

(No Model.)

2 Sheets—Sheet 1.

J. W. GREENE.
BOSOM FORM.

No. 401,028.

Patented Apr. 9, 1889.

Fig. 1.

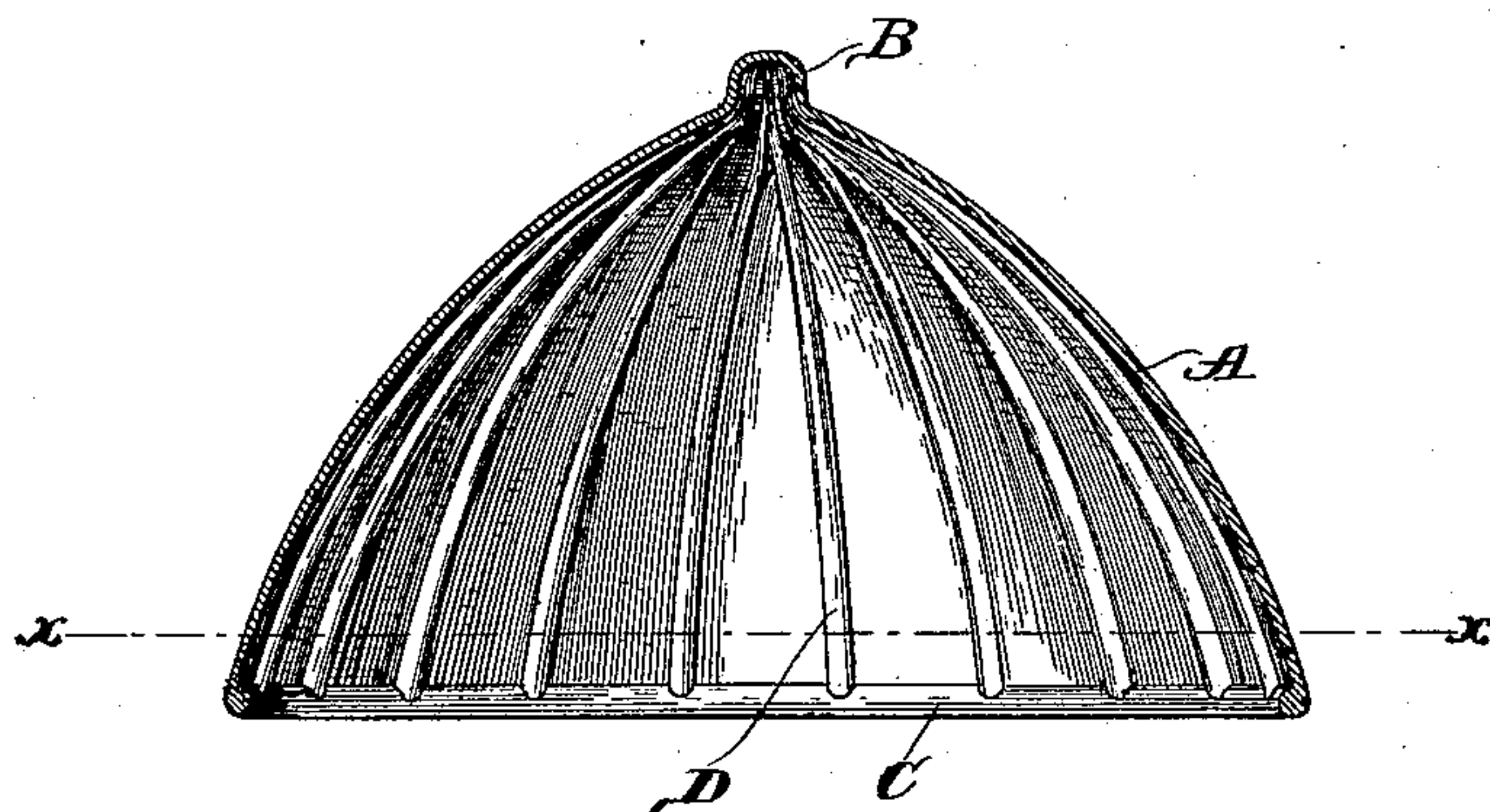


Fig. 2.

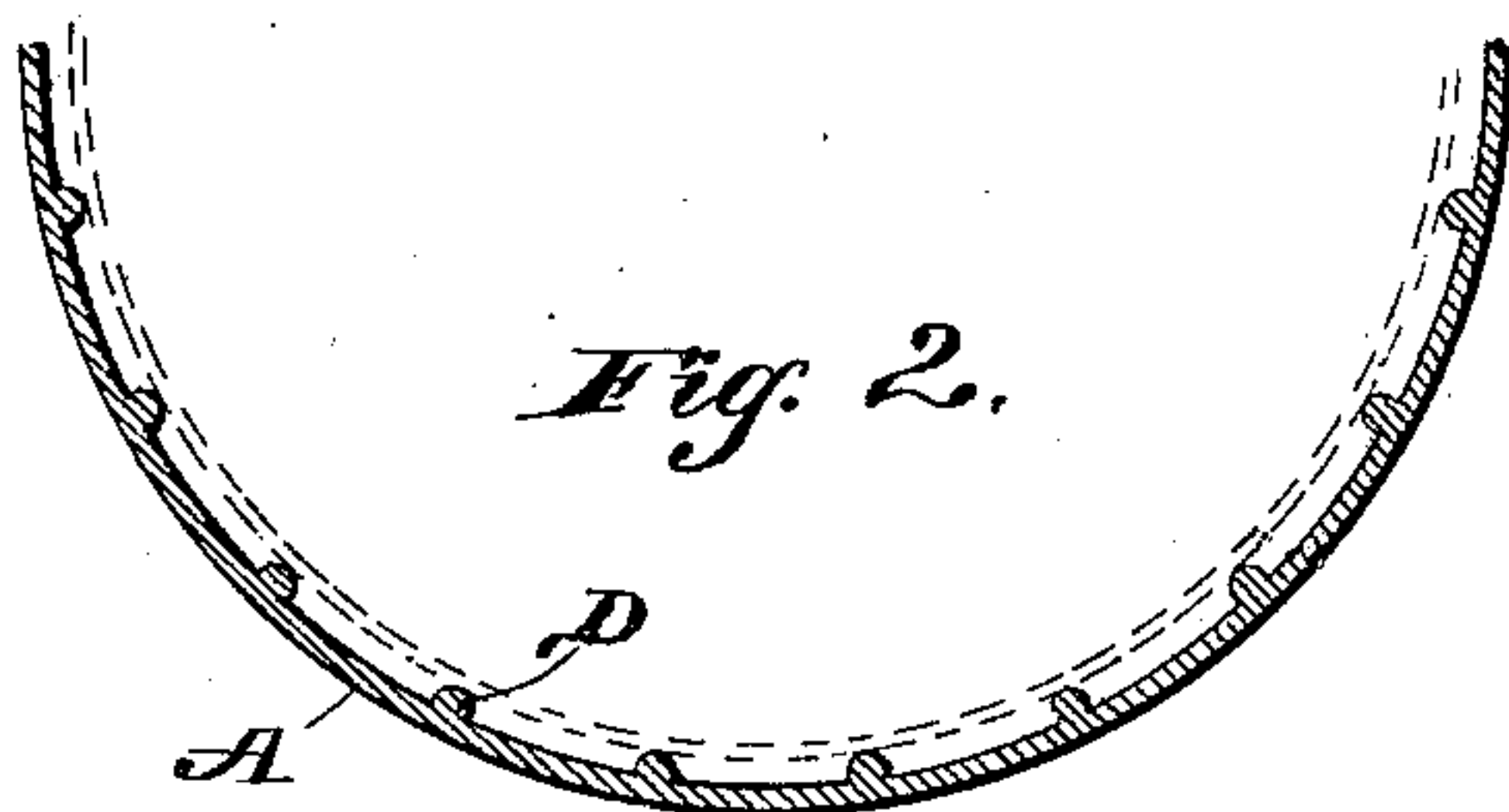


Fig. 3.

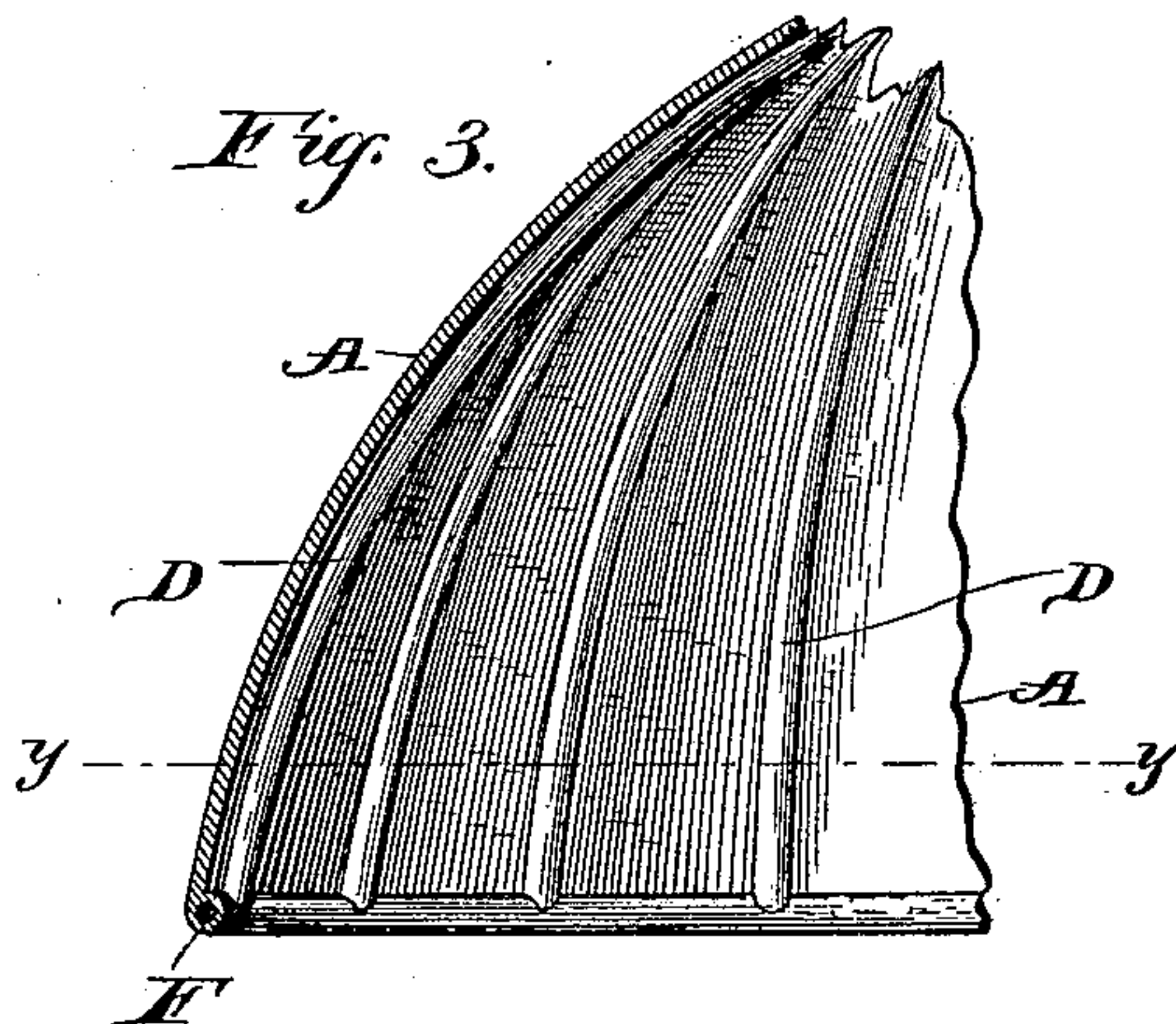
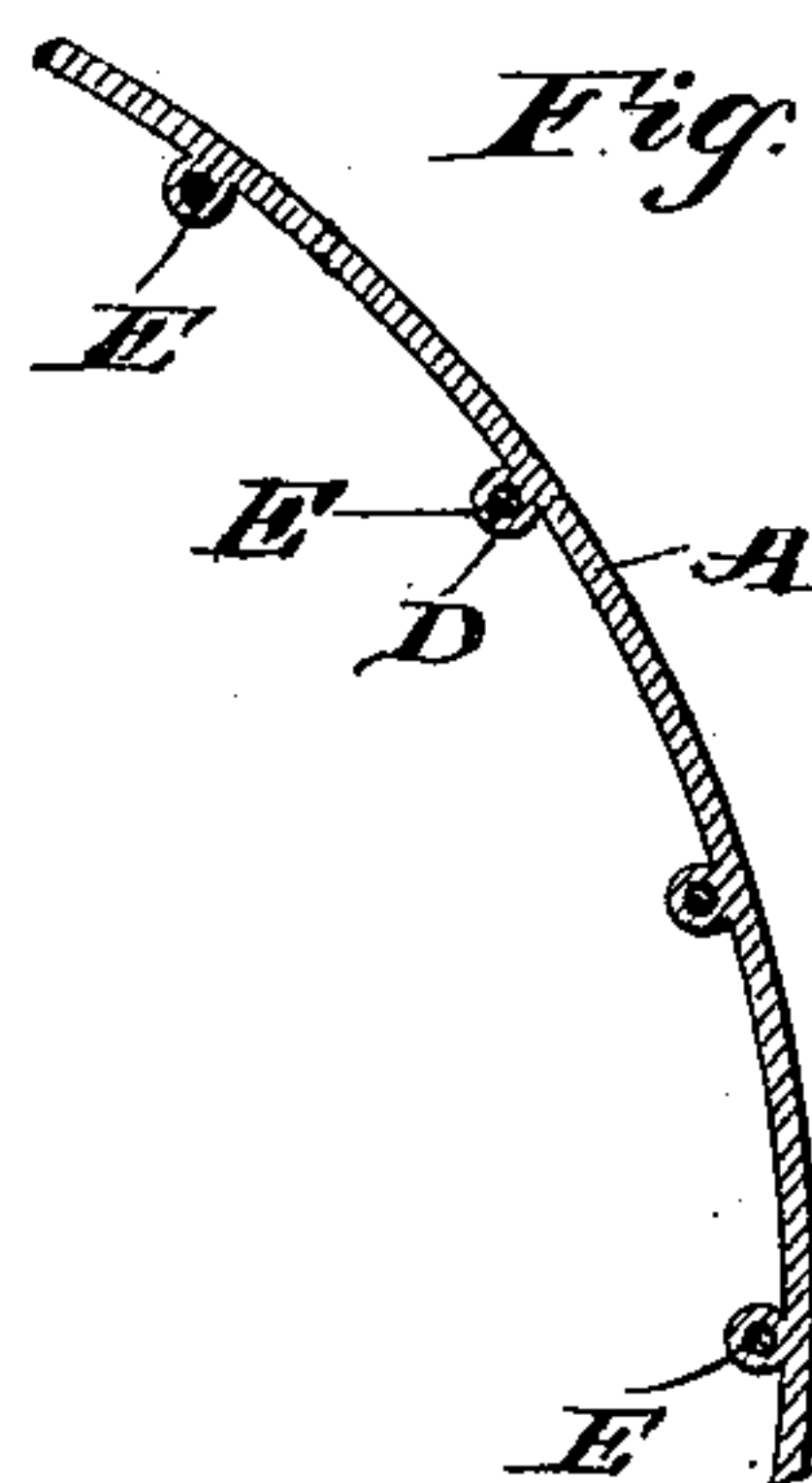


Fig. 4.



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Fig. 5.

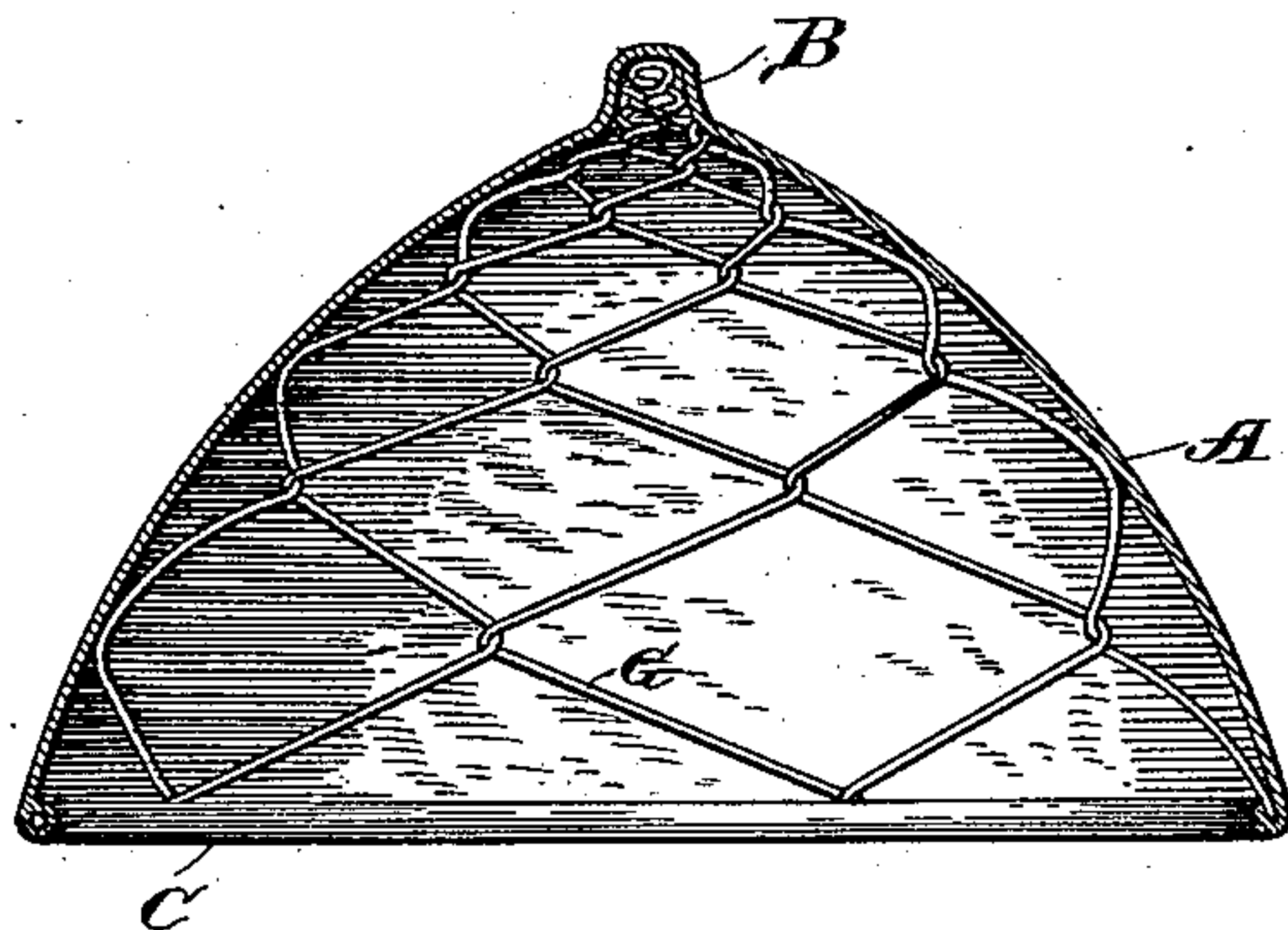


Fig. 6.

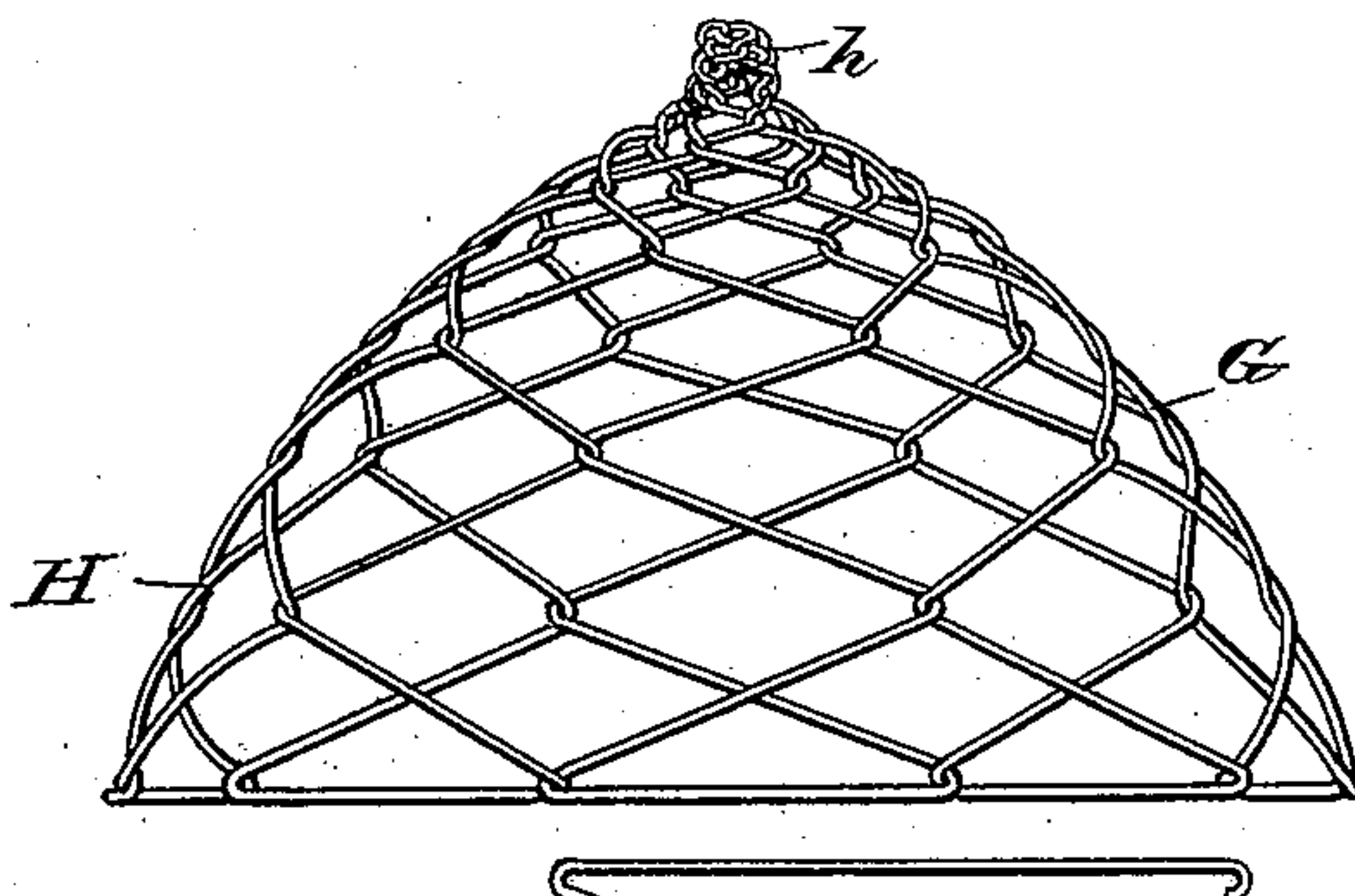


Fig. 9.

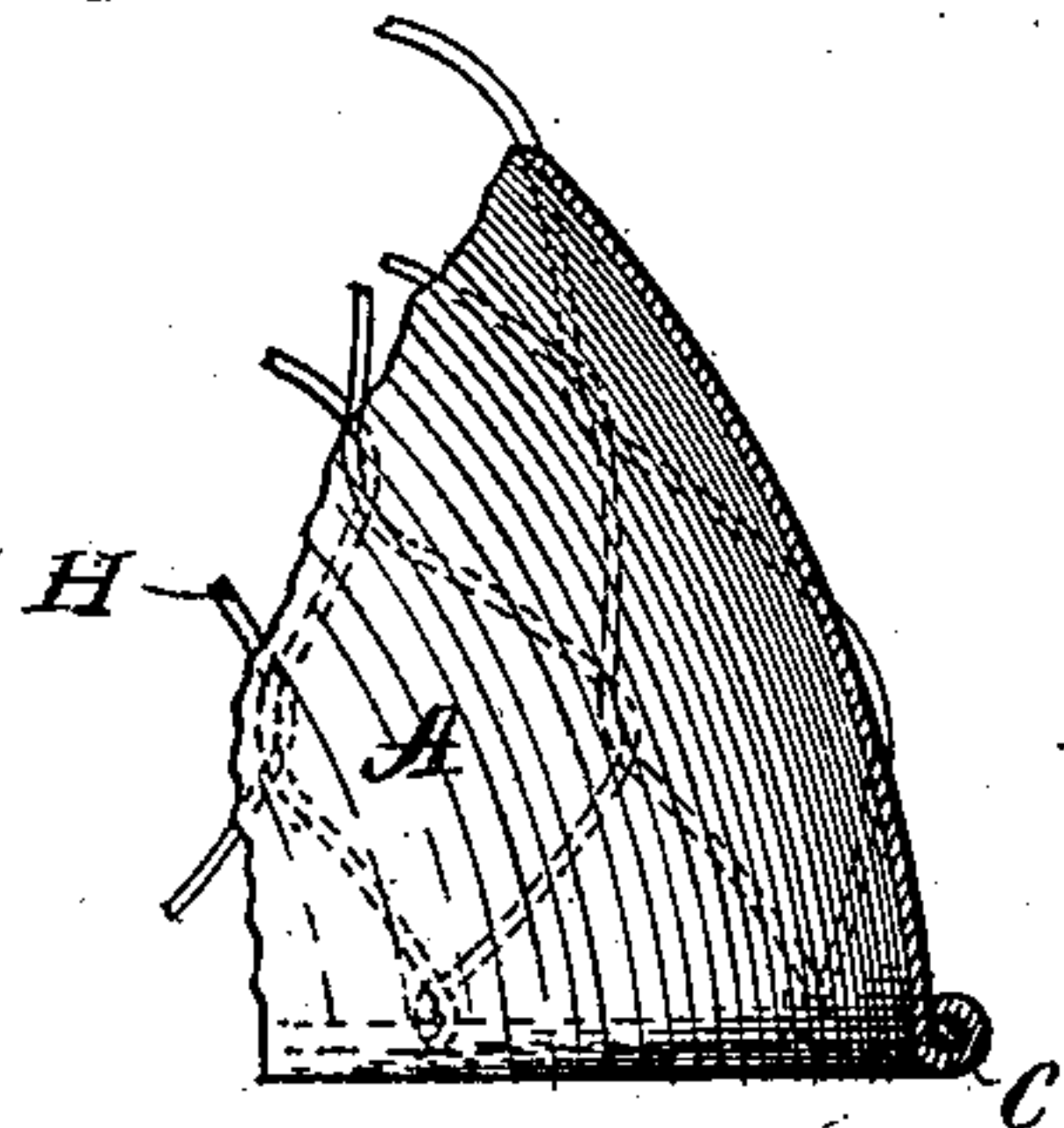
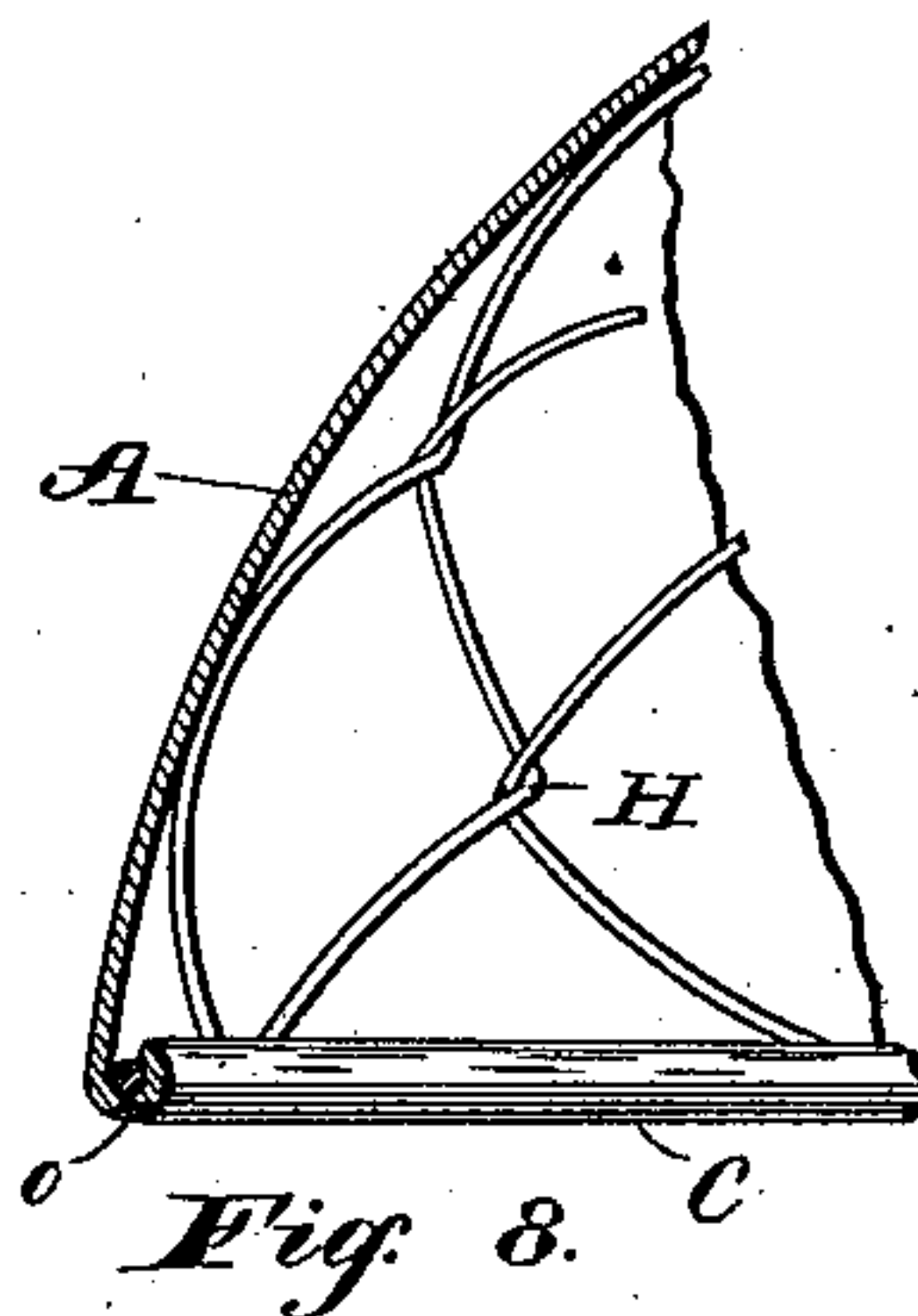
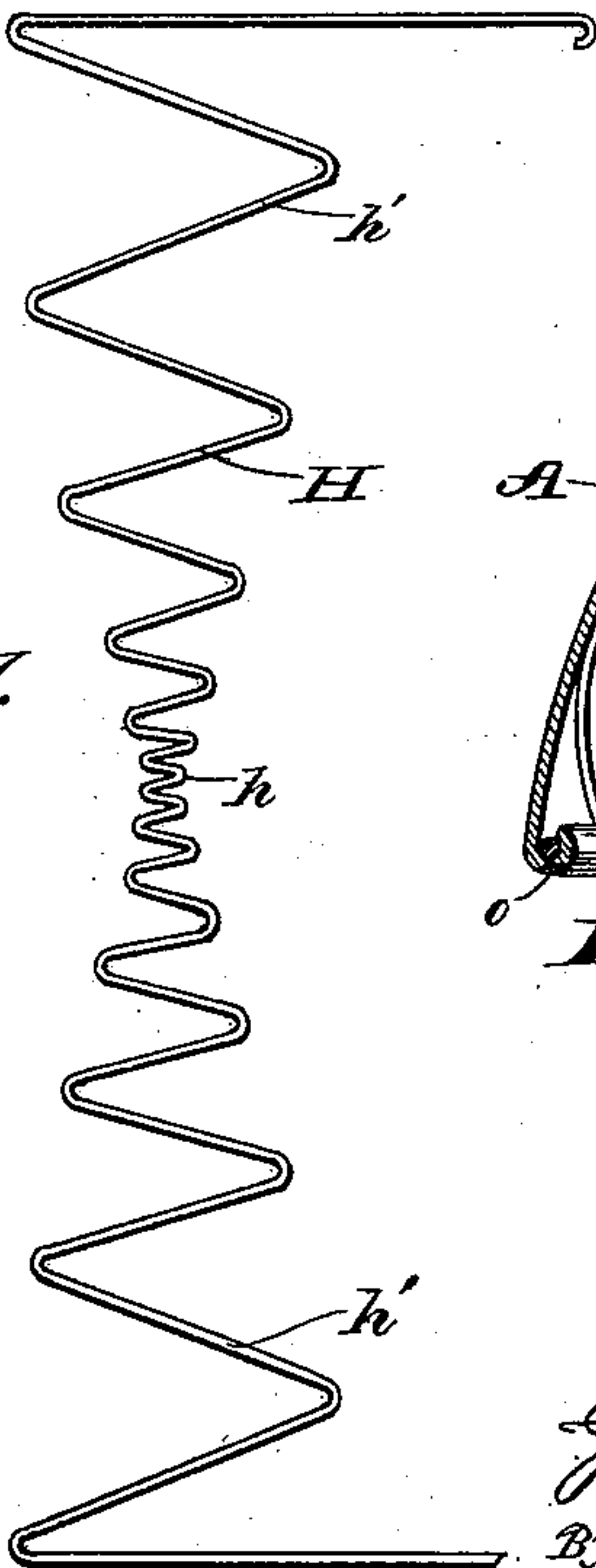


Fig. 7.



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UNITED STATES PATENT OFFICE.

JACOB W. GREENE, OF CHILLICOTHE, MISSOURI.

BOSOM-FORM.

SPECIFICATION forming part of Letters Patent No. 401,028, dated April 9, 1889.

Application filed October 30, 1888. Serial No. 289,544. (No model.)

To all whom it may concern:

Be it known that I, JACOB W. GREENE, a citizen of the United States, and a resident of Chillicothe, in the county of Livingston and State of Missouri, have invented certain new and useful Improvements in Bosom-Forms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in suction-cups adapted for use as a bosom-form; and it consists of the peculiar construction and arrangement of parts, as will be hereinafter fully described and claimed.

The primary object of my invention is to provide a suction-cup which is adapted to be applied by a simple pressure of the hand, and which will hold itself in position by suction to the human breast or other part of the body.

Some of the important results attending the use of a suction-cup embracing my invention are the development and enlargement of the parts of the body to which it is applied, the relief of local pain, and the treatment of disease. This is accomplished by lifting the atmospheric weight and causing a freer circulation and increased flow of blood to and through the flesh operated on. This is particularly true and practicable in case of the mamillary glands; hence my invention is especially adapted to use on the human breast, mainly for the purpose of developing and enlarging it. When not used as a suction-cup, my device is worn simply and loosely as a bosom-form, with its rim resting directly against the flesh and held in place by a corset or other convenient fastening. When used as a suction-cup, which may be as frequent and as long at each time as comfort and necessity may determine, it is applied to and over the breast by a simple but forcible pressure of the hand on the outside of the clothes. In use no part of my invention touches the main and tender part of the gland. Only the rim comes in contact with the flesh, and this rim only presses on the outer edge of the breast.

By the construction of my combined suction-cup and bosom-form and the yielding nature of the material the cup flattens on the

bosom when hand-pressure is exerted thereon, which thereby exhausts or drives the air from under it, and when the hand is lifted and the pressure thereof thus removed the cup springs back or returns to its original shape and sucks tightly to the breast, with a very rarefied air under it. It is thus worn loosely as a bosom-form and tightly as a suction-cup at will until the natural breast is gradually so developed and enlarged that the cup is no longer needed to build the bosom out artificially.

With these ends in view I will term my invention an "improvement in bosom-forms," and proceed to describe the construction thereof in connection with the accompanying drawings.

It consists, essentially, of an elastic imperious cup conforming closely to the shape of a well-developed woman's breast, with or without a nipple, and with resilient stiffening-braces rigidly united to the cup for increasing its resiliency and for stiffening the same. The cup is made of an elastic rubber and strengthened to obtain sufficient strength and flexibility with resilient stiffening ribs and braces arranged and secured, preferably, within the cup. These braces are composed of rubber, metallic spring wires, whalebone, or other flexible substance, substantially as hereinafter more fully described.

In the accompanying drawings I have illustrated three bosom-forms contemplated by my invention, in which—

Figure 1 is a central sectional view through a bosom-form embracing my invention. Fig. 2 is a transverse sectional view on the line $x x$ of Fig. 1. Fig. 3 is a detail sectional view, partly broken away and on a slightly-enlarged scale, of a modification of the construction shown in Figs. 1 and 2. Fig. 4 is a detail sectional view of the device shown in Fig. 3 on the line $y y$ of the same figure. Fig. 5 is a view corresponding to Fig. 1, showing another construction contemplated by my invention. Fig. 6 is a detail view in elevation of the foundation wire frames shown in Fig. 5. Fig. 7 is a detail view of one of the springs of which said wire frame is made. Figs. 8 and 9 are detail sectional views of other forms of my invention.

Like letters of reference denote corresponding parts in the figures.

I will first explain the preferred construction shown in Figs. 1 and 2, then the modified construction shown in Figs. 3, 4, 5, 6, 7, and 8.

A designates an imperforate conical cup-shaped form which is made of an impervious elastic material, which can be forcibly compressed by hand. This cup-shaped form is made hollow and is left open at its larger end or base, while at the middle or apex, when a nipple is desired, there is made a hollow protuberance, B, in imitation of the nipple of a human breast, the form A being so shaped and curved as to approximate closely the appearance of a well-developed human breast. If desired, this protuberance may be omitted and the apex of the cup-shaped form be left oval or round. This form A may be made of uniform thickness, or it may vary in thickness at suitable places, as may be desired, or the material may vary at different places in consistency and hardness. At the base or open end of my improved form I provide an integral rim or flange, C, which is rounded and of greater thickness or diameter than the wall or shell of the form A. This rim C is the part that in use presses against the flesh, and to more surely prevent the passage of air thereunder it may contain a slight groove, as indicated in Fig. 8, that, in case of hard flesh, may be filled with a suitable liquid—such as water or oil—on the surface of said rim that touches the flesh.

To impart additional elasticity and resiliency to the form and cause it to promptly spring outward and resume its normal shape after it has been compressed and applied as a suction-cup to the breast, I resort to the aforesaid stiffening-braces, secured, preferably, within said form. In Figs. 1 and 2 of the drawings these resilient or flexible braces are represented in the shape of ribs D, which are preferably made integral with the cup-shaped form A. These ribs extend along the inner surface, preferably, of the form A from the enlargement B at the middle or apex thereof down to the rim C, within which they terminate. To impart additional strength and resiliency to these integral stiffening-ribs, I also contemplate using spring-wire braces E, (see Figs. 3 and 4,) which are located centrally within said ribs. In practice these ribs D are molded around the wire or other braces E, so as to form a homogeneous structure. If preferred, another spring-wire, F, may be located within the annular rim C of the form, as shown in Fig. 3.

In the modified construction shown in Figs. 5, 6, 7, and 8 I employ the imperforate, flexible, conical, or bowl-shaped form A and a spring-wire frame, G, which is made up of a series of convoluted wire springs, H, (shown in detail in Fig. 7,) which springs are suitably woven or united together to constitute the resilient or elastic stiffening-braces for distending said cup-shaped form cap or covering. Each of these spring-wires H is bent so that the middle coils thereof are much nar-

rower or shorter than the outer end coils, and these wires are then arranged and connected so that the middle coils meet at the apex of the foundation-frame, (see Fig. 6,) while the frame itself conforms approximately to the shape of the cup-shaped form A and is capable of yielding or compression when pressed by hand and of springing or returning to its normal position when released. In practice this wire frame is first made in the manner shown and described, and the cup-shaped form A is molded around the same, so that said frame is completely closed within the form and constitutes an integral part thereof, the apex of the frame fitting in the hollow protuberance of the form, while the edge or rim of the frame lies within the integral round (or grooved) rim C. I do not, however, confine myself to the precise details of construction, form, and proportions shown and described in these drawings. I am aware that changes therein can be made without departing from the spirit or sacrificing the advantages of my invention—as, for instance, the inner surface of my form may be so lined, if preferred, as to conceal the aforesaid braces, as indicated by dotted lines in Fig. 2 of the drawings; and in lieu of arranging the resilient stiffening-braces within the cup they may be located exteriorly thereto, (see the detail view, Fig. 9,) and stiffening-braces of other material possessing the required elasticity—such as whalebone—may be substituted for the spring-wire braces herein shown and described. Furthermore, the spring-wire frame shown in Figs. 5, 6, and 7 may be inclosed within a removable cup or sheath, as in Fig. 8, in which instance the flange or rim is made of such size as to receive within it the edges of the frame and thus prevent displacement or separation of the parts and impart the necessary stiffness and resiliency to the form. I am also aware that these stiffening-braces may be connected or secured to the imperforate form in many other ways, and hence I do not confine myself exclusively to the preferred way herein shown and described as an embodiment of my invention.

I am aware that a bosom-form has been heretofore made of a cloth or fabric covering and a wire supporting-frame, which form is worn loosely or held in place by means of straps or other device; but such is not my invention. My invention is distinguished from devices of this character in that I employ an elastic cup which is impervious to air and made of rubber, and resilient stiffening-braces rigidly united to the cup to impart strength and a degree of elasticity thereto not possessed by the cup alone, whereby the cup will forcibly rebound and thus exhaust the air from between itself and the part to which it is applied and hold itself in place by suction.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a breast-form and suction-cup, the

combination of a compressible spring-frame, substantially as described, constructed to rebound when forcibly compressed and released, and an elastic rubber cup inclosing said frame
5 capable of holding itself in place by suction against the part to which it is applied, for the purpose described.

2. A bosom-form and suction-cup consisting of an elastic rubber cup having a series
10 of integral stiffening-braces, substantially as described, said braces extending along one face of the cup from a point near its open end to the apex thereof, for the purpose specified.

3. A bosom-form and suction-cup consist-

ing of an elastic cup made of a single thick- 15
ness of rubber and stiffening-braces extending radially from the open end of the cup toward the apex thereof, said braces being composed of inner wire springs and integral ribs
inclosing the springs, substantially as and for 20
the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB W. GREENE.

Witnesses:

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H. G. ORTON.