

O. KAUFMANN.  
 INCANDESCENT MANTLE.  
 APPLICATION FILED OCT. 21, 1905.

940,639.

Patented Nov. 16, 1909.

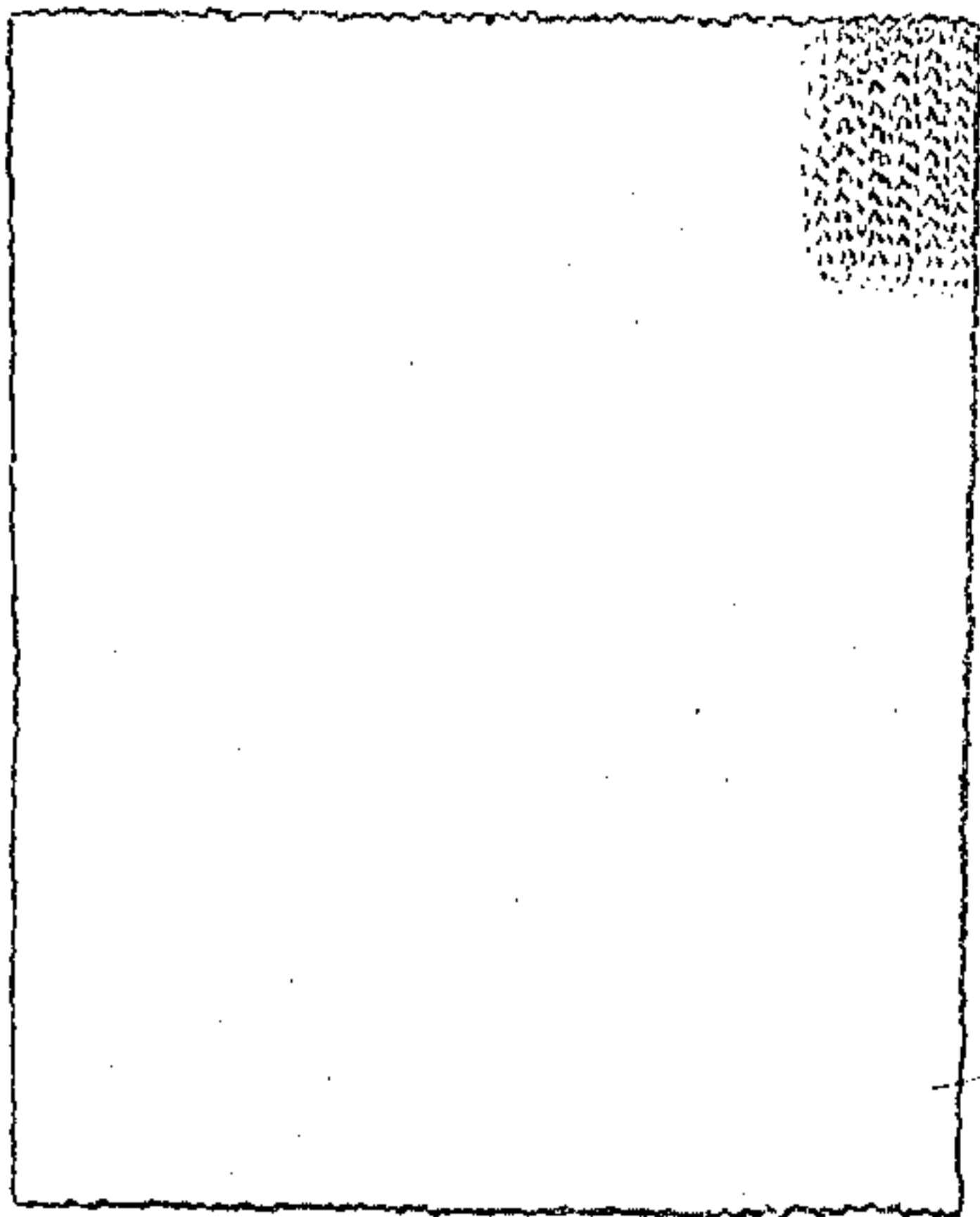


Fig. 1.

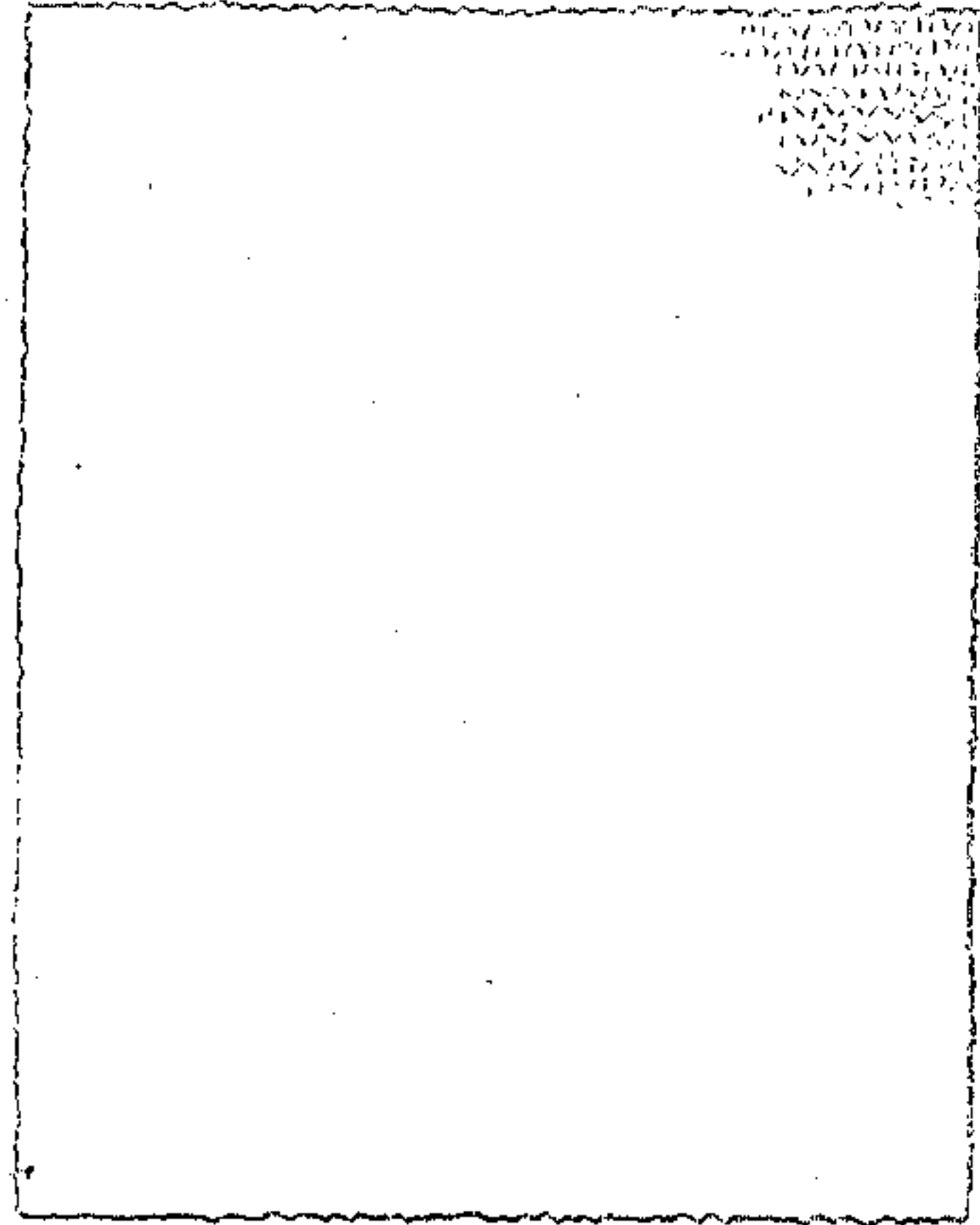


Fig. 2.

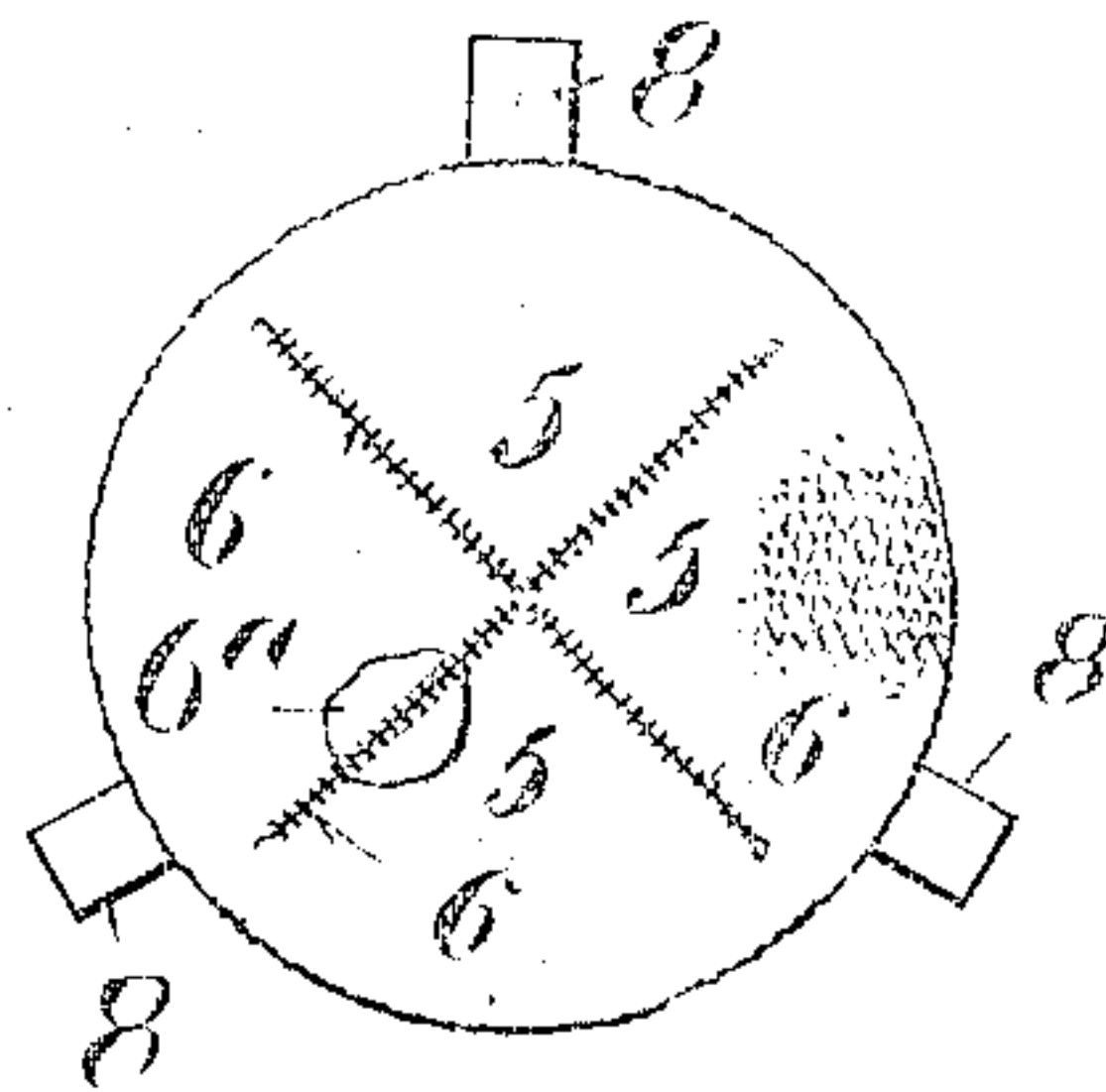


Fig. 7.

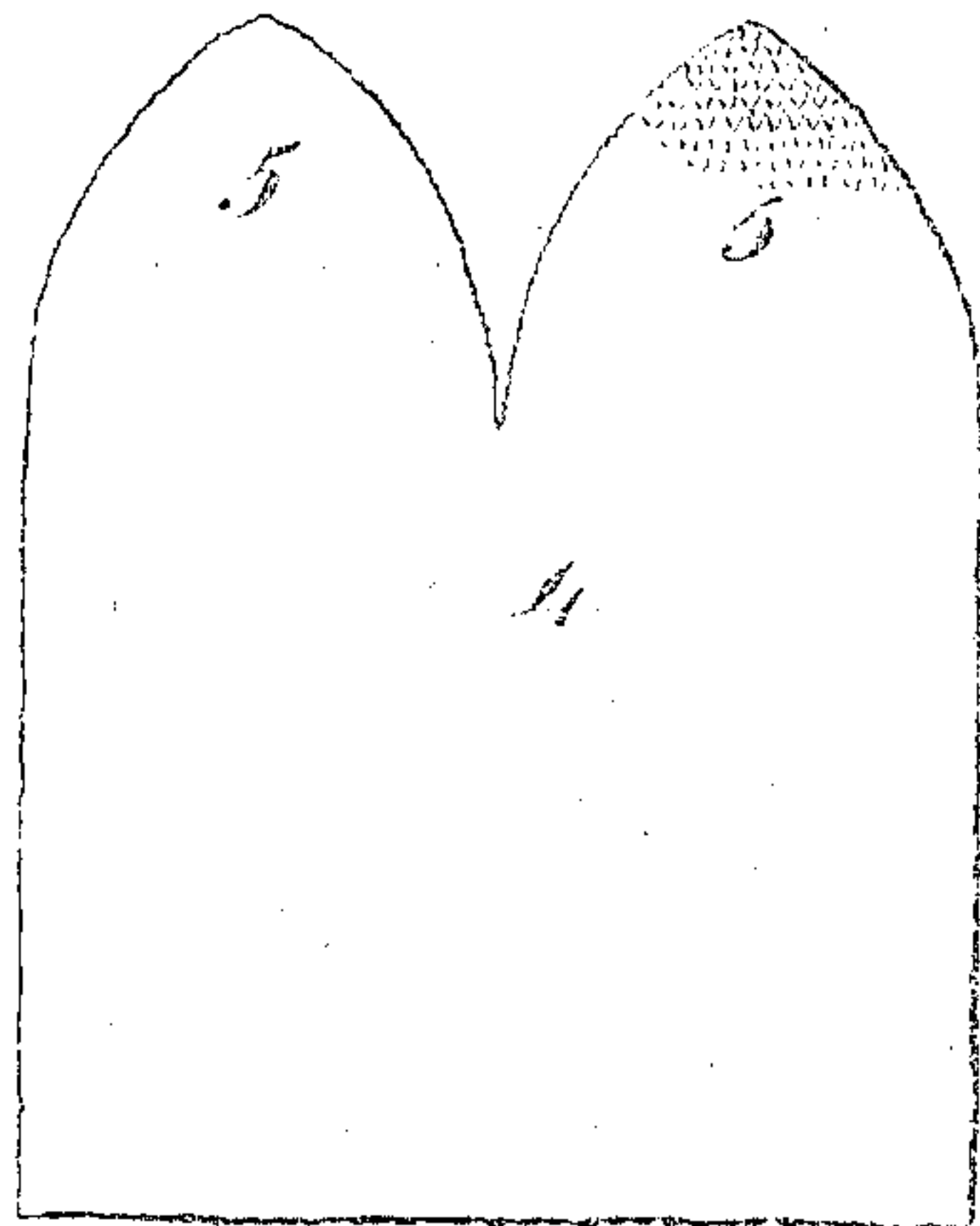


Fig. 3.

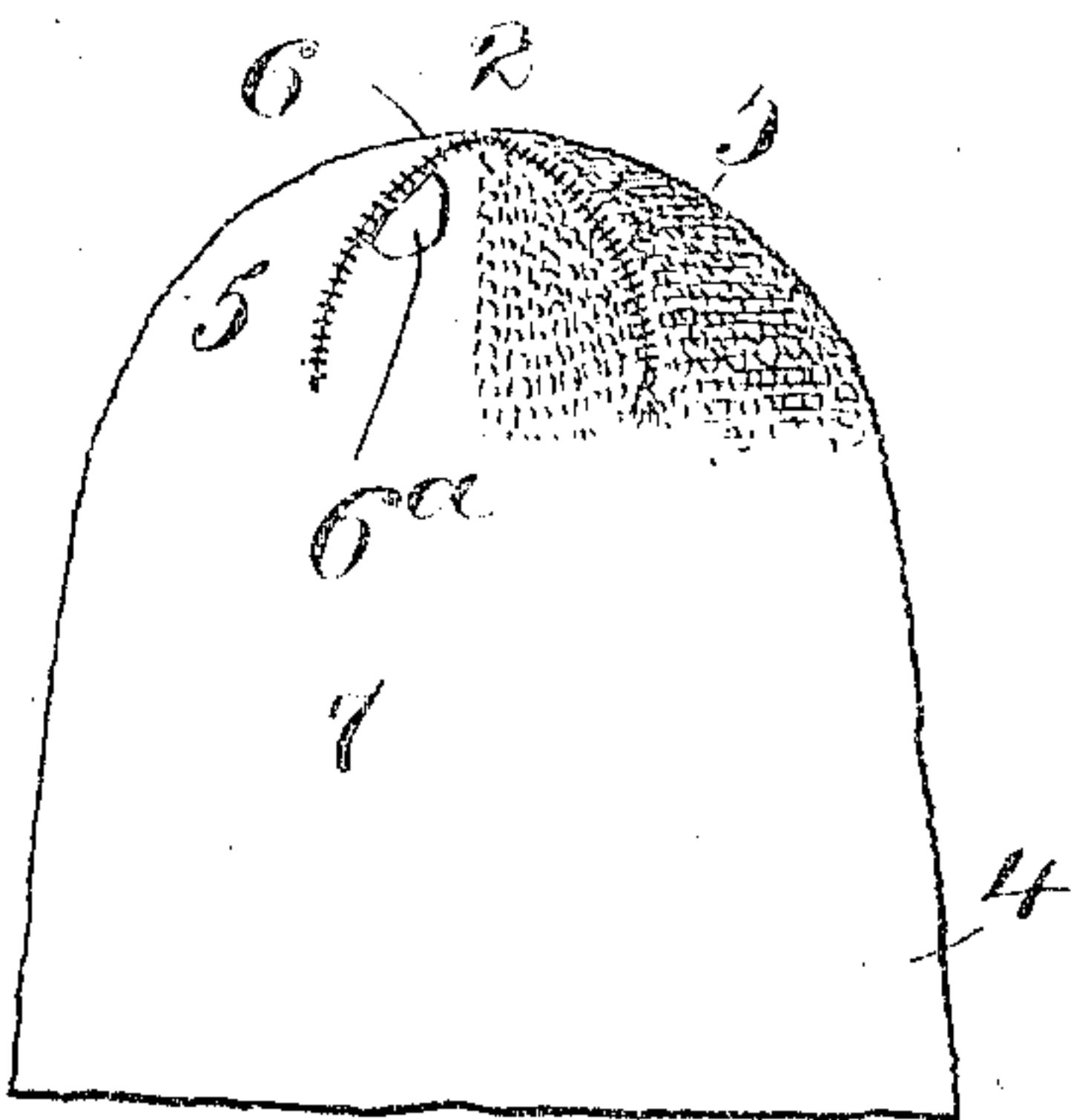


Fig. 4.

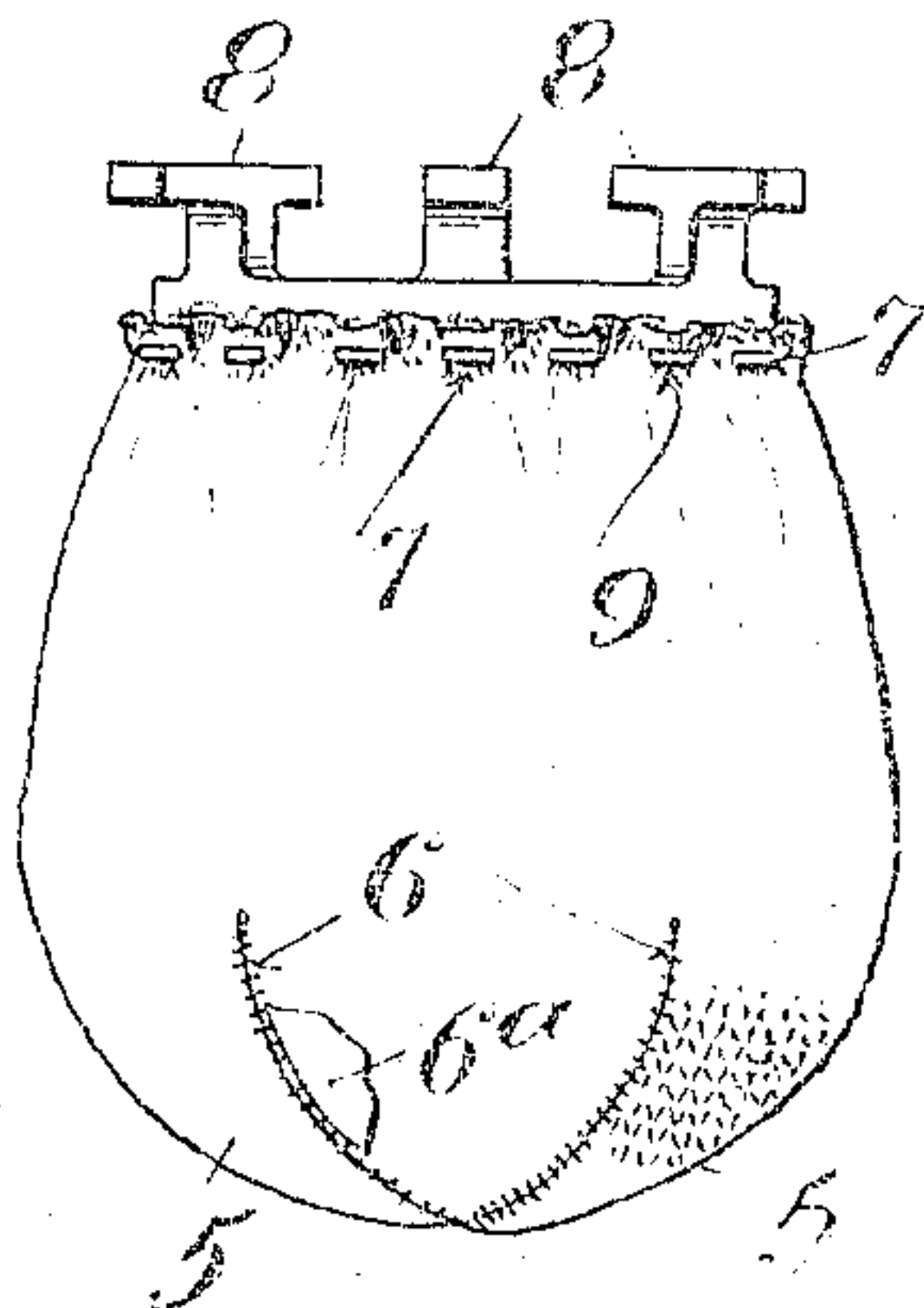


Fig. 5.

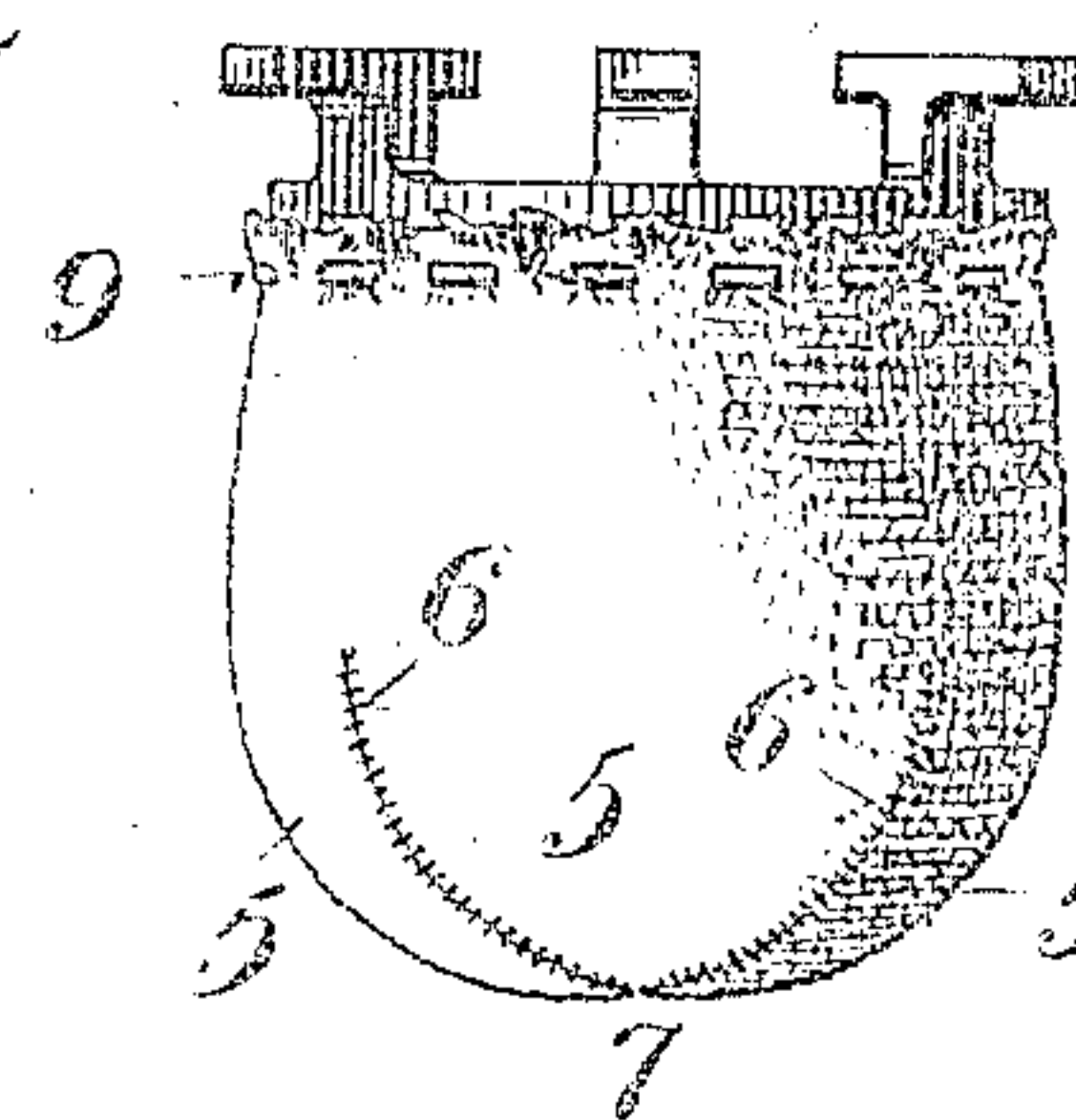


Fig. 6.

Witnesses  
 C. W. Benjamin  
 Phas. Hensley

Inventor  
 Otto Kaufmann  
 by his Attorney  
 J. E. Roy



# UNITED STATES PATENT OFFICE.

OTTO KAUFMANN, OF NEW YORK, N. Y., ASSIGNOR TO BLOCK LIGHT COMPANY, OF  
NEW YORK, N. Y.

## INCANDESCENT MANTLE.

940,639.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, OTTO KAUFMANN, a citizen of the United States, and a resident of the city of New York, county of Queens, and State of New York, have invented a new and useful Incandescent Mantle, of which the following is a specification.

My invention relates to the production of mantles or incandescents for gas lamps, specifically to those used on inverted gas lamps, although the same may have other uses; and the object of my invention is to provide an improved mantle of the above sort, which ordinarily is supported at its base in an inverted position.

Heretofore such mantles have been made by gathering one end of a tube of knitted material by the use of a string encircling one end of the tube, or by passing a string through the loops of the knitting and drawing the loops together. This is objectionable because these methods crease and fold the fabric and make it unnecessarily weak and dense at the point where the stress is greatest when the mantle is in use, so that it soon breaks at the said weakened point thereby rendering the life of the mantle short and uncertain, and by reason of the density of the mantle produced in the above ways an unnecessary increase in gas pressure is required to properly incandesce it, the result of which is also to shorten the life of the mantle, to increase the expense of its use, to complicate its use, and render it less efficient.

The object of my invention therefore is to generally improve the manufacture of mantles, and to abolish these folds and creases and strengthen the mantle generally and more particularly at the part formed and creased as above described. These and other objects are accomplished by my invention, one embodiment of which is hereinafter set forth.

For a more particular description of my invention, reference is to be had to the accompanying drawings forming a part hereof in which:

Figures 1 and 2 show an ordinary mantle tube cut into proper lengths. Figs. 3, 4 and 5 show my improved mantle in various stages of manufacture. Figs. 6 and 7 are, respectively, side and end elevations of the completed mantle with a support attached.

Throughout the various views of the drawings, similar reference characters designate similar parts.

Referring to Figs. 1 and 2. 1 designates a mantle tube cut to the proper length.

As stated above, in my improved mantle the folds and creases heretofore present are abolished and this is accomplished in the structures shown in Figs. 4 to 7 inclusive, in the following manner. The tube 4 of the impregnated webbing shown in Fig. 3 is cut transversely so as to have four curved tongues 5, each identical with the two shown in Fig. 3. These tongues 5 are sewed together by a thread 6 so that the seam turns inwardly to form a rib 6<sup>a</sup>, whereby the structure is stiffened as shown in Fig. 4. This mantle 7 is then mounted on a suitable base or supporting ring 8 and secured by a tie-thread 9 as shown in Fig. 5. The mantle is then burned and shaped and finally coated with collodion or other suitable protecting covering and then it is in the shape indicated in Figs. 6 and 7. It is then ready to be packed and shipped or used in the customary manner.

In the foregoing has been described one embodiment of my invention, but many others may be made so I do not regard it as limited to the precise disclosure therein made, but as being broad enough to cover all structures that come within the scope of the annexed claims.

Having thus described my invention, what I claim is:

1. An article of manufacture, a mantle or incandescent consisting of a tube of fabric having a cylindrical open end and a rounded terminal comprising a plurality of rounded sections, the adjacent edges of which are seamed together, the seams forming interior reinforcing ribs.

2. An inverted mantle having a cylindrical open top and a dome-formed smooth-surfaced base consisting of two sections, each of the general form of a quarter of a sphere, and seamed together at their edges.

3. An incandescent mantle constructed from a tubular stocking having a cylindrical open end and a smooth dome-shaped closed end formed of curved end sections and united at their edges by means of seams.

4. An incandescent mantle having a cylin-



drical open top and a reinforced dome-formed smooth-surfaced base of sections of curved form seamed together at their edges.

5 5. A mantle or incandescent, comprising a tube of fabric having one end closed the tube being severed on a curved line transversely of its length, said severed edges being secured together by a seam which is located inside of the closed end of the mantle  
10 tube, whereby the said closed end is reinforced by a seam extending transversely of the mantle.

15 6. A mantle for incandescents comprising a tube of fabric having a plurality of seams for closing one end of the tube, which seams extend transversely and are located within

the tube and produce reinforcing ribs extending from the median portion of the closed end of the mantle.

7. A mantle for incandescents consisting 20 of a tube of fabric having a closed and rounded end and a plurality of ribbed seams interiorly located in said closed end, which seams diverge from the median portion of said closed and rounded end longitudinally 25 along the mantle and radiating from a common center.

Signed this 19th day of October, 1905.

OTTO KAUFMANN.

Witnesses:

GUSTAVE THRONARD,

EUGENE A. GALLAGHER.