

(No Model.)

W. M. PROTHEROE.

VENTILATOR FOR HATS.

No. 294,149.

Patented Feb. 26, 1884.

Fig. 1.

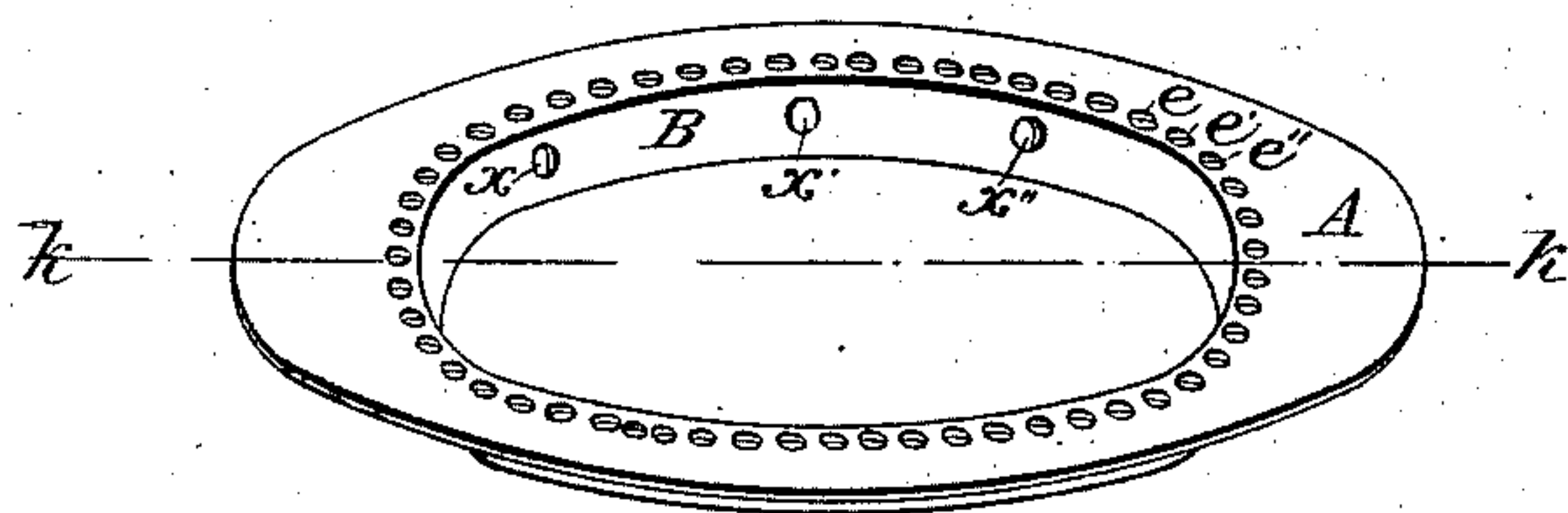


Fig. 3.

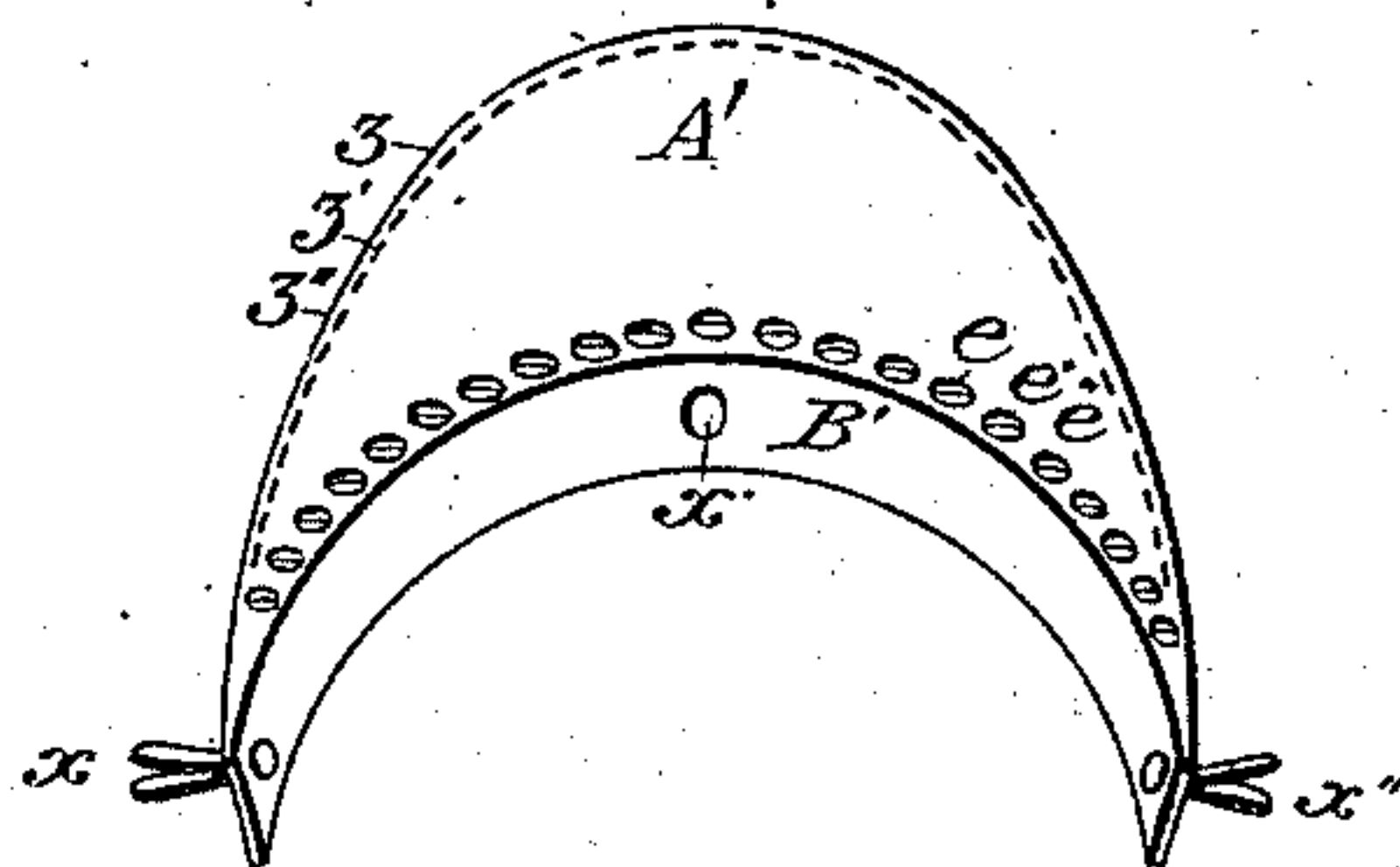


Fig. 2.

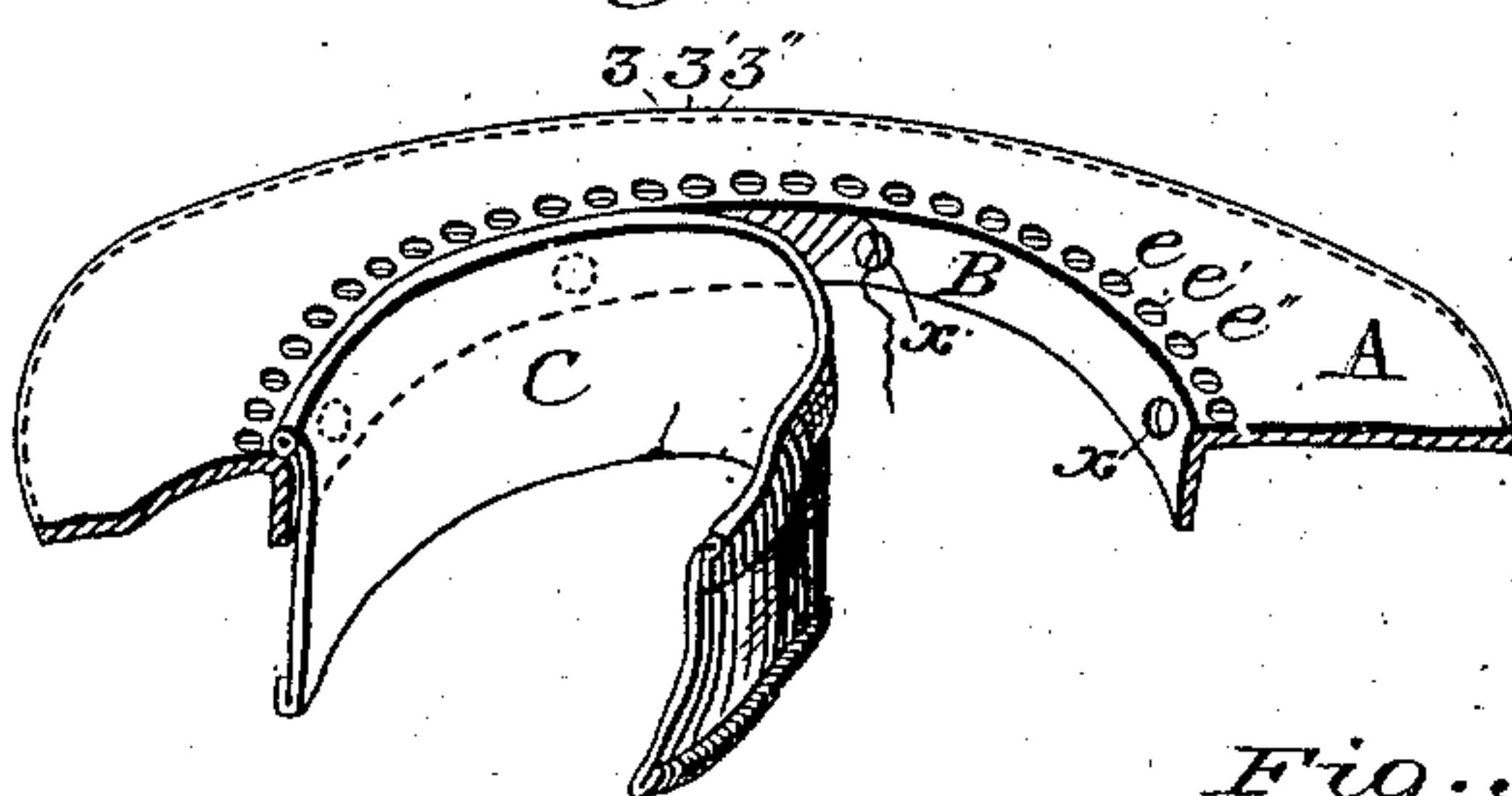


Fig. 4.

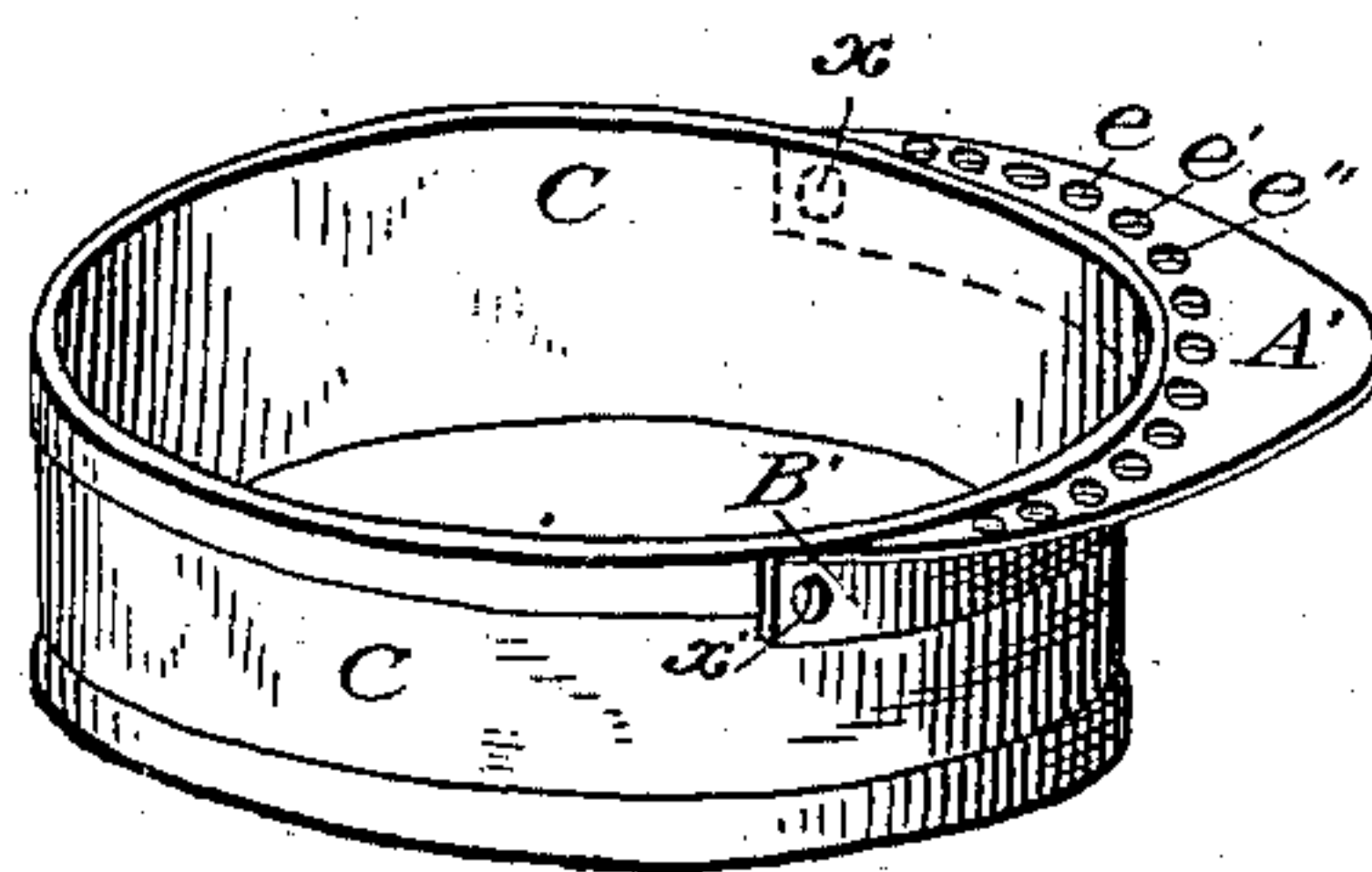


Fig. 5.

Fig. 6.

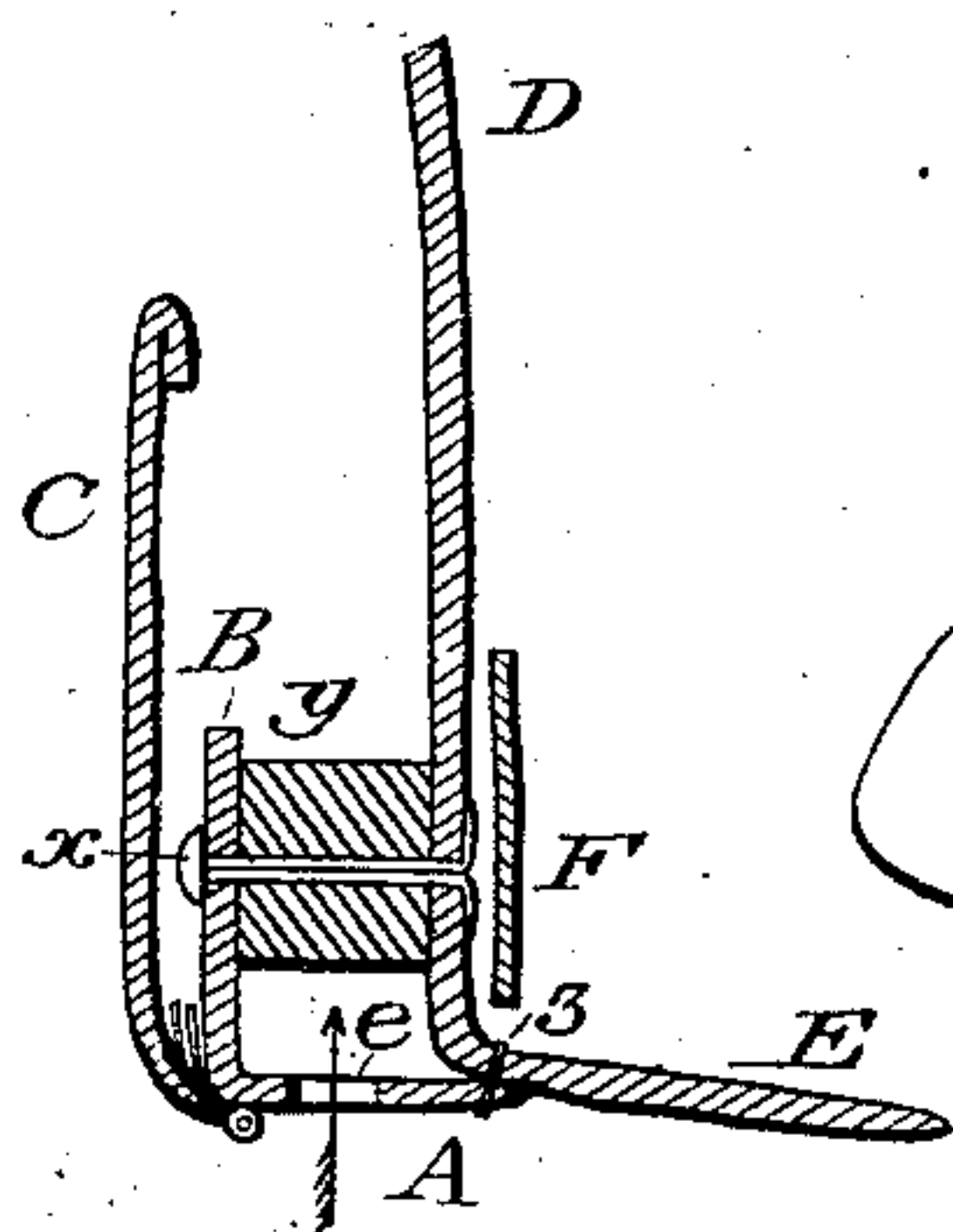


Fig. 7.

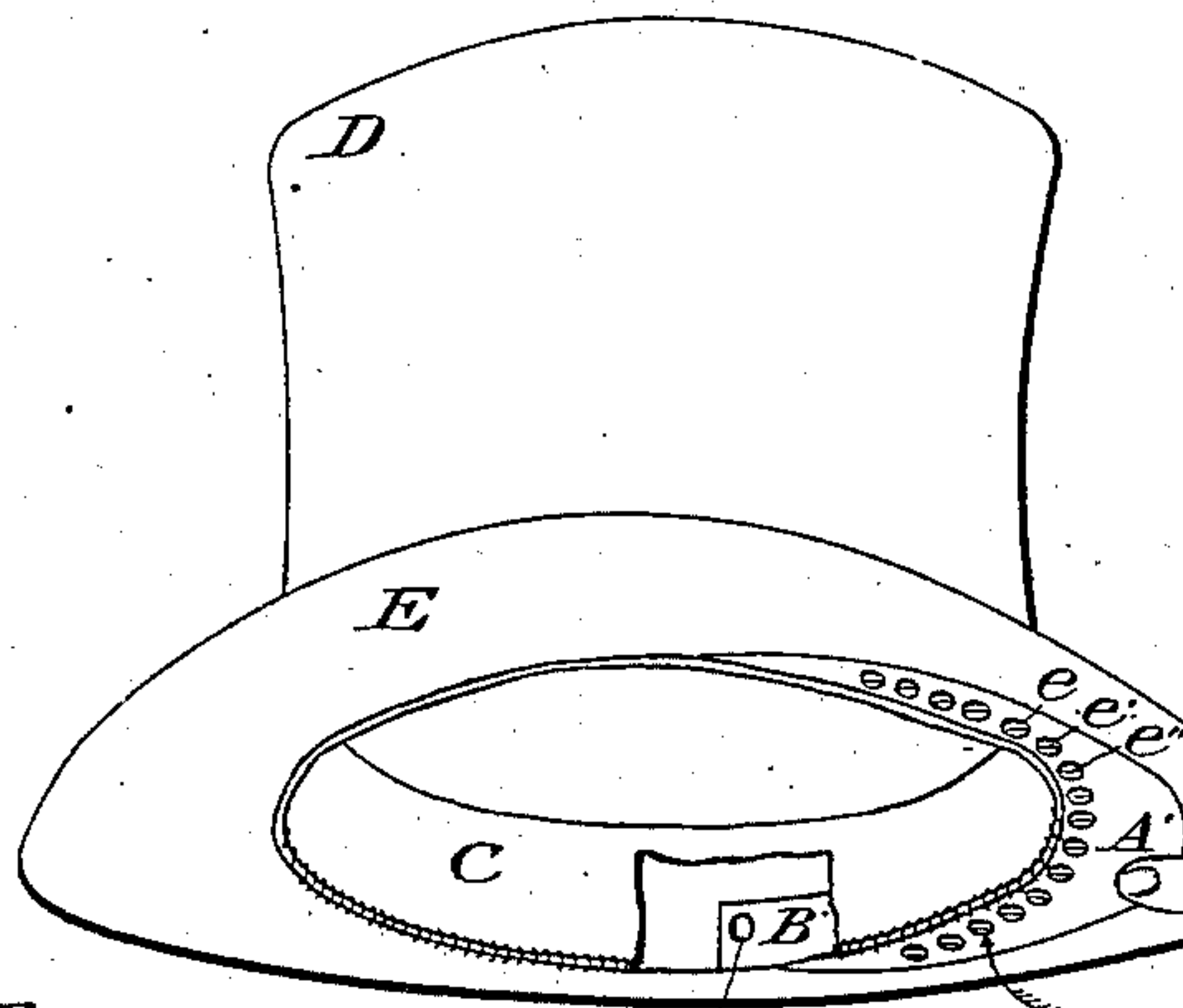
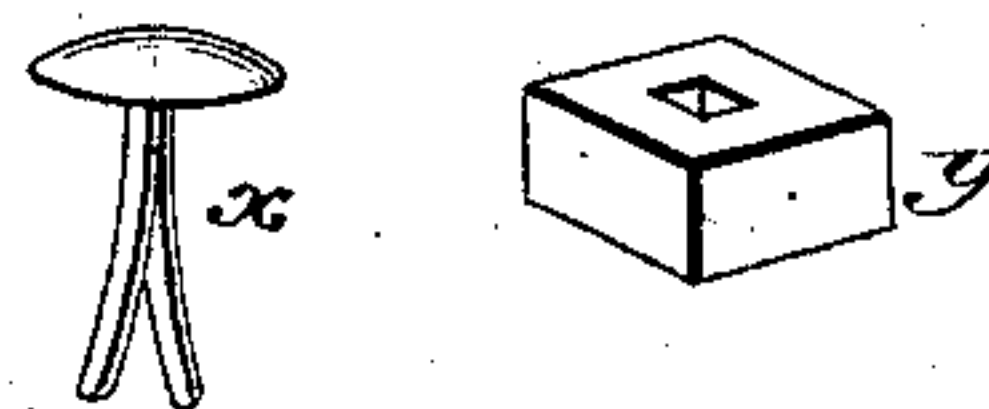


Fig. 9.

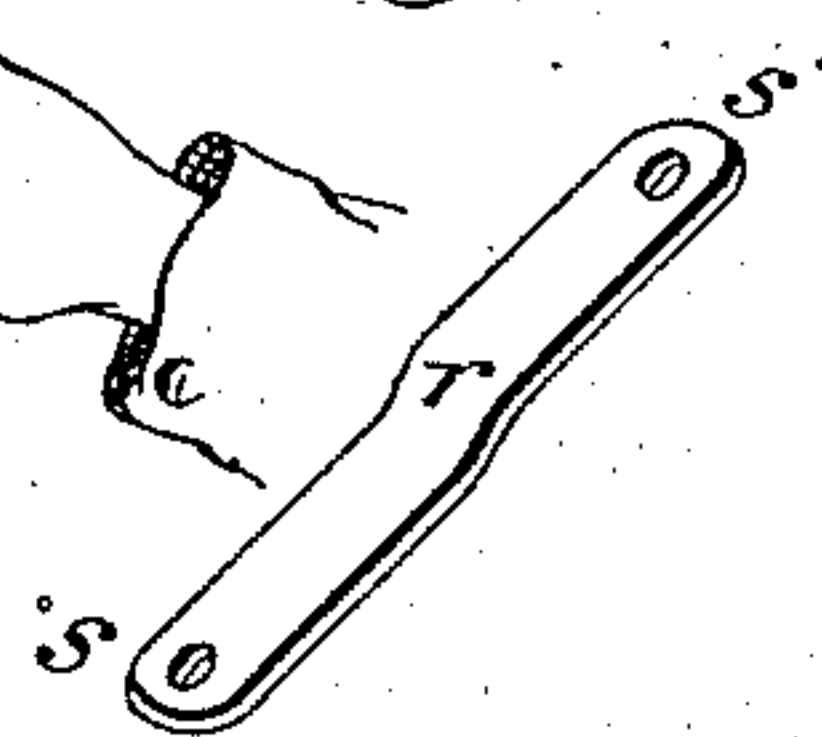
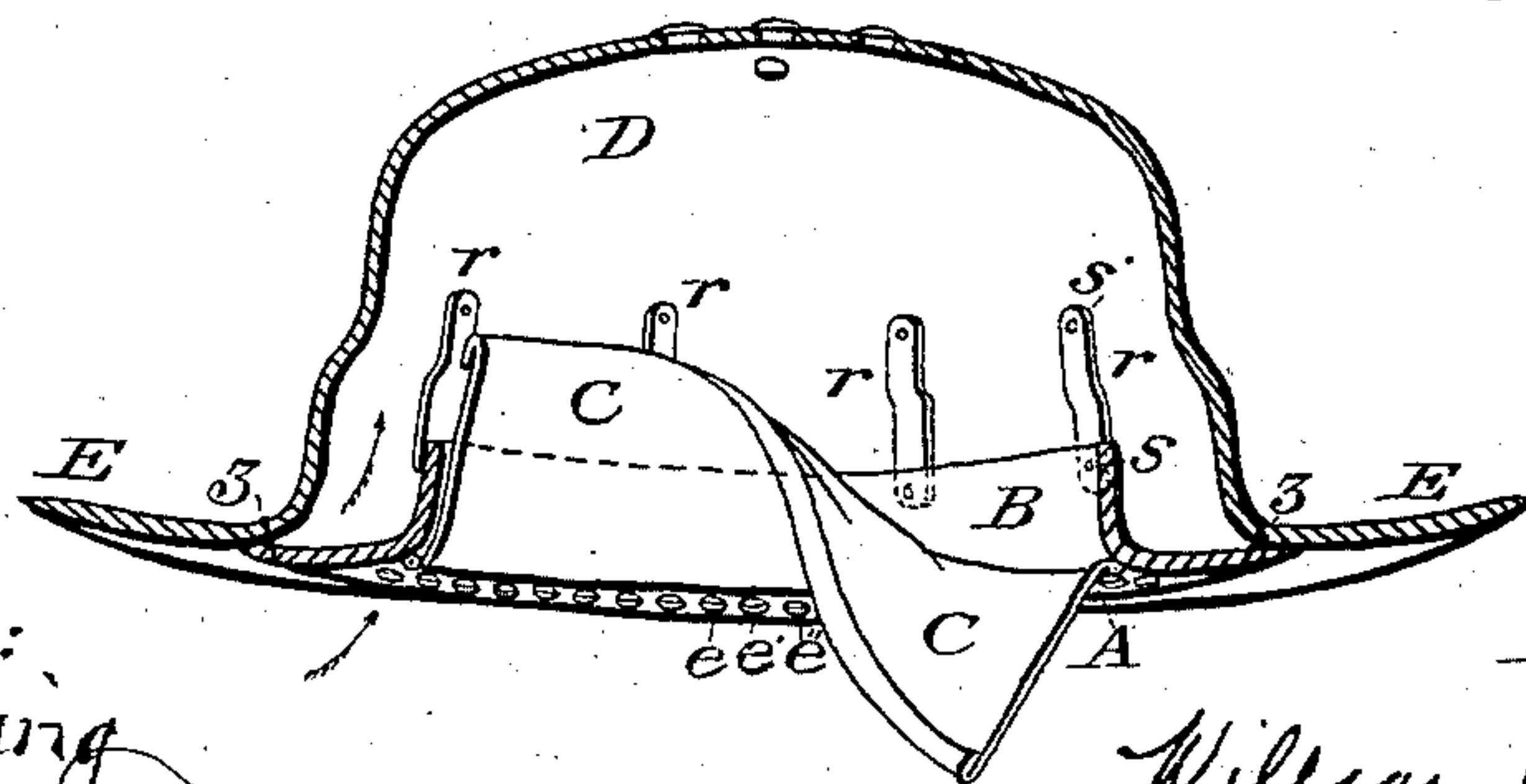


Fig. 8.



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UNITED STATES PATENT OFFICE

WILLIAM M. PROTHEROE, OF NEW YORK, N. Y.

VENTILATOR FOR HATS.

SPECIFICATION forming part of Letters Patent No. 294,149, dated February 26, 1884.

Application filed April 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. PROTHEROE, of the city, county, and State of New York, have invented certain new and useful Improvements in Ventilators for Hats, of which the following is a specification.

My improvement relates to that class of hats in which space is left between the head of the wearer and the side crown of the hat, or between the side crown of the hat and the sweat-leather, for free circulation of air for purposes of ventilation.

The objects of my invention are, first, to provide a ventilator for hats which will fit, conform to, and rest against the head in the same manner and with the same effect in all respects as the common fur or wool felt hat trimmed with the ordinary sweat-leather; second, to provide, as a separate article of manufacture, a permanent felt ventilator for hats trimmed with sweat-leather, prepared to be easily secured to any hat as purchaser may desire; third, to provide a cheap, durable, and neat ventilator-hat, to be constructed out of the materials and by the means ordinarily employed in felt or wool hatting.

These objects I accomplish by, and my invention consists in, the insertion between the sweat-leather and the side crown of the hat of a ring or an annular section of felt, shaped and perforated as hereinafter described, to which the sweat-leather is secured, and which is secured to the hat-body by the means and in the various ways hereinafter fully described.

In this class of ventilator-hats heretofore constructed various materials have been used to separate the hat-sweat from the side crown—viz., corrugated wire, metallic springs, fluted plates, rubber tubes, rings or annular sections of metal or wire-cloth, and many others. The effect of the introduction of any of these materials has been to interfere with the elasticity and conformability of the hat wherever the same have been inserted. As a result that portion of the hat was either less or more elastic, did not conform as readily to the head, or did not exert a uniform pressure against the head. It is also to be remarked that with this class of ventilators a different kind of sweat-leather from that ordinarily employed in hats was rendered necessary, as well as a different

method of securing the same within the hat. These sweat-leathers were often badly or not at all flanged, rough and uncomfortable to the head, and unsightly; again, very difficult of attachment, requiring much nicety in adjustment, and considerable expense. I seek by my invention to do away with all these difficulties by bringing to bear against the head only the same felt and the same sweat-leather which are found in the ordinary felt hat, and by providing a ventilator to which any of the ordinary hand-made or machine-made reeded or unreeded sweat-bands may be secured as readily and in the same manner as the ordinary hat.

In the drawings, Figure 1 is a perspective view of my ring of felt for ventilating hats. Fig. 2 shows a section thereof through the line K K, with the sweat-leather partly attached. Fig. 3 represents my annular section of felt for ventilating hats. Fig. 4 shows the same in perspective, with the sweat-leather secured thereto. Fig. 5 shows a hat with my improved ventilator inserted, and also the hand of the wearer grasping the same. Fig. 6 shows a cross-section of one side of a hat with my improved ventilator attached. Fig. 7 shows one of the fastenings and chock-blocks which I employ to secure my ventilator to hats. Fig. 8 shows my improved ventilator attached to that class of hats in which the lower part of the crown is enlarged for the purpose of ventilation. Fig. 9 shows the strip which I employ, securing my ventilator to the class of hats illustrated in Fig. 8.

Similar letters of reference indicate corresponding parts

In preparing my ventilator, I provide a ring, A B, or an annular section, A' B', of fur, wool, or other felt, made all in one piece, and as thin and light as practicable. It may be made from the waste roundings of a hat-factory, or from felt specially prepared for the purpose. In the former case the expense of my ventilator will be much cheapened. The brim, lip, or flange A or A', which corresponds to the brim of a hat, is made sufficiently broad, so that it will cover the space allowed for ventilation and lap over upon the under side of the hat-brim E, (as shown in Figs. 5, 6, and 8,) and the portion B or B', which extends upward within the

hat-crown D, is made about one-half inch wide, thereby serving to strengthen the ring or section and to support the sweat-leather, which is attached thereto, against the head, giving the effect of an ordinary felt hat, and at the same time preserving the space allowed for ventilation. This portion B or B' also serves as a means of securing the ventilator into the hat by use of the clamps or fastenings and strips hereinafter described. The ordinary sweat-leather C is secured to the ring or section, as illustrated in Figs. 2 and 4, in the same manner as to an ordinary hat. I prefer to strengthen the reeded sweat-leather for this purpose by employing, instead of the common reed or fine wire, a thick wire of tempered brass or steel. The sweat-leather may be as much flanged as desired. This ring or section is stiffened with shellac or other suitable material, curled and set to conform to the hat in which it is intended to be used. It is obvious that such exact shape may be given to it that it will fit closely against the under side of the hat-brim, so as to appear almost identical therewith. The outer edge of the ring or section may be beveled toward the hat-brim, or it may be bound. This felt ring or section is perforated all way or part way round, as may be desired, at points *e e' e''*, &c., to admit air to the space allowed for ventilation. A metallic punch or other suitable appliance may be used for this purpose. The perforations should be made as near the intersection of the parts A and B, or A' and B', as the sweat-leather will allow. I do not limit myself to any particular form, size, or distribution of these ventilation-holes. I also employ rings or sections of soft or semi-stiff felt or stiffened cloth, prepared in other respects as above. The ventilator thus prepared will fit the head precisely as any ordinary felt hat now in use.

In applying my ventilator to a hat, space is allowed between the portion B of the ring A B, or between the portion B' of the section A' B', and the inner side of the side crown of the hat for the circulation of air, which is admitted by the holes *e e' e''*, &c., as shown in Fig. 6. Where the continuous ring A B is used, the exterior circumference of the portion B thereof is less than the interior circumference of the side crown of the hat at its line of intersection with the brim. Where the section A' B' is used, the ventilation-space is left widest at the middle of the section, and gradually diminishes toward the ends of the section, which are secured closely to the side crown of the hat.

My ventilator may be attached to the hat in several ways. It may be sewed directly to the hat-brim E by the row of hand or machine stitches shown at *z z' z''*, &c., in Figs. 2, 3, 6, and 8, which pass through the portion A or A', near its edge, and through the hat-brim E; or it may be attached to the side crown of the hat by means of the metallic clamps or fastenings *x, x', and x''* shown in Figs. 1, 2, 3, 4, 5, and 6, which pass through the por-

tion B or B', through the chock-block *y*, and are clamped firmly through the side crown, D, near its intersection with the brim E, as shown in Fig. 6. I employ several of these fastenings and blocks at intervals around the hat in securing the continuous ring A B, and only one or two with the section A' B'. In the latter case the ends of the portion B' may be secured to the hat-body by a row of stitches, or by a fastening, *x*, without chock-block, and the remaining part of the sweat-leather to the hat in the usual manner.

I do not limit myself to any particular kind or shape of either clamp or chock-block, as there are many which will answer my purpose, namely, of securing the portion B or B' firmly to the side crown, and at the same time holding it at a distance therefrom to support the sweat-band against the head and insure free ventilation. That portion of the fastening *x* which protrudes and is folded over against the outside of the side crown is concealed by the band of the hat F, as shown in Fig. 6. Greater strength and durability are secured by using both the fastenings *x* and the stitches *z* in the same hat. I also make the lip, brim, or flange A or A' broader in the front, so that in putting on or removing the hat the wearer may extend the thumb over the rim or lip A or A', hold it tightly up against the brim E, between the thumb and fingers, as illustrated in Fig. 5, and thus prevent the ring or section from being torn or broken. This is particularly useful with certain kinds of sweat-bands which perspiration causes to adhere tightly to the forehead.

In applying my invention to the class of hats shown in Fig. 8, and before described, I employ both the row of stitches *z z' z''*, &c., and strips of metal or other suitable material, shaped as shown in Figs. 8 and 9, to secure the ring A B firmly to the hat. The strips *r* are riveted or otherwise fastened to the outer surface of the portion B at point *s*, and to the hat-crown, above where it is enlarged, at *s'*. Several of these strips are used at intervals around the hat, as shown.

The fastenings *x* and chock-blocks *y* may be used in this class of hats in the same manner as heretofore described, either instead of the strips *r* or in combination with them.

I am fully aware that rings or sections of metal supporting and sizing the sweat and separating it from the side crown without or with flanges perforated for ventilation were in use prior to 1858, as stated in Letters Patent No. 19,616, and that flanges of leather with perforations, as claimed in said patent, have been used; and also that angular rings or sections of wire-cloth have been applied in this same manner, and patented in Letters Patent No. 211,527; but these do not accomplish the improvement contemplated by my invention. I therefore do not claim, broadly, such rings or sections, with or without flanges perforated for ventilation.

In placing my improved ventilator in that

class of hats shown in Fig. 8, I do not claim a vertical supporting-strip secured to and bearing upon the under side of the offset in the body of the hat, as described, and claimed in Letters Patent No. 225,235; but

What I do claim, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a ventilator for hats composed of the ring of felt A B, perforated at $e\ e'\ e''$, &c., prepared and shaped substantially as described.

2. As a new article of manufacture, a ventilator for hats composed of the annular section of felt A' B', perforated at $e\ e'\ e''$, &c., prepared and shaped substantially as described.

3. As a new article of manufacture, a ventilator for hats composed of the ring of stiffened cloth A B, perforated at $e\ e'\ e''$, &c., prepared and shaped substantially as described.

4. As a new article of manufacture, a ventilator for hats composed of the annular section of stiffened cloth A' B', perforated at $e\ e'\ e''$, &c., prepared and shaped substantially as described.

5. The combination, in a ventilator-hat, of the ring of felt A B, with the perforations $e\ e'\ e''$, &c., the sweat-band C, and the row of stitches $z\ z'\ z''$, &c., substantially as and for the purposes described.

6. The combination, in a ventilator-hat, of the ring of felt A B, with the perforations $e\ e'\ e''$, &c., the sweat-band C, and the clamps or fastenings x , with chock-blocks y , substantially as and for the purposes described.

7. The combination, in a ventilator-hat, of the ring of felt A B, with perforations $e\ e'\ e''$, &c., sweat-band C, row of stitches $z\ z'\ z''$, &c., and clamps or fastenings x , with chock-blocks y , substantially as and for the purposes described.

8. In a ventilator-hat, the construction of the flange A of the ring A B sufficiently broad in that part which is adapted to the front of the hat to enable the wearer to grasp it between the thumb and fingers and support it up against the under side of the hat-brim in the operation of putting on or removing the hat, substantially as described.

9. The combination, in a hat the crown of which is enlarged as it approaches the brim for the purpose of ventilation, of the ring of felt A B, perforations $e\ e'\ e''$, &c., and the sweat-band C, substantially as and for the purposes described.

10. The combination, in a hat the crown of which is enlarged as it approaches the brim for the purpose of ventilation, of the ring of felt A B, perforations $e\ e'\ e''$, &c., sweat-band C, row of stitches $z\ z'\ z''$, &c., and supporting-strips r , secured at s and s' , substantially as and for the purposes described.

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Witnesses:

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