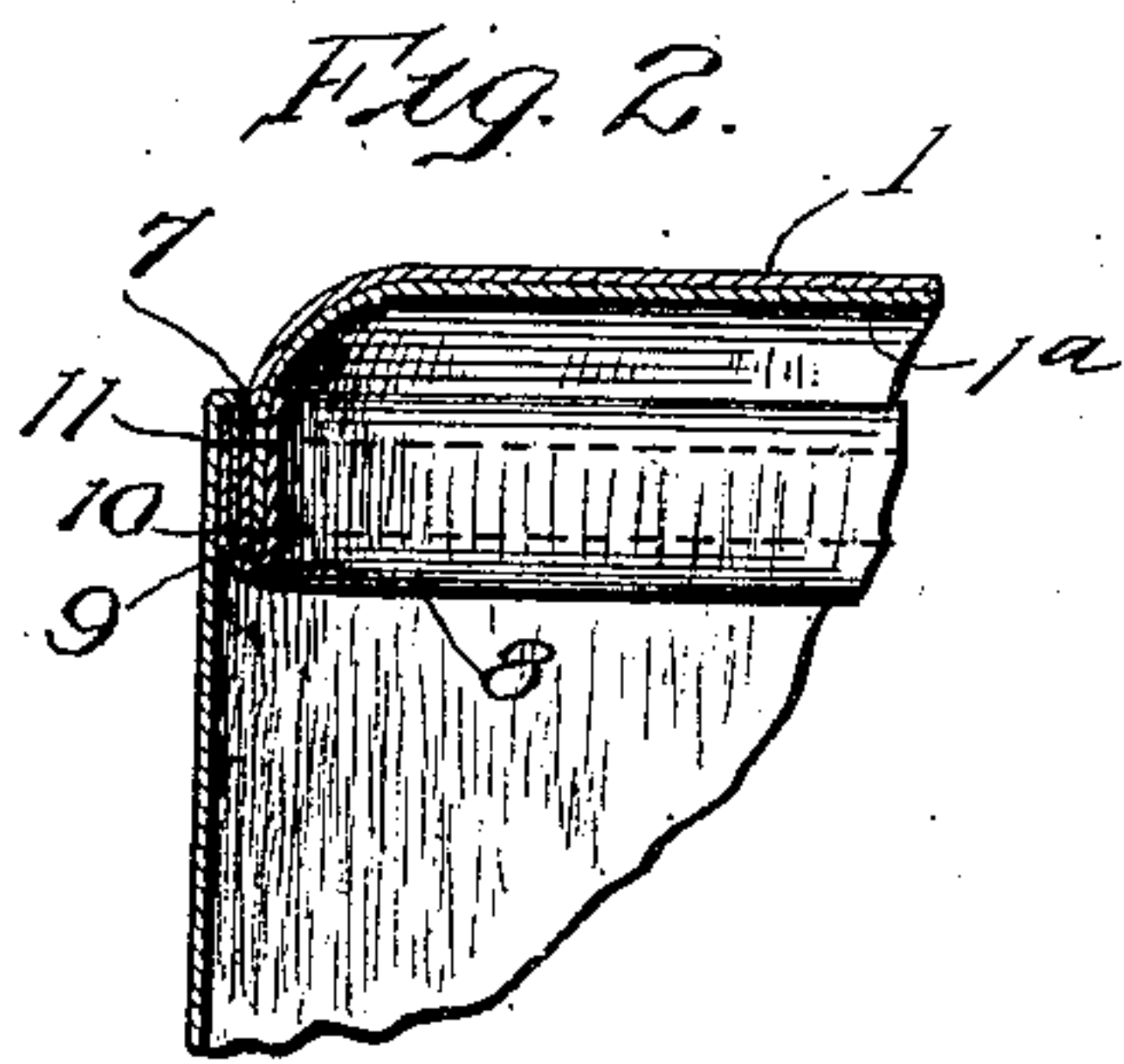
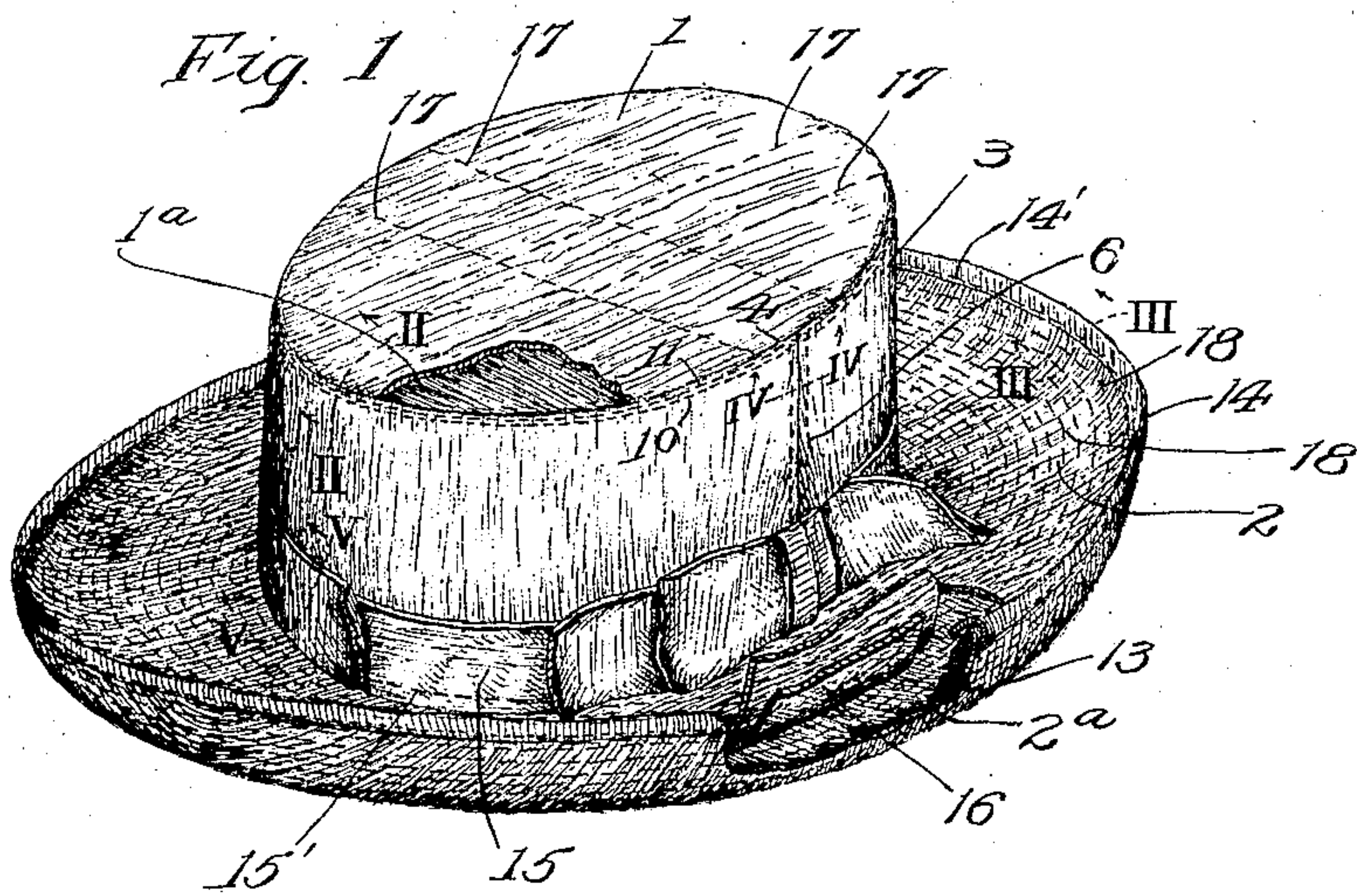


917,210.

L. WEINER.
HEAD COVERING.
APPLICATION FILED JULY 16, 1906.

Patented Apr. 6, 1909.
2 SHEETS—SHEET 1.



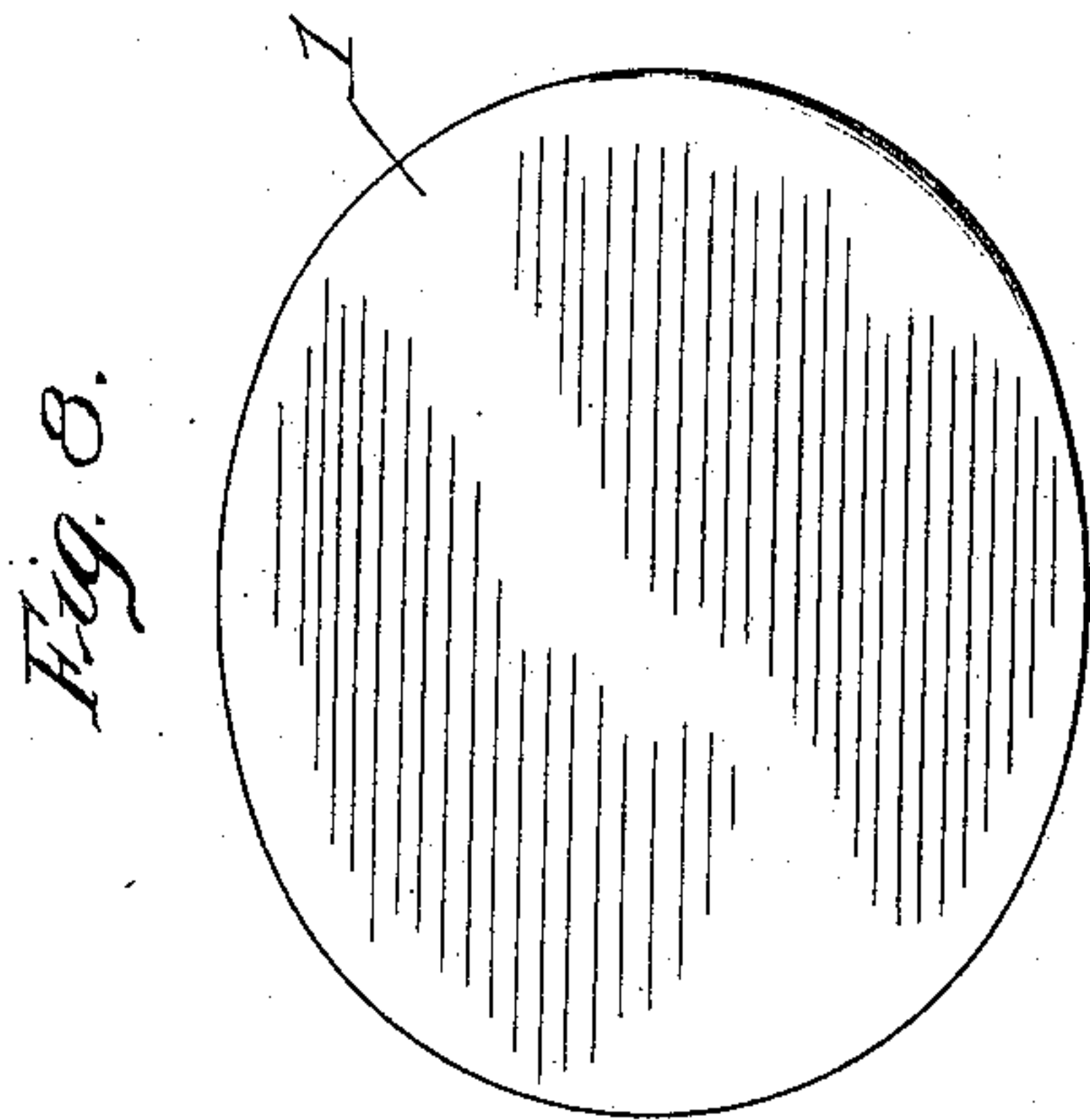
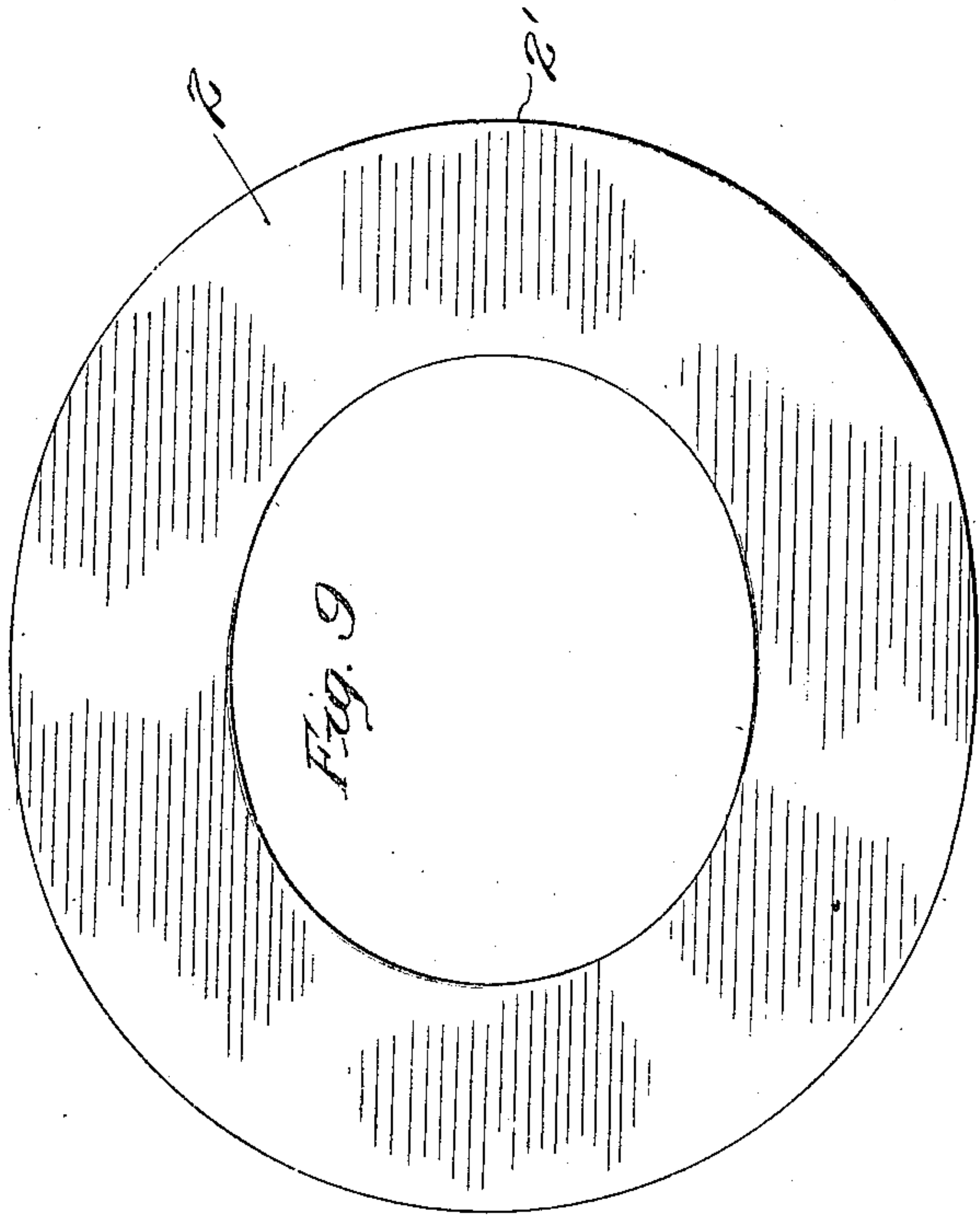
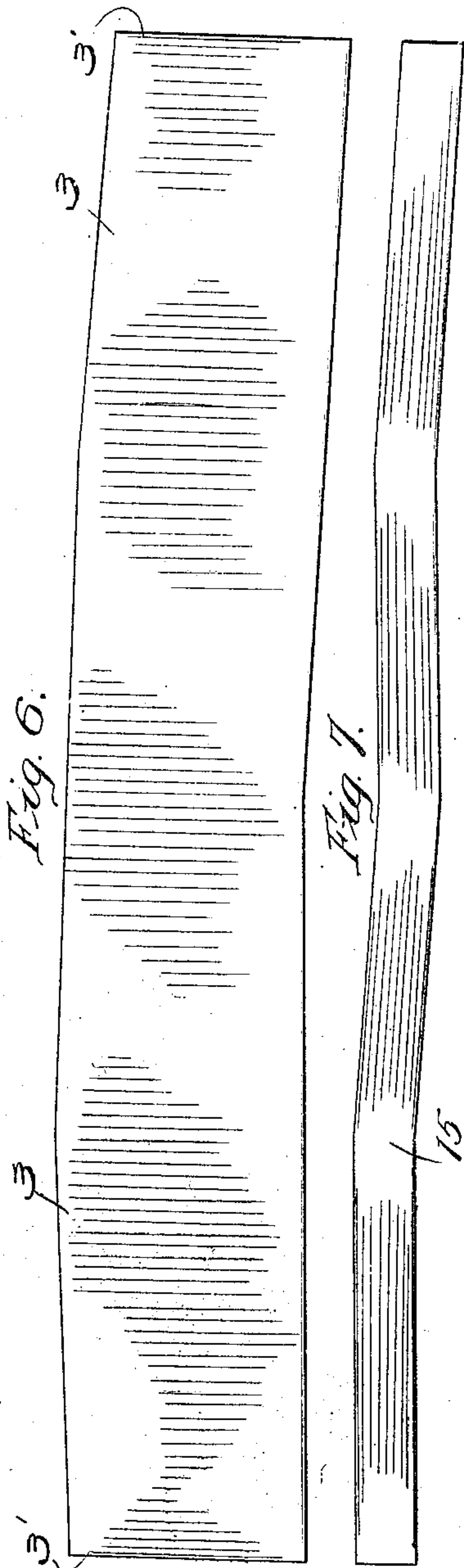
WITNESSES:
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Alston B. Moulton.

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

LOUIS WEINER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO FRANK P. HEID AND COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

HEAD-COVERING.

No. 917,210.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed July 16, 1906. Serial No. 326,352.

To all whom it may concern:

Be it known that I, LOUIS WEINER, a subject of the Czar of Russia, and residing in Philadelphia, State of Pennsylvania, United States of America, have invented certain new and useful Improvements in Head-Coverings, of which the following is a full, clear, and exact disclosure.

My invention relates to improvements in head coverings, and particularly to hats made of a fabric having stiff but elastic fibers running in one direction of the fabric, the threads transverse to said stiff elastic fibers, being soft and inelastic. A fabric which embodies these characteristics, is haircloth, or similar material.

Heretofore attempts have been made to make hats out of haircloth, or similar material, but on account of the fact that when haircloth is cut, the fabric so frays at the edges that the cut portions cannot well be sewed to each other, it has heretofore been impossible to make a satisfactory or durable article.

The objects of my invention are to construct a light weight, cool, ventilated hat, which is comfortable on the head, which is not injured by rain or water, which will not change its shape after the same has been wet or crushed, which is capable of great variations in style, shape and color effects, and which will not stretch or pull apart at the seams.

Other objects of my invention will appear in the specification and claims below.

In the drawings forming a part of this specification, in which the same reference characters are employed to designate the same parts throughout the various figures: Figure 1 is a perspective view of my improved hat, parts of the same being broken away to show the construction thereof; Fig. 2 is a section on the line II—II of Fig. 1; Fig. 3 is a section on the line III—III Fig. 1; Fig. 4 is a section on the line IV—IV Fig. 1; Fig. 5 is a section on the line V—V Fig. 1; Figs. 6 to 9 inclusive, show the blanks from which the essential portions of my hat are formed.

As plainly shown in Figs. 1, 8 and 9, the top 1 of the crown, and the brim 2 are each made of integral seamless pieces of fabric, and the side 3 of the crown is made of but one strip of fabric having its outer ends 3'

joined together. In making my hat I preferably lay patterns on the material in such a manner that in the top and brim pieces, 1 and 2 respectively, the stiff fibers of the material would extend from the front to the back of the hat. The side of the crown is made of a single thickness of material, and preferably the fibers of the fabric extend from the brim to the top of the crown. In order to firmly secure together the various pieces of the fabric forming the chief parts of my hat so that the raw edges of the same will not fray, and the joined edges pull apart, I sew the pieces together so that the adjacent edges of the parts of the hat are stitched together by a plain open seam whenever the direction of the seam is parallel to the direction of the hair or similar fiber, and by lap seam whenever the direction of the seam is transverse to the direction of the hair. I join the outer ends 3' of the piece 3 forming the side of the crown, when the direction of the seam is parallel to the direction of the hair, by a plain open seam 4 and then cover the opened raw edges of the seam with a suitable binding 5 stitched down as at 6 on opposite sides of said edges. In this manner, the two ends will be so secured together that they cannot be pulled apart and so that the edges are prevented from fraying.

The top 1 and side 3 of the crown are preferably sewed together in the manner shown in Fig. 2. That is to say, since the direction of the seam is transverse to the direction of the hair in the side of the crown and the edge of the top, the two parts are sewed together in a lap seam by stitching 7, and the edges are forced or pressed over adjacent the side of the rim. The binding 8 is then turned in under the raw edges 9 of the seam and adjacent the side 3 of the brim, and is sewed down by stitching 10 and the other edge of the binding is sewed down as at 11. In this way the fraying of the soft threads from the stiff elastic hair is completely prevented, and the stiff hairs are not allowed to work out of the ends at the cut edges. The top may, however, and preferably is, made of a plurality of thicknesses as shown in Fig. 1 and the various layers forming the top arranged so that the stiff fibers of one layer extend transversely to the stiff fibers of the adjacent layer. This ar-

rangement renders the top comparatively
 stiff and so makes a support for the side.
 In other words, this arrangement of the
 fibers equalizes the strength of the top in all
 5 directions and makes a top having the aver-
 age strength of the material composed of
 both warp and weft of hair cloth. The fab-
 ric will not bend in one direction any easier
 than it does in another. This arrangement
 10 also stiffens the side of the hat, when the
 fibers of the side are arranged vertically
 and makes it unnecessary to use a plurality
 of layers of fabric for the side of the hat.
 The stiff top holds the single thickness of
 15 the side in a comparatively firm and stiff
 form and dispenses with the use of any
 other material, or construction to make the
 hat maintain its shape. This stiffness of the
 top and crown is also increased by the fact
 20 that the edges of the fabric composing the
 top are bent downwardly in uniting it to
 the side, thereby forcing the stiff fibers closer
 together at the edge or margin. This also
 makes the fabric much firmer and con-
 25 tributes greatly to the preservation of the
 form which the hat is given under the con-
 ditions to which it is subjected in wear.
 In making hats in which there is a brim,
 the stiffness of the side, although of a sin-
 30 gle layer, is also greatly increased by mak-
 ing the brim of a plurality of layers and
 rigidly attaching the bottom of its side to
 the brim as by stitching. The lower edge
 of the side 3 of the crown and the brim 2
 35 are united in a lapped seam by stitching 3''
 as shown in Fig. 5; but in this case, the bind-
 ing of the raw edges may be omitted since
 the said edges are amply covered and se-
 cured by the sweat band 12. The outer edges
 40 2' of the brim are preferably bound by a
 strip 13 of stiff material, as canvas, or
 leather, by stitching 13' and the whole is
 then covered with a suitable binding 14,
 stitched as at 14'. This stiffening of the
 45 outer edge of the brim materially assists the
 hat in retaining its shape and prevents the
 hairs of the fabric from working out at the
 edges of the brim. In order to stiffen the
 side 3 of the crown, I may secure, by stitch-
 50 ing 15', to the outside of the same adjacent
 the point where the same is united to the
 brim 2, a narrow strip of fabric 15 similar
 to the fabric employed in the body of the
 hat, but having the stiff elastic fibers run-
 55 ning transverse to the direction of the said
 fibers in the side 3 of the crown.

The top of the hat and the brim may be
 made of a single thickness of material as
 above described, but in order to stiffen the
 60 top of the crown and the brim, I may make
 one or both of a plurality of thicknesses of
 material. Thus the top may be composed of
 two thicknesses of material 1 and 1^a, and
 the brim of the parts 2 and 2^a as shown in

the drawings, in which case the lower thick- 65
 ness 1^a and 2^a would preferably be cut so
 that the fabrics of said pieces would extend
 transversely to the direction of the fibers in
 the pieces 1 and 2, top and brim respectively.
 In some cases it may be desirable to further 70
 stiffen the brim by inserting between the
 pieces of the brim, a piece of stiffening ma-
 terial or fabric, such as 16, said piece being
 composed of haircloth, or similar material,
 or of any other material, such as rubber. 75

When the top of the crown is made of a
 plurality of thicknesses of material, I may
 unite these thicknesses by stitching as shown
 at 17, in order to make the same stiffer and
 also to prevent an uneven shrinking or warp- 80
 ing of the various layers forming the top
 portion of the hat, and the various thick-
 nesses of the brim may also be united by
 stitching 18 for the same purpose.

While various materials may be employed 85
 for making my improved hat, I preferably
 employ what is ordinarily known as a fine
 quality of haircloth, and I have found that
 when the hairs of the fabric are woven into
 the fabric with a silk warping, the hat will 90
 not shrink or change its shape after having
 been wet. I preferably then, use a silk hair-
 cloth for making my hat, although any
 other material having similar characteristics
 may be substituted therefor. 95

I preferably make my hat in the manner
 above described that is to say, with the stiff
 fibers or hairs of the material of which the
 same is made, running or extending length-
 wise or from the front to the back of the top 100
 and brim, and the fibers of the side of the
 crown running vertical. This gives the hat a
 pleasing appearance and when it is crushed,
 the elastic fibers of the sides of the crown
 straighten out immediately when released 105
 and restore the hat to its original shape.
 These features, however, do not affect the
 weight or ventilating qualities of the hat, or
 broadly, the means by which the separate
 pieces are stitched or sewed together, and I 110
 do not desire to be limited to the exact size,
 shape, or exact method of making the same,
 since my invention comprises the making
 of any hat out of any material similar to
 that described in the specification so long as 115
 the same is covered by the claims forming a
 part of this specification.

Having thus described my invention, what
 I claim and desire to protect by Letters Pat- 120
 ent of the United States, is:—

1. A head covering comprising a top com-
 posed of a plurality of thicknesses of a fab-
 ric having stiff elastic fibers extending in
 one direction, and inelastic fibers extending
 transverse thereto, the said stiff fibers of 125
 each layer being arranged transversely to
 the direction of the stiff fibers of the ad-
 jacent layer of said top, the edges of said

layers of said top being bent at substantially right angles to the plane of said layers to force the stiff fibers of each layer at the said edges closer together, and a side composed of a single thickness of a similar fabric arranged with the fibers extending substantially vertically, the said turned down edges of said top and the top edge of said side being firmly united by stitching.

2. A head covering comprising a top composed of a plurality of thicknesses of a fabric having stiff elastic fibers extending in one direction, and inelastic fibers extending transverse thereto, the said stiff fibers of each layer being arranged transversely to the direction of the stiff fibers of the adjacent layer of said top, the edges of said layers of said top being bent at substantially right angles to the plane of said layers to force the stiff fibers of each layer at the said edges closer together, and a side composed of a single thickness of a similar fabric arranged with the fibers extending substantially vertically, the said turned down edges of said top and the top edge of said side being firmly united by a lap seam.

3. A head covering comprising a top composed of a plurality of thicknesses of a fabric having stiff elastic fibers extending in one direction and inelastic fibers extending transverse thereto, the said stiff fibers of each layer being arranged transversely to the direction of the stiff fibers of the adjacent layer of said top, the edges of said top being bent downwardly and the stiff fibers of each layer forced closer to each other thereby, a side composed of a single thickness of similar fabric arranged with the fibers extending substantially vertically, the said turned down edges of said top and the top edge of said side being firmly united by stitching and the stiffened brim firmly united to the bottom edge of said side by stitching.

4. A hat made of a fabric having stiff elastic fibers running in one direction and relatively soft and inelastic threads running transverse thereto, and comprising a top formed of two thicknesses of said fabric, one of said thicknesses having its fibers running longitudinally of the hat and the other of said thicknesses having its fibers running transversely of the hat, the said thicknesses being stitched together and the edge of said top being turned inwardly; and a side formed of one thickness of said fabric and having its fibers extending vertically of the hat, the upper edge of said side being folded inwardly and downwardly to meet the inwardly turned edge of the top.

5. A hat made of a fabric having stiff elastic fibers running in one direction and relatively soft and inelastic threads running transverse thereto, and comprising a top

formed of two thicknesses of said fabric, one of said thicknesses having its fibers running longitudinally of the hat and the other of said thicknesses having its fibers running transversely of the hat, the said thicknesses being stitched together and the edge of said top being turned inwardly; and a side formed of one thickness of said fabric and having its fibers extending vertically of the hat, the upper edge of said side being folded inwardly and downwardly to meet the inwardly turned edge of the top, and a binding covering the said edges of the top and side and stitching extending through all of the overlapping thicknesses of the top, side and binding.

6. A hat made of a fabric having stiff elastic fibers running in one direction and relatively soft and inelastic threads running transverse thereto, and comprising a top formed of two thicknesses of said fabric, one of said thicknesses having its fibers running longitudinally of the hat and the other of said thicknesses having its fibers running transversely of the hat, the said thicknesses being stitched together and the edge of said top being turned inwardly; and a side formed of one thickness of said fabric and having its fibers extending vertically of the hat, the upper edge of said side being folded inwardly and downwardly to meet the inwardly turned edge of the top, and a binding covering the said edges of the top and side and stitching extending through all of the overlapping thicknesses of the top, side and binding, and a brim overlapping the inner surface of the lower edge of said side comprising a plurality of thicknesses sewed together.

7. A hat made of a fabric having stiff elastic fibers running in one direction and relatively soft and inelastic threads running transverse thereto, and comprising a top formed of two thicknesses of said fabric, one of said thicknesses having its fibers running longitudinally of the hat and the other of said thicknesses having its fibers running transversely of the hat, the said thicknesses being stitched together on lines parallel to the fibers and the edge of said top being turned inwardly; and a side formed of one thickness of said fabric and having its fibers extending vertically of the hat, the upper edge of said side being folded inwardly and downwardly to meet the inwardly turned edge of the top; a binding covering the said edges of the top and side and stitching extending through all of the overlapping thicknesses of the top, side, and binding; a brim overlapping the inner surface of the lower edge of said side comprising a plurality of thicknesses sewed together, the fibers of one thickness of the brim extending parallel to the sides of the hat and

the fibers of a second thickness of the brim
extending transversely thereto; a strip of
hair cloth stitched to the lower edge of the
side and having its fibers extending trans-
5 versely to the fibers of the sides; a hat band
covering said strip; a strip of stiff material
stitched over the outer edge of said brim;
and a binder covering said strip.

In witness whereof I have hereunto set
my hand this twelfth day of July, A. D. 10
1906.

LOUIS WEINER.

Witnesses:

ALSTON B. MOULTON,
ALEXANDER PARK.