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PATENTED AUG. 6, 1907.

N. FUCHS.

MANTLE AND HOLDER FOR INVERTED LAMPS OR GAS BURNERS.

APPLICATION FILED DEC. 10, 1906.

Fig. 1.

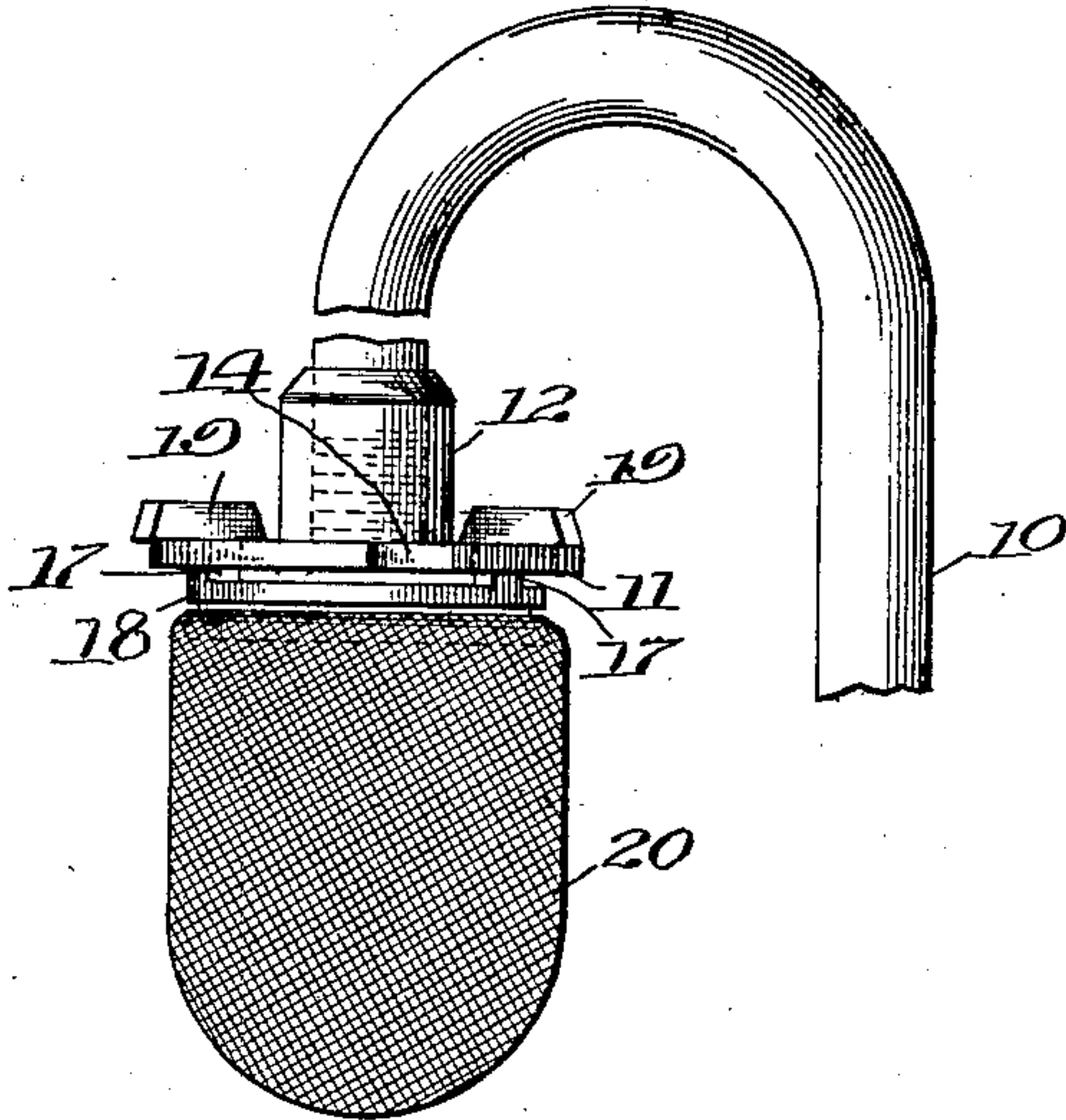


Fig. 2.

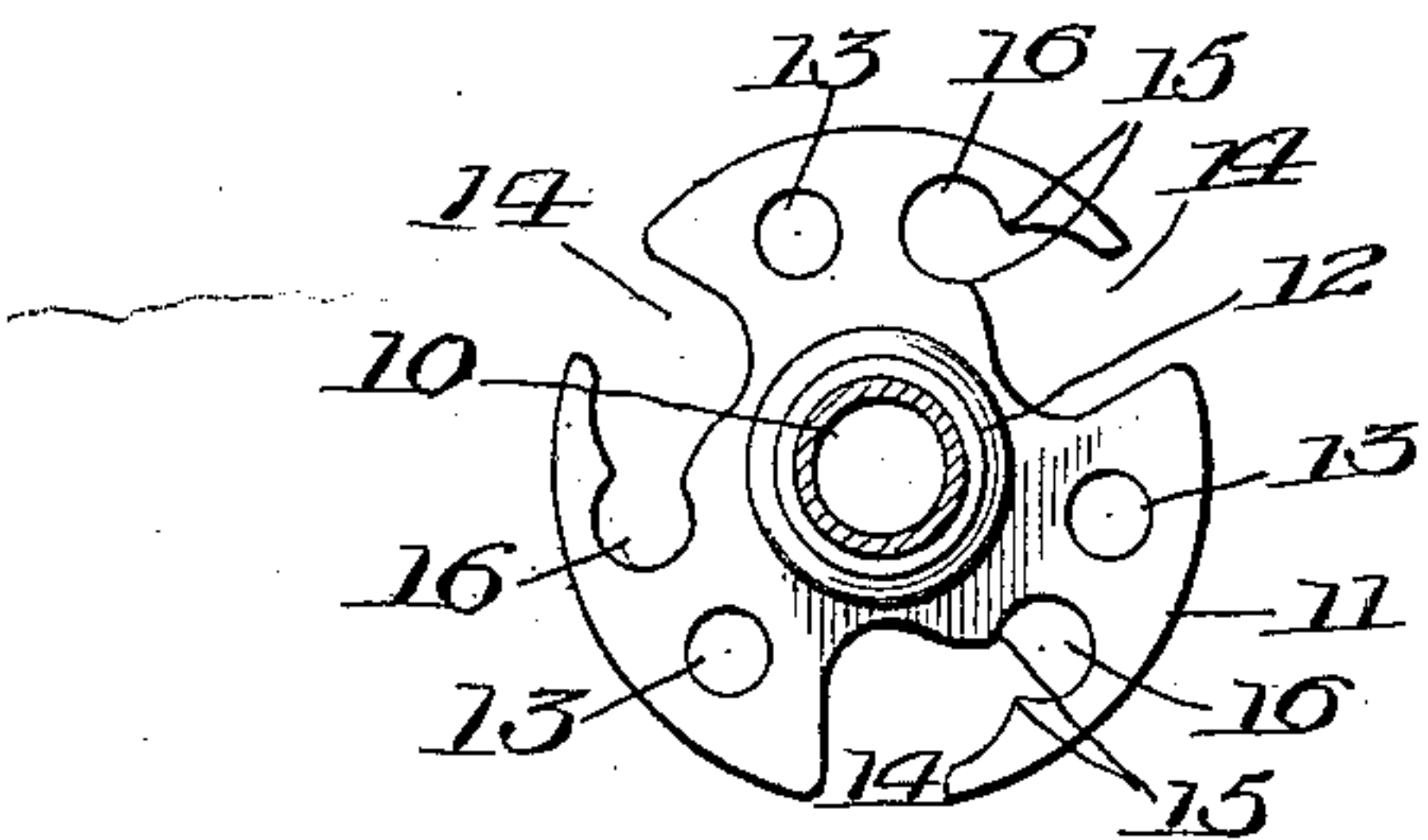


Fig. 5.

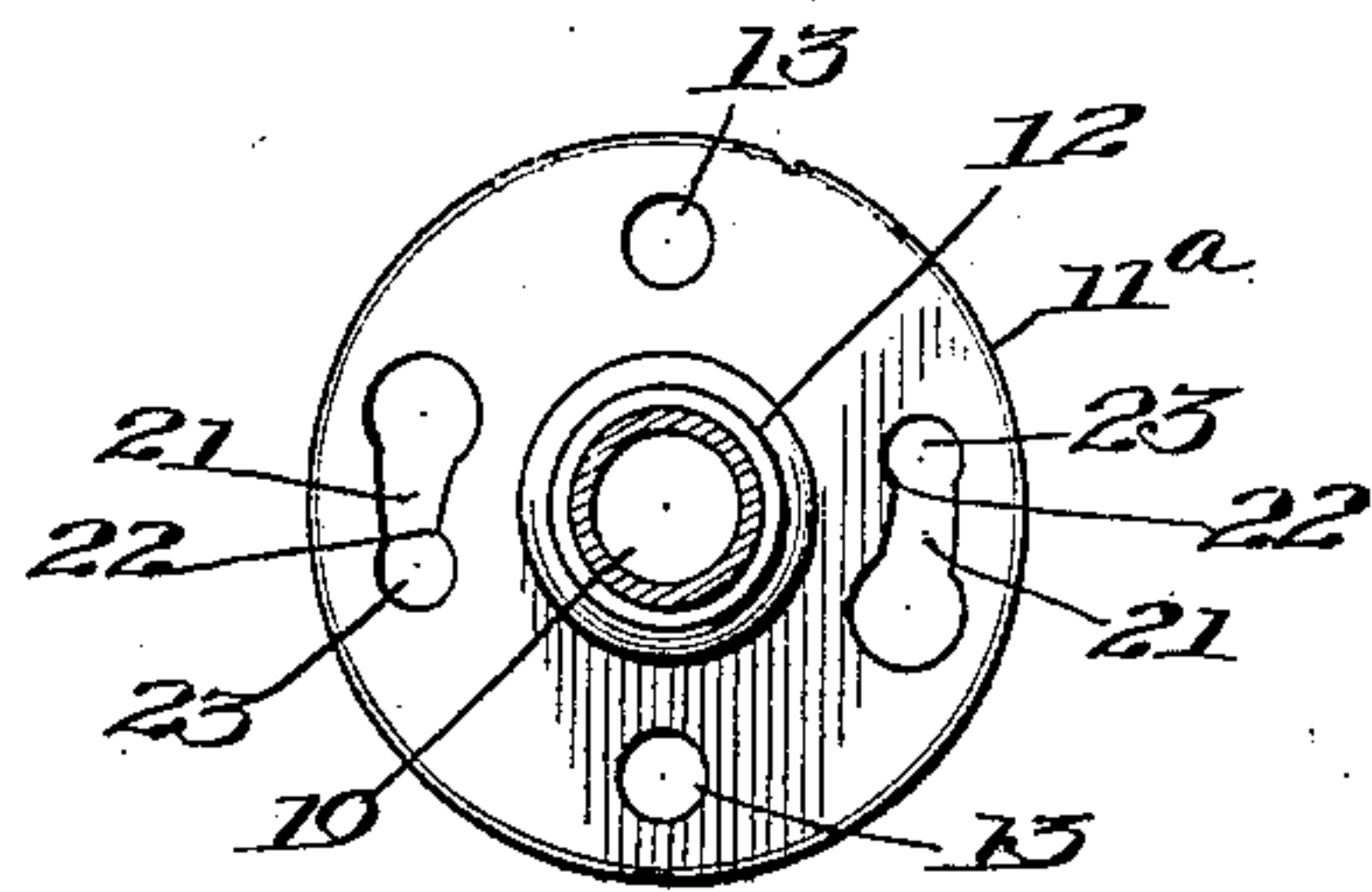


Fig. 3.

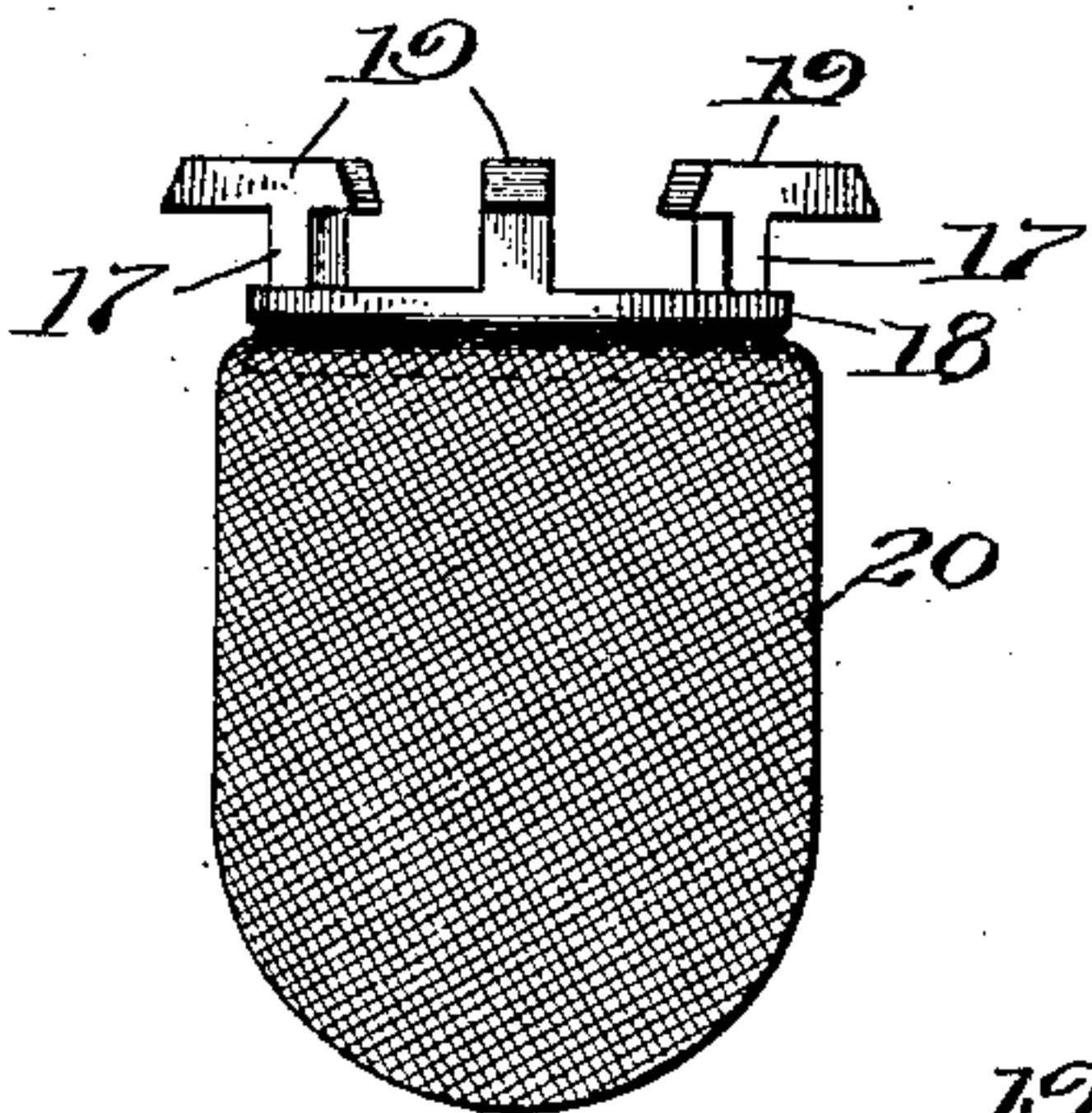


Fig. 6.

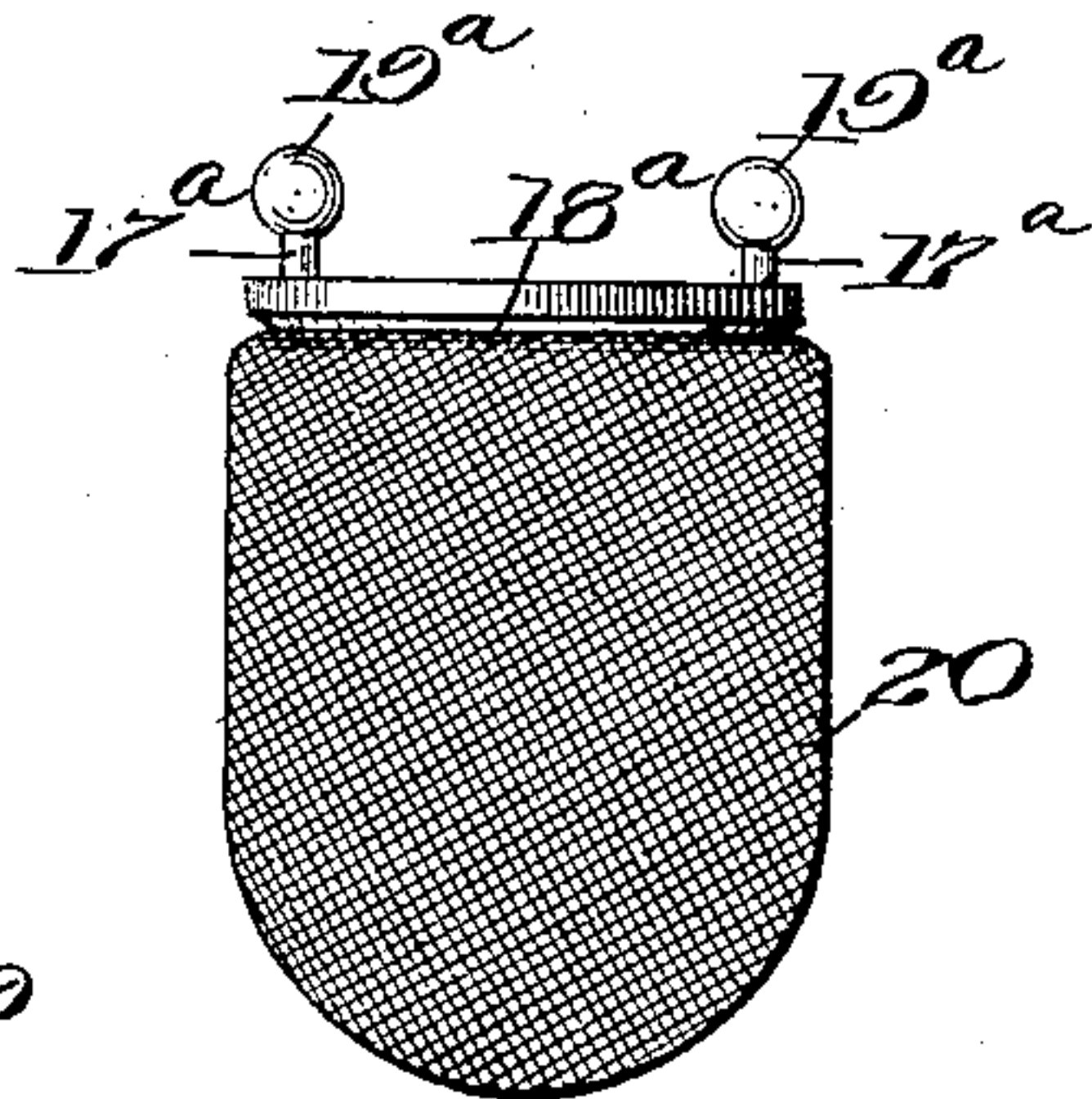
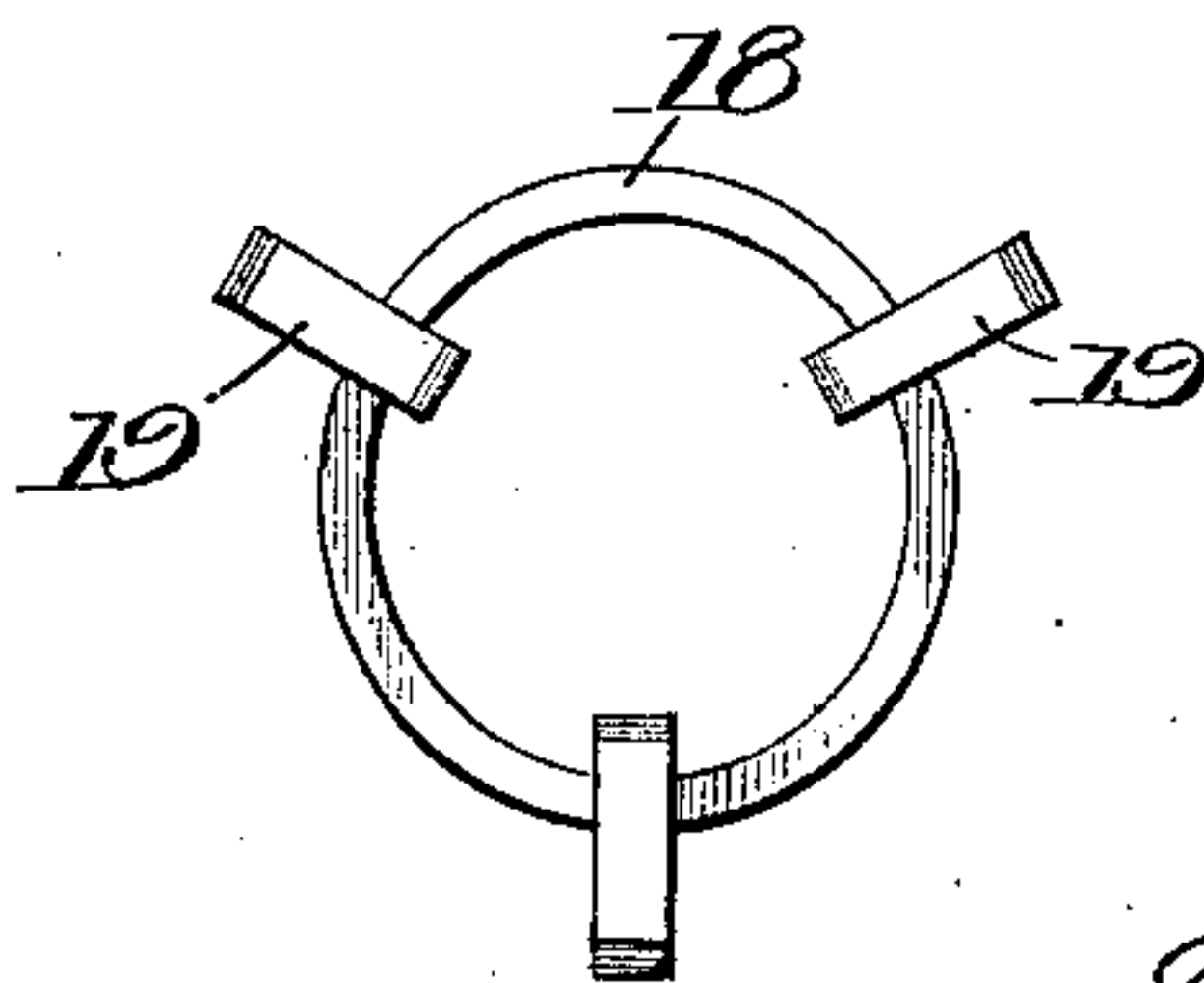


Fig. 4.



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UNITED STATES PATENT OFFICE.

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MANTLE AND HOLDER FOR INVERTED LAMPS OR GAS-BURNERS.

No. 862,816.

Specification of Letters Patent.

Patented Aug. 6, 1907.

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To all whom it may concern:

Be it known that I, NATHAN FUCHS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Mantle and Holder for Inverted Lamps or Gas-Burners, of which the following is a specification.

This invention relates to improvements in a mantle and holder therefor to be used in connection with what is known as inverted lamps or gas-burners, and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide a mantle and holder of the above-named type, which shall be simple and inexpensive in construction strong, durable and effective in operation, the parts of which shall be so made that the mantle may be readily secured in place on the holder in such a manner that its walls will be disposed at a uniform distance from the flame of the burner, thus preventing it being rendered useless, as is frequently the case with the mantles and holders heretofore in common use, in which they are held in such a manner that one portion of the wall of the mantle will be close to the flame of the burner while another portion thereof will be located at a considerable distance therefrom.

Another object of the invention is to provide means for so holding the mantle that it will not become detached from the holder by reason of vibration incident to the heat of the lamp, or otherwise produced.

A still further object is to afford means for holding the mantle, from which it may be readily detached when desired.

In order to enable others skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it, referring to the accompanying drawing, in which—

Figure 1 is a view in side elevation of a mantle and holder embodying one form of my invention, showing the former supported by the latter and in position on an inverted burner. Fig. 2 is a detached plan view of the holder. Fig. 3 is a view in side elevation of one form of the mantle. Fig. 4 is a plan view of the mantle ring. Fig. 5 is a similar view of a modified form of the mantle holder. And Fig. 6 is a view in side elevation of a modification in the construction of the mantle.

Like numerals of reference, refer to corresponding parts throughout the different views of the drawing.

The reference numeral 10 designates a goose-neck or supply-pipe, which may be equipped with a burner, of the ordinary or any preferred construction, and on

which is secured the mantle holder, which consists of a circular disk or plate 11 having at its center a tubular portion 12, which may be screw-threaded to engage the inverted end of the supply-pipe or goose-neck, as is clearly shown in Fig. 1 of the drawing. The plate or holder 11 is provided with a series of openings 13, usually three in number, for the passage of air, and is also provided with a number of slots 14 each of which is open at the periphery of the disk or plate 11, as is clearly shown in Fig. 2 of the drawing, in which figure it will be observed that each of said slots is enlarged towards its open end and contracted as at 15 near its inner end, thereby forming at said point a contracted recess 16 for the reception of the supporting stems 17 on the mantle ring 18, which stems and ring may be made of any suitable heat-resisting or non-combustible material.

Each of the stems 17 of the mantle ring is provided at its upper end with a horizontally disposed head 19, which projects outwardly and inwardly in a radial manner, so that said heads will rest at their lower surfaces on the upper surface of the holder or plate 11, and so that each of said heads will have a bearing on the said plate both on the inner and outer sides of the contracted recess 16 in which it is located, when the mantle 20, which may be secured at its upper end to the ring 18 in any suitable manner, is placed in position for use on the plate 11 or mantle holder.

In Fig. 5 of the drawing I have shown a modification in the construction of the mantle holder, which consists in employing a disk or circular plate 11^a, which, as in the other construction, is provided at its center with a tubular portion 12 to engage the goose-neck or supply-pipe 10, and is provided at points diametrically opposite each other with slots 21, which have each of their ends closed, as shown, but are contracted towards one of their ends as at 22 to form the contracted recesses 23, which are adapted to receive the stems 17^a on the modified form 18^a of the mantle ring shown in Fig. 6, in which two stems 17^a located diametrically opposite each other are employed instead of three as in the other construction, and in this modified form each of the stems 17^a is provided with rounded heads 19^a, which are adapted to be passed through the enlarged portion of the slots 21 in the plate or holder 11^a and to rest on the upper surface of the said plate or holder, when the ring 18^a carrying the mantle 20 is turned, so that the stems 17^a will pass through the contracted portions 22 into the recesses 23, where they will be safely held by reason of the contracted form of said recesses. In the modification now under consideration, the plate 11^a is shown as being provided with two slots 21 and two openings 13, the latter for the passage of air, but it is evident that I may employ two or more of said slots

to receive and engage two or more of the headed stems 17^a on the mantle ring 18^a, or two or more of the openings 13 for the passage of air, without departing from the spirit of the invention. It is also evident that in
5 the construction illustrated in Figs. 2 and 3 of the drawing, a plurality of the slots and a plurality of the headed stems 17 to fit therein may be employed, and for this reason I do not desire to be limited to any specific number.

10 By employing a mantle and holder constructed according to my invention, it is apparent that the mantle may be readily placed in position on the holder by passing the heads 19, on the stems 17 of the construction shown in Fig. 3, up through the open ends of the
15 slots 14, when by turning the ring in the proper direction the stems 17 will be caused to pass through the contracted portions 15 and into the recesses 16, where they will be held in such a manner, by reason of the contracted parts 15, as not to be dislocated by the
20 vibrations of the burner, or until it is desired to remove the mantle, when the ring may be turned in the opposite direction, thus permitting the heads 19 to pass downwardly through the open ends of the slots 14 in the holder. In the construction shown in Figs. 5 and
25 6, practically the same operation is performed in order to secure the mantle in position on the plate or holder 11^a, or to remove it therefrom.

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

1. In a mantle and holder therefor, the combination with a 30 holding plate or disk having means at its center to engage a supply pipe and provided near its outer edge with a plurality of slots each of which is enlarged at one of its ends and is contracted towards and near its other end and again enlarged beyond or inwardly from said contracted 35 portion to form an enlarged recess, of a ring carrying a pendent mantle and having on its upper portion a plurality of stems each of which is provided with an enlarged head, the heads on said stems adapted to be passed through the larger portions of said slots, the said stems adapted to 40 be passed from the larger end of the slots through the contracted portions of the same into the said recesses and the heads on said stems adapted to engage the contracted recesses.

2. A mantle and holder therefor, consisting of a circular 45 holding plate having a central opening and provided near its periphery with a plurality of slots, one end of each of which is enlarged, each of said slots being contracted from said enlarged end towards and near its other end and again enlarged beyond or inwardly from said contracted 50 portion to form an enlarged recess, of a ring carrying a pendent mantle and having on its upper portion a plurality of stems each of which is provided with an enlarged spherical head adapted to be seated in the recesses located inwardly from the contracted portions of the slots.

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