

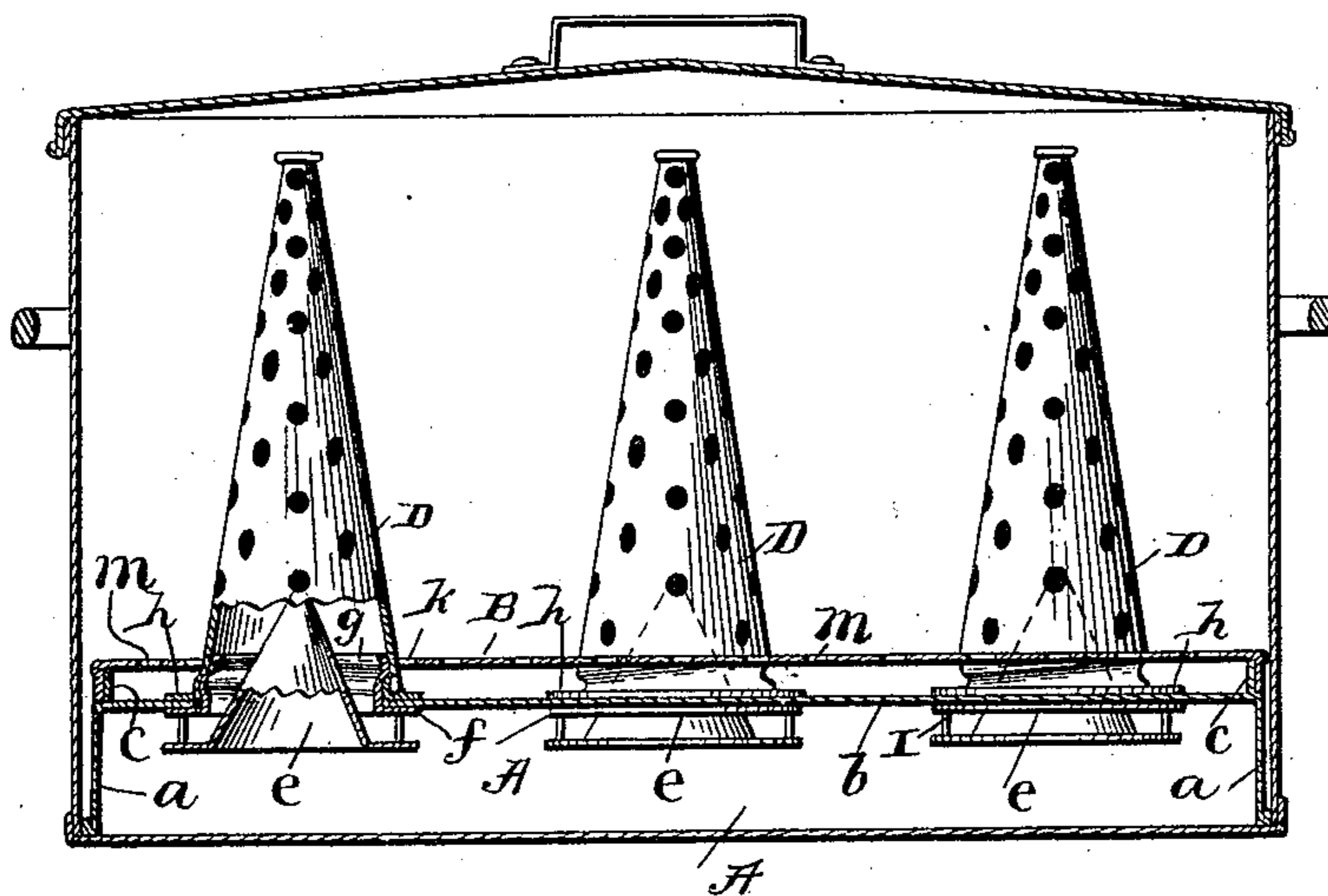
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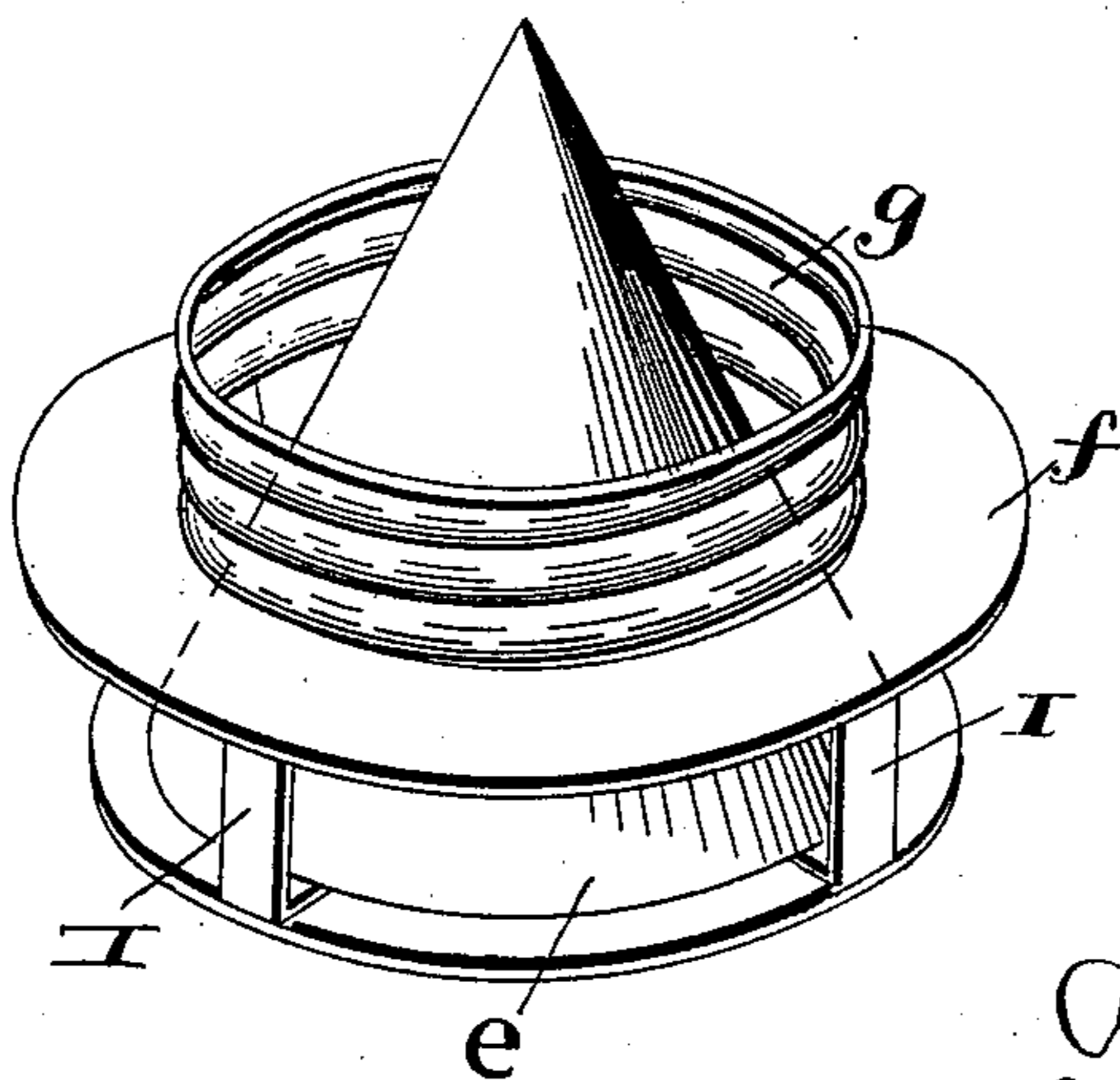
A. DUNLOP & E. CRUZAN.  
STEAM WASHER.

No. 599,167.

Patented Feb. 15, 1898.



*Fig. 2.*



Witnesses  
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

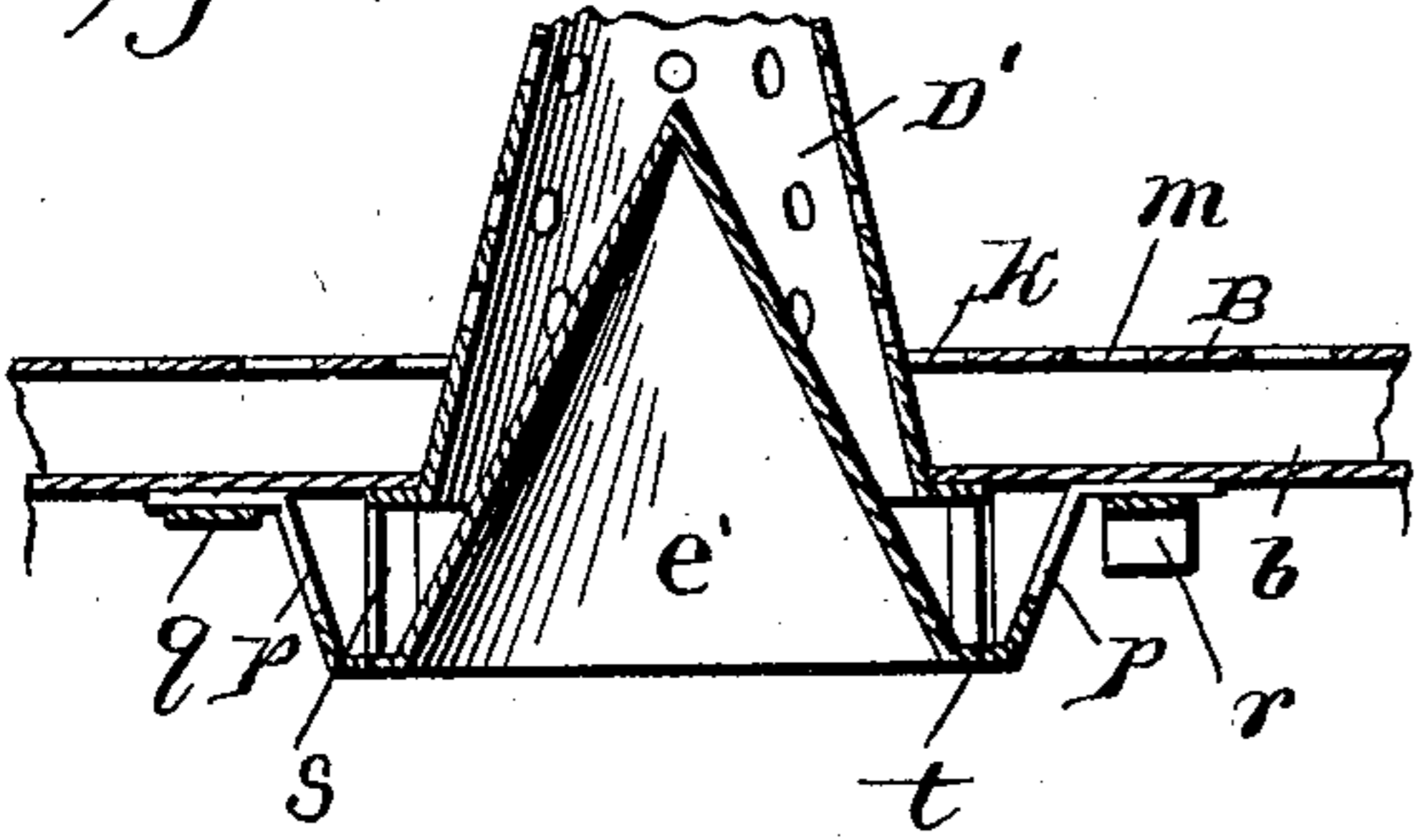


Fig. 4.

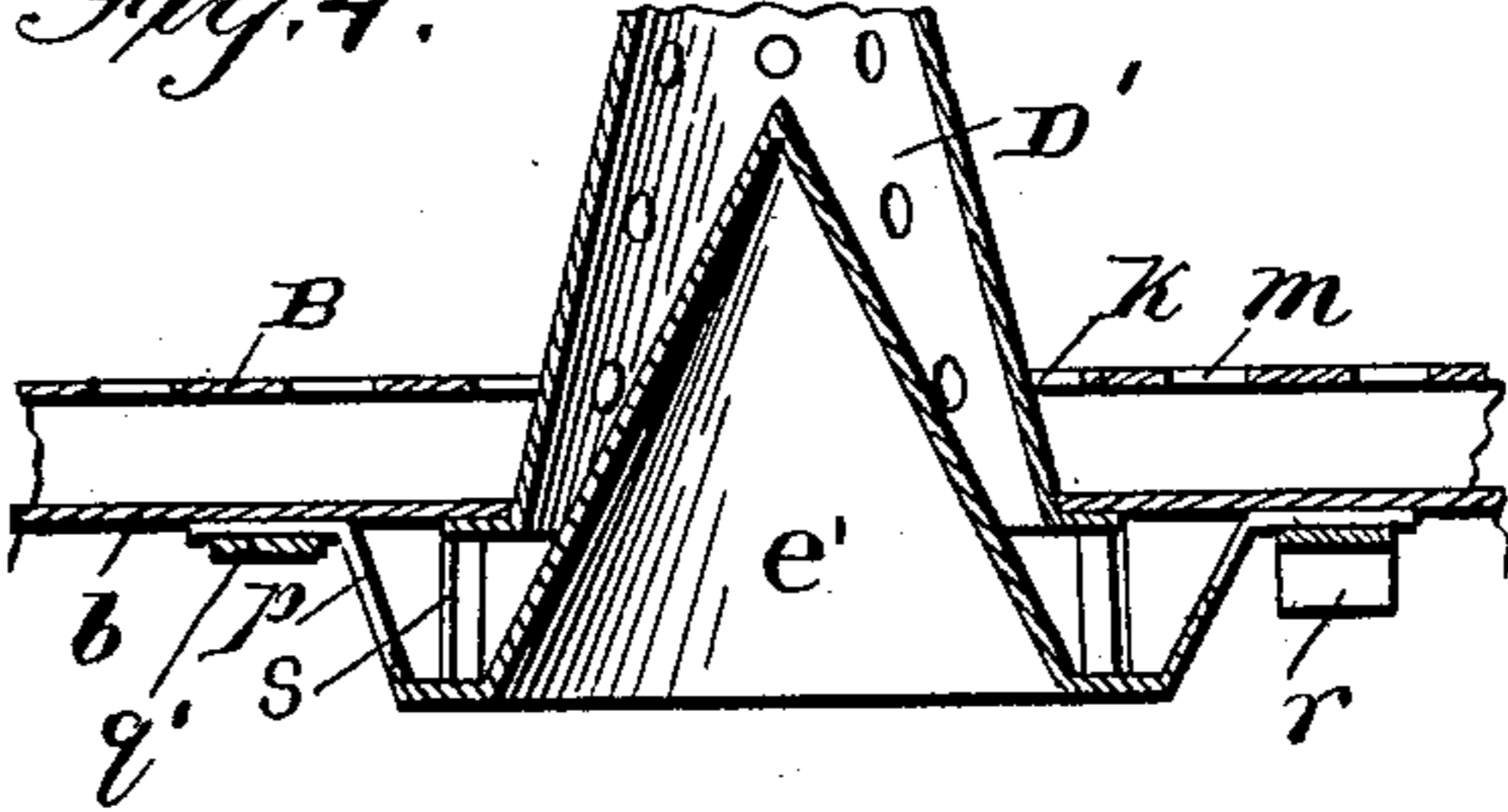


Fig. 5.

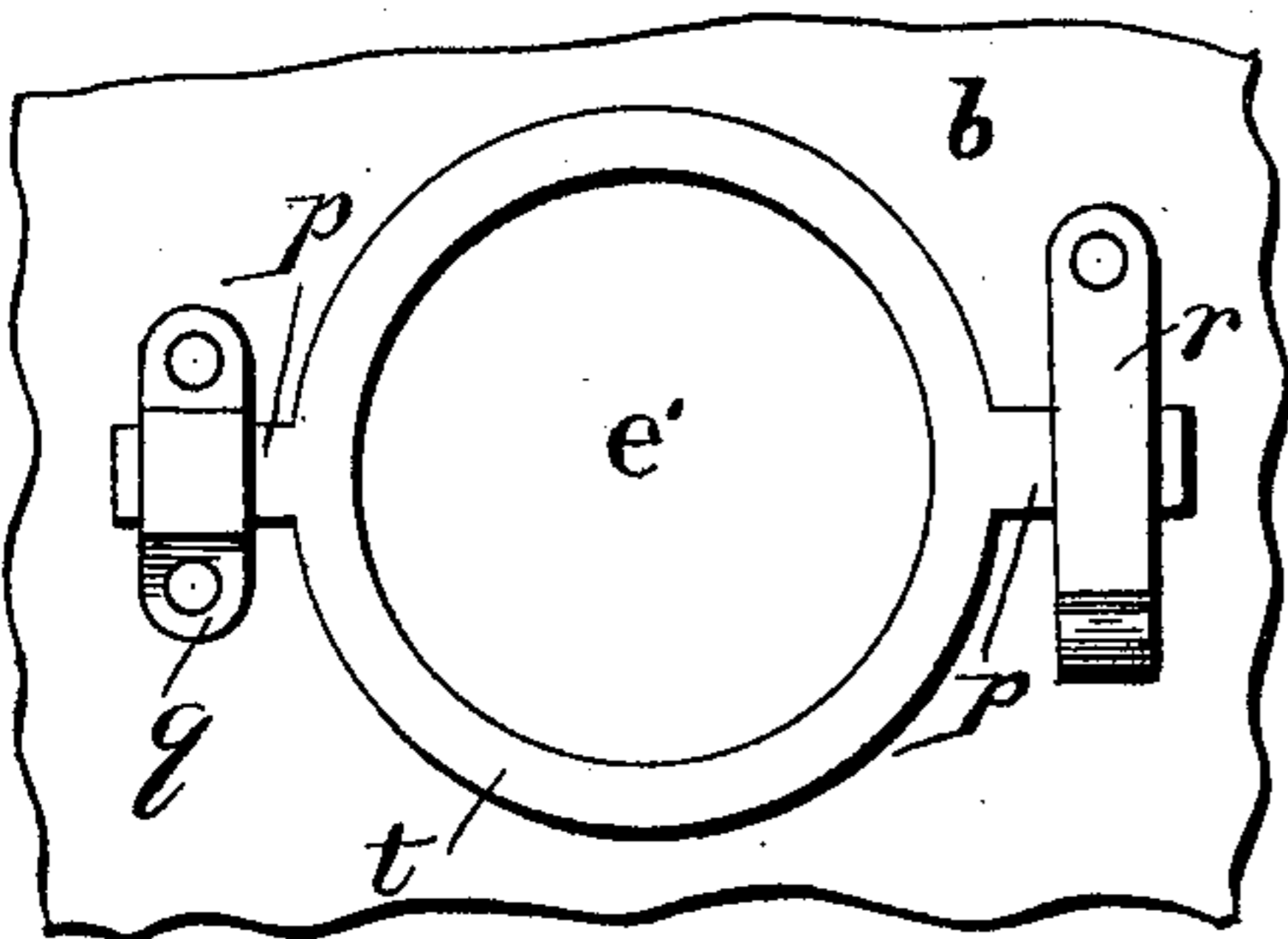


Fig. 6.

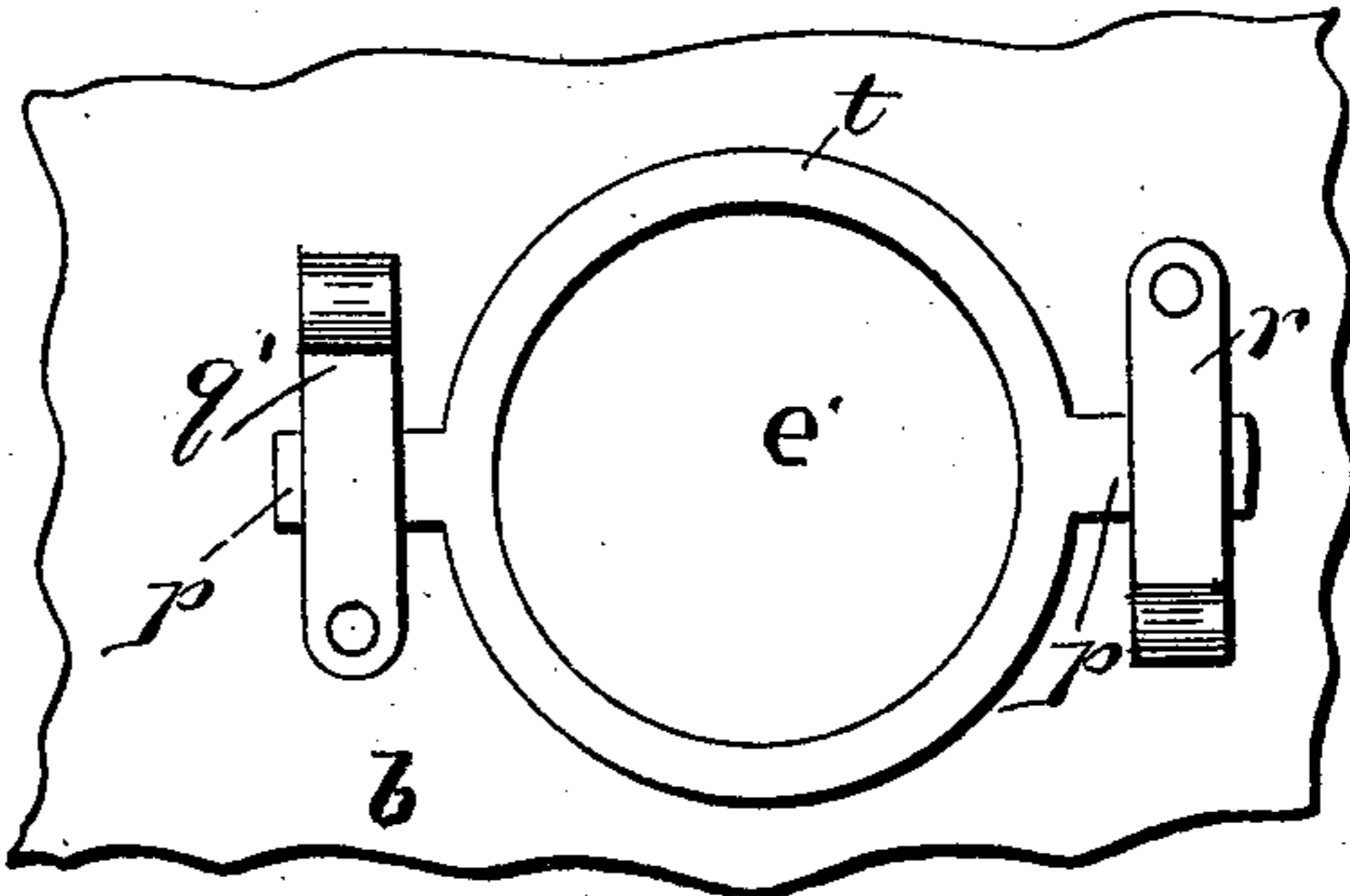


Fig. 7.

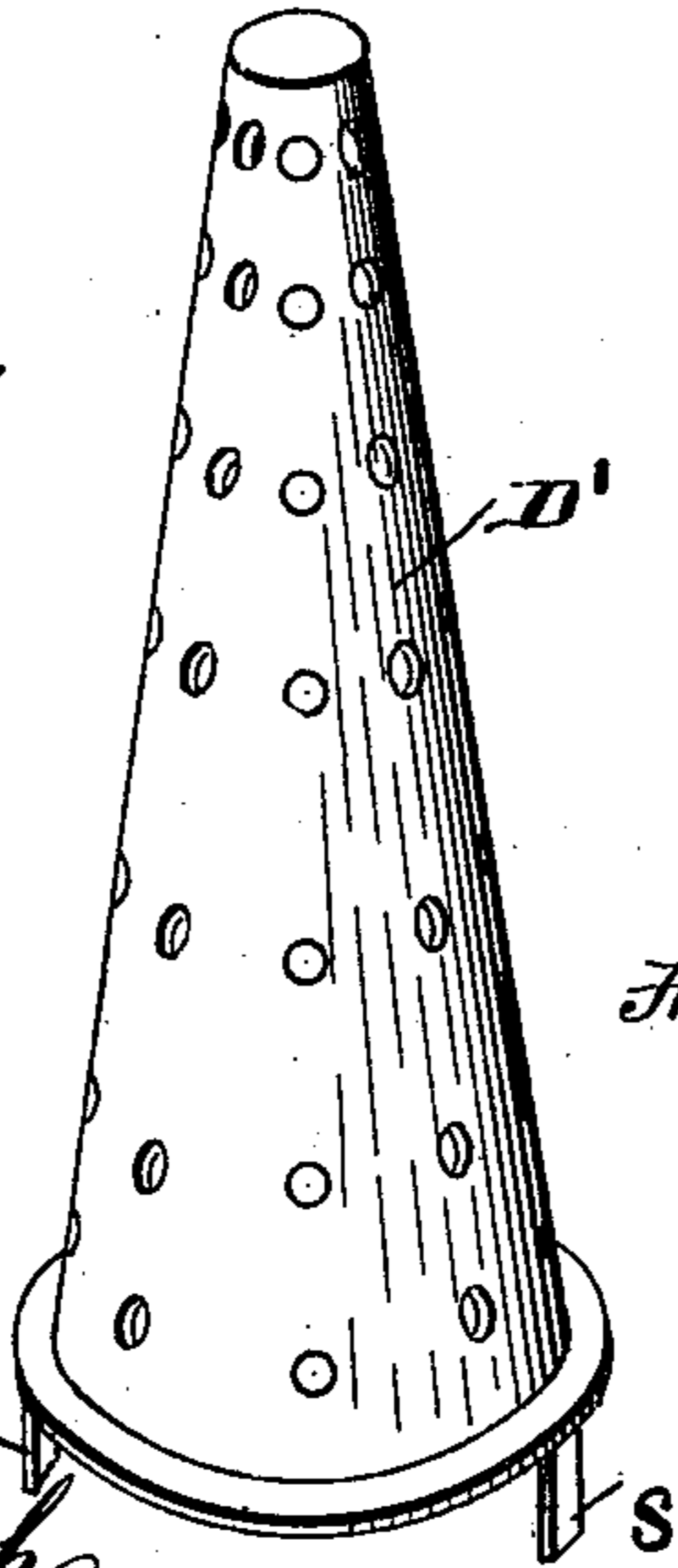
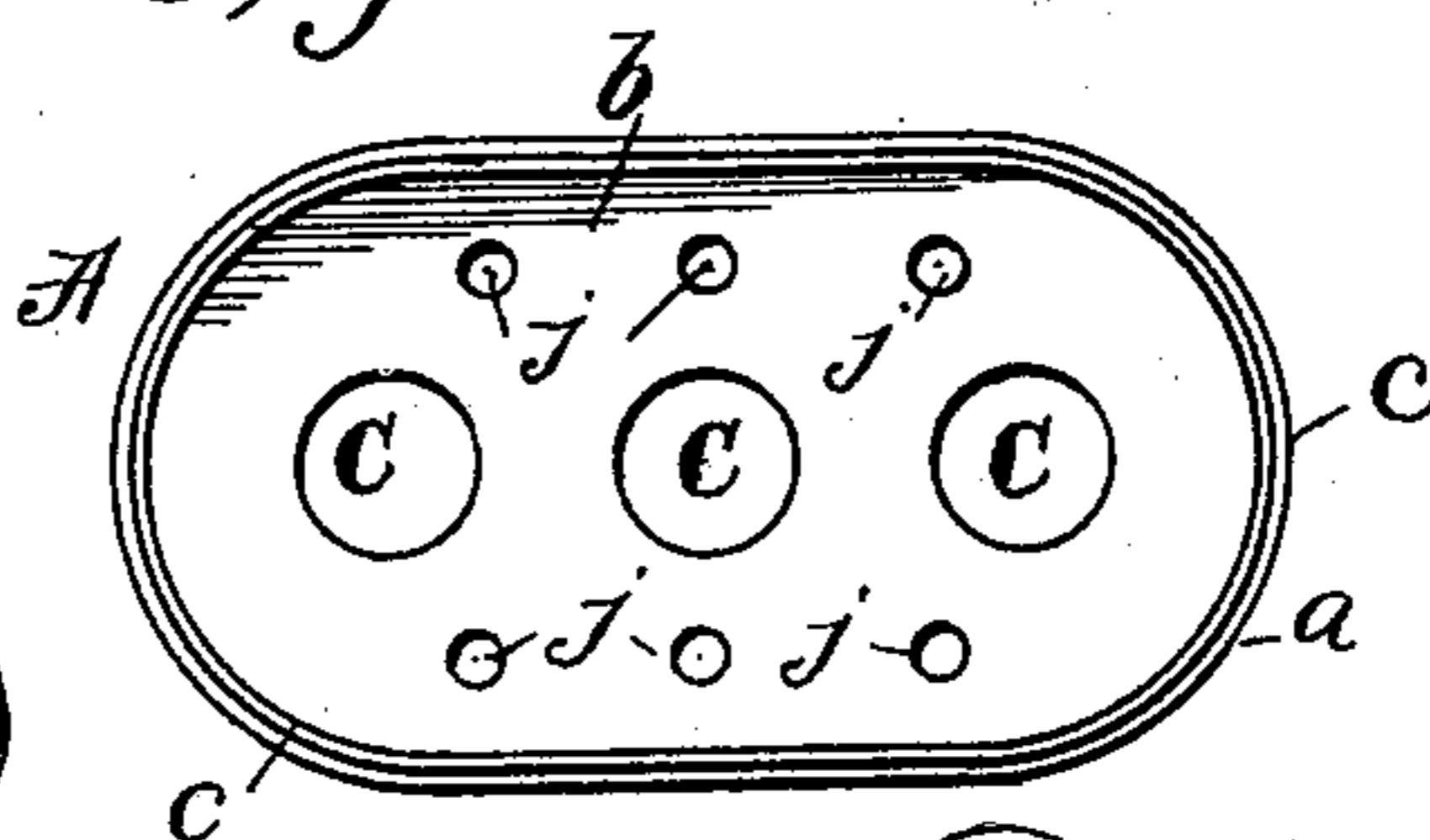


Fig. 8.



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# UNITED STATES PATENT OFFICE.

ALLAN DUNLOP AND EDWARD CRUZAN, OF CIMARRON CITY, OKLAHOMA TERRITORY.

## STEAM-WASHER.

SPECIFICATION forming part of Letters Patent No. 599,167, dated February 15, 1898.

Application filed August 3, 1897. Serial No. 646,880. (No model.)

*To all whom it may concern:*

Be it known that we, ALLAN DUNLOP and EDWARD CRUZAN, of Cimarron City, in the county of Payne and Territory of Oklahoma, have invented certain new and useful Improvements in a Combined Washer, Cooker, and Canner; and we 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to improvements in steam-washers; and it pertains to a construction adapted to be placed in an ordinary washboiler, all of which will be fully described hereinafter and particularly referred to in the claims.

In the accompanying drawings, Figure 1 is a longitudinal vertical sectional view of our invention, showing it placed within a washboiler. Fig. 2 is a detached perspective view of the cup shown in Fig. 1. Figs. 3 and 4 are detached views of a modified form of the cup. Figs. 5 and 6 are bottom views of Figs. 3 and 4, respectively. Fig. 7 is a detached perspective view of the modified form of perforated tube. Fig. 8 is a top plan view of the top *b* with the cones removed.

A represents the base of the machine, consisting of a vertical flange *a*, here shown as oblong in form, adapting it to fit within an ordinary washboiler, but the shape may be varied without departing from the spirit of our invention. *b* is the top of this base, and extending around the edge of this top is a peripheral flange *c*, upon which fits a removable perforated cover B. The top *b* is provided with a plurality of large openings *C* for the reception of perforated cones *D*, these cones having closed upper ends, as clearly shown. In Fig. 1 we show one form of supporting the said cones *D*, which consists in supporting them through the medium of conically-shaped cups *e*, which are placed below the large openings *C* and supported out of contact with their sides. The object of these cups is to prevent the water from boiling up into the cones and being thrown upon the clothes, making our invention purely a steam-washer. In this form

of cup a flange or ring *f* is provided, having a vertical flange *g* adapted to pass through the openings *C* of the top *b*. The cones *D* are provided at their lower ends with outturned flanges *h* and the cones have their lower ends internally screw-threaded to receive the screw-threaded flange *g* of the cup. In this manner the cones and cups are clamped to the top *b*, as will be readily understood, and in a very firm, simple, and cheap manner.

The cups *e* are supported by the annular rings *f*, through the medium of depending arms *I*, having their upper ends connected with the rings and their lower ends with the lower ends of the cups. In this manner the cups are supported out of contact with the rings to permit a free passage of the steam upward into the perforated cones, while at the same time these cups prevent the boiling or passage upward of water within the cones, as beforestated. This construction also provides a readily attachable and detachable cup and cone, whereby the invention is adapted to be readily taken apart.

The top *b* is provided with a series of openings *j* at each side, and the cover B is provided with large openings *k*, through which the said cones pass, the said openings *k* being preferably considerably larger than the cones. This cover B is also provided with a large number of openings *m*, which are so close together that the dirt forced through the clothes will not accumulate upon the cover, but be washed therefrom down upon the top *b* of the base A, and these openings *m* also serve to establish a uniform distribution of the steam rising through the openings *j* of the top *b*.

It will be noted that we provide for the passage of the dirt from the cover B down upon the top *b* and out of contact with the clothes which are supported upon the cover B. The cover B being removable and the dirt accumulated upon the top *b*, the machine is readily and easily cleaned when the washing has been effected.

In Figs. 1 and 2 we have described and shown one way of supporting the cones; but this may be varied without departing from the spirit and scope of our invention. For instance, as shown in Figs. 3 and 5, the cups may be provided with L-shaped arms *p*,

adapted to be detachably connected to the top *b*, through the medium of an eye *q* and a spring *r*, and in this instance the lower end of the cone, as shown in the same figures, are provided with depending projections or arms *s*, resting upon the outer edge *t* of the cups. In this construction, as in the construction shown in Fig. 1, the cup serves to unite the cones to the top *b*. It will also be noted in this construction that the lower ends of the cones are provided with outturned flanges, as in Fig. 1; but in this instance the flanges engage the under side of the top *b* instead of the upper side, as in the construction shown in Fig. 1. It will also be noted that two springs *q'* and *r* may be used at the under side of the top *b*, with which the L-shaped arms of the cup will engage and disengage by the turning of the cup and thus unite the cups and the cones to the top *b*.

Having thus described our invention, what we desire to secure by Letters Patent is—

1. A device of the character described comprising an inverted-cup-shaped base, a removable top supported above the top of the cup-shaped base and provided with a series of perforations, the top of the base and the removable top having registering openings, and perforated cones passing through the said openings and supported by the top of the base, substantially as described.

2. A device of the character described comprising an inverted-cup-shaped base having a peripheral vertical flange projecting above its top, a removable perforated top having a depending flange fitting upon the peripheral flange of the base, the top of the base and the removable top having registering openings,

and perforated cones or tubes passing through the registering openings of the two tops, substantially as described.

3. A device of the character described comprising an inverted-cup-shaped base, the top thereof having an opening, a perforated cone passing through the said opening, and a cup beneath the top of the base, the cup engaging and serving to unite the cone and also itself to the top of the base substantially as described.

4. A device of the character described comprising an inverted-cup-shaped base the top thereof having an opening, a perforated tube or cone passing through the said opening and having a flange on its lower edge adapted to engage the top of the base, a removable cup situated at the under side of the top of the base, and engaging the said top and the cone for uniting the cone and the cup to the top of the base, substantially as described.

5. In a device of the character described, an inverted-cup-shaped base, the top thereof having an opening, a perforated tube or cone passing through the said opening and provided with a flange adapted to engage the said top, a cup situated beneath the top, the top and cup having interlocking members, and the cone and cup provided with interlocking members, whereby the cone and cup are united to the top, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

ALLAN DUNLOP.  
EDWARD CRUZAN.

Witnesses:

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