

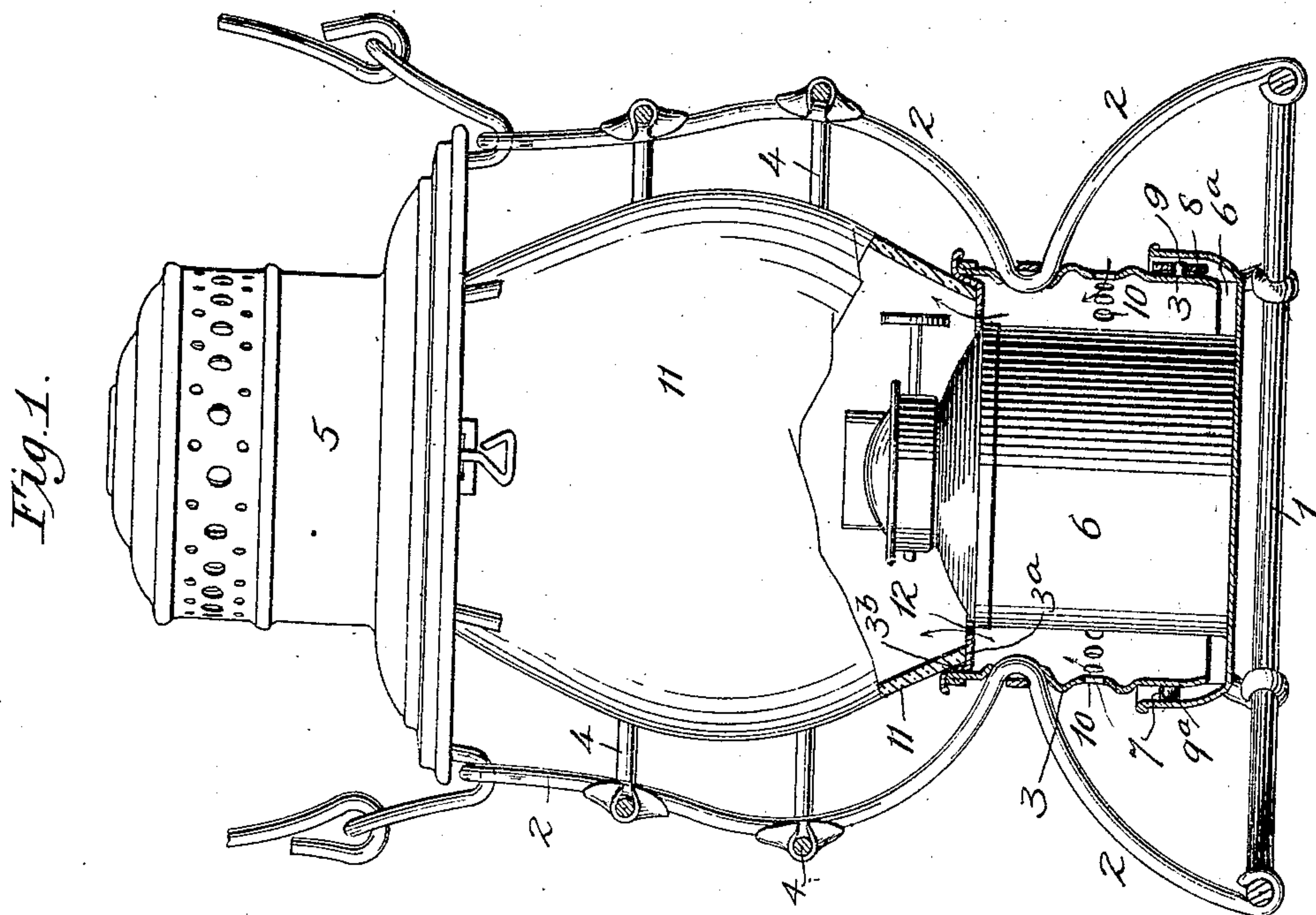
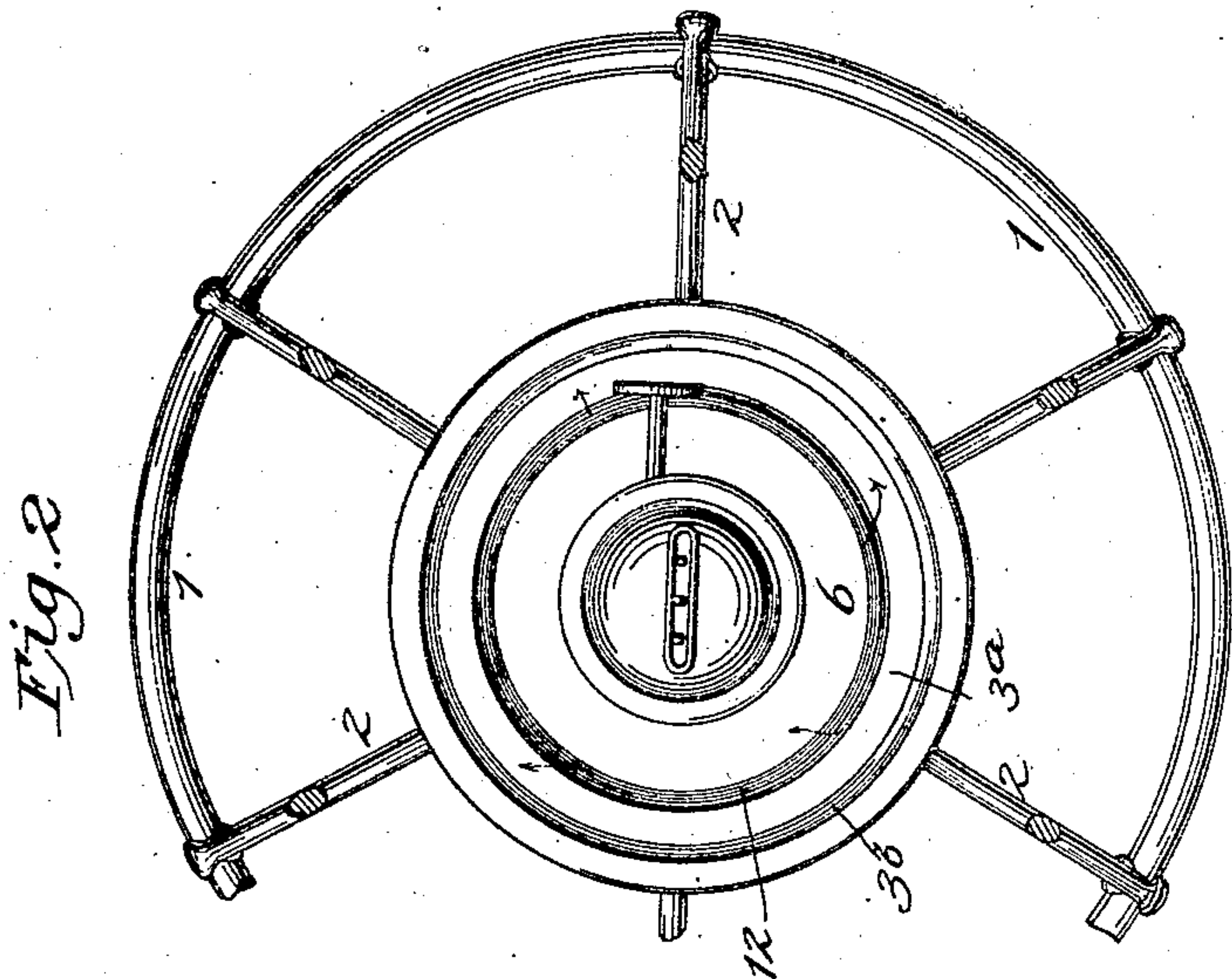
No. 886,973.

PATENTED MAY 5, 1908.

W. S. HAMM.
LANTERN.

APPLICATION FILED NOV. 2, 1904.

2 SHEETS—SHEET 1.



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Fig. 5.

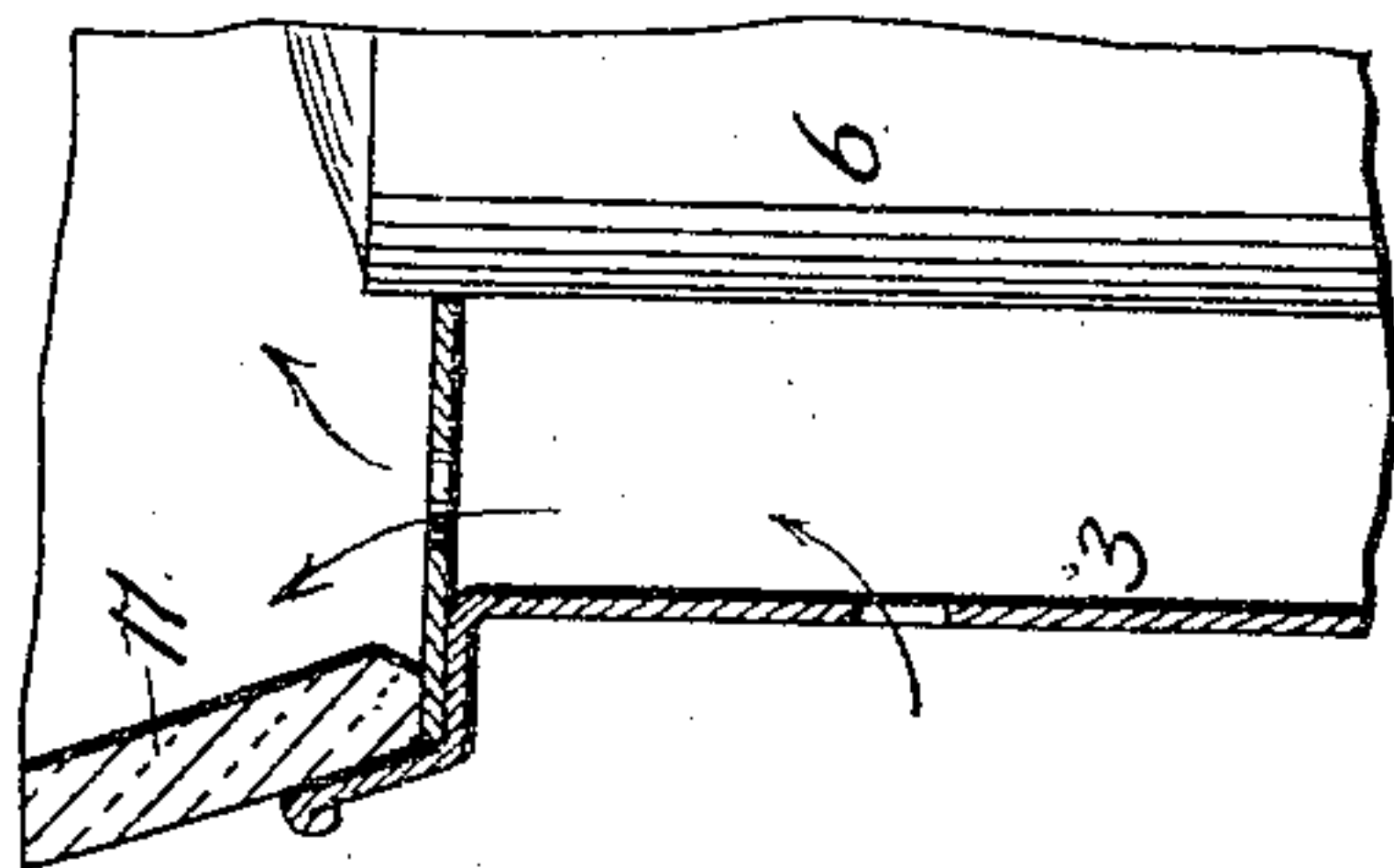


Fig. 4.

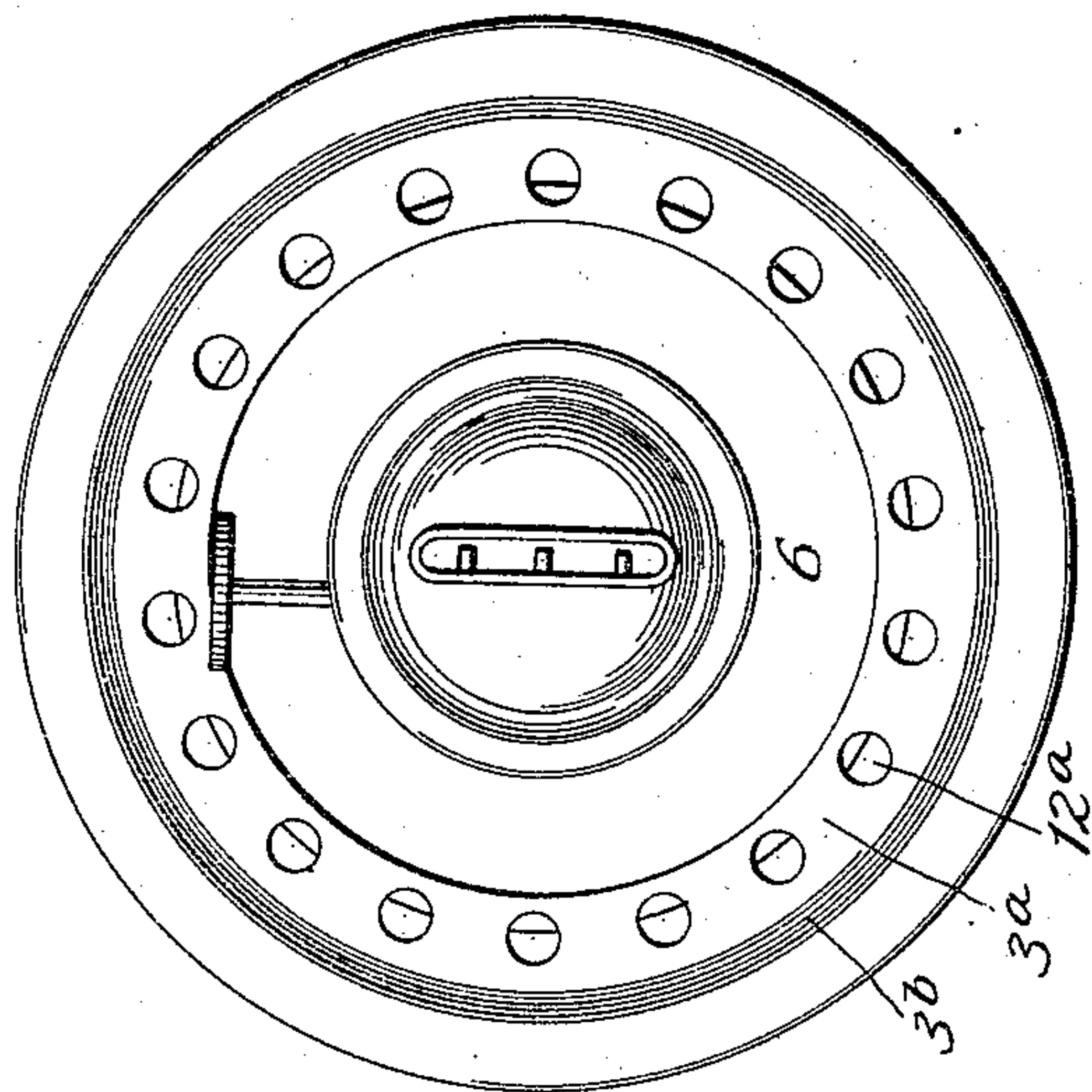
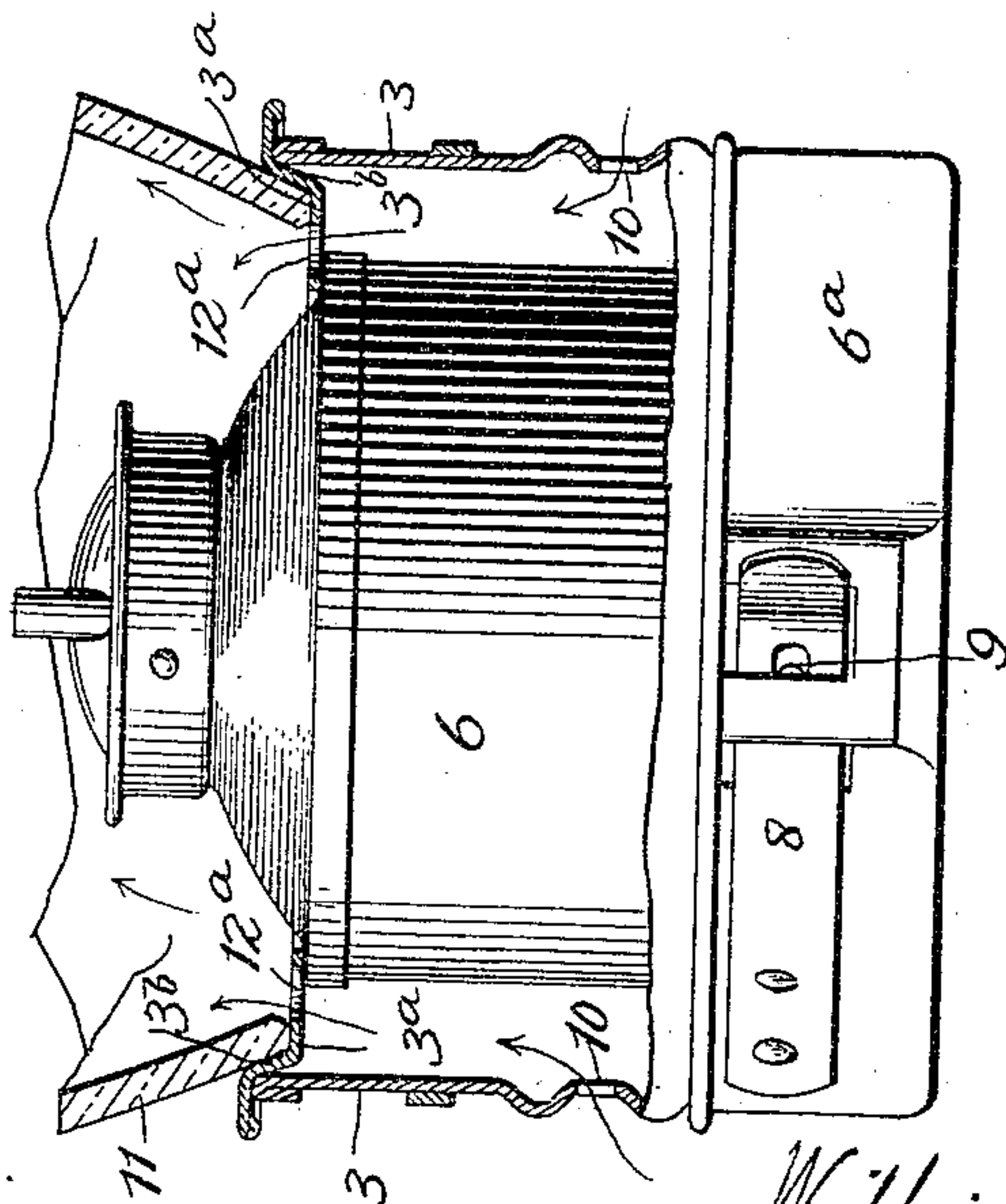


Fig. 3.



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LANTERN.

No. 886,973.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed November 2, 1904. Serial No. 231,103.

To all whom it may concern:

Be it known that I, WILLIAM S. HAMM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Lanterns, of which the following is a specification.

My invention relates to lanterns, more especially such of the hand type as are used in railroad practice, and consists in means hereinafter described for holding or seating the lower edge of the lantern globe, and whereby the current of air necessary to support combustion may enter the interior of the globe and be broken, attenuated or divided before reaching the flame, so that the light is prevented from being extinguished and a steady flame, and consequently a reliable signal, is produced. Heretofore it has been usual to provide a globe for a lantern of this class with an annular bottom flange considered necessary for holding the globe in place, but of late globes have been manufactured for such lanterns without such annular bottom flanges, and it has become necessary to change certain parts of the lantern body to adapt it to the new form of globe.

In devising means for seating a lantern globe of the novel character mentioned, changes have been required in the inner structure of the lantern whereby to admit a proper current of air to the interior of the globe and to the flame, the air being primarily received as heretofore through openings furnished in the body hoop. These objects I carry out as herein explained and illustrated in the drawings, in which

Figure 1 is a vertical section of a lantern showing the invention, the section being taken to show a removable oil pot locked by means of a bayonet joint to the body hoop. Fig. 2 is a plan thereof. Fig. 3 is a similar vertical section showing a modification, and Fig. 4 is a plan of Fig. 3. Fig. 5 shows a further modification.

Similar numerals of reference indicate similar parts in the respective figures.

1 is the base of the lantern to which are attached guard wires 2 connecting with the annular hoop 3 in any suitable manner, and which, extending upwardly to form the correct shape of the guard, unite with the series of horizontal guard rings 4. To the upper one of the latter is hinged the cap 5. Formed with the oil pot 6, and at the lower part there-

of, is a cup 6^a in the wall of which is the slot 7 of a bayonet joint, and to which wall is attached the spring 8, the free end of the spring being adapted to fit over a pin 9 projecting from the hoop 3 and the slot 7 over a similarly projecting pin 9^a. It will be understood that except at the locking portions of the hoop, where its cup is bulged out as shown in Fig. 1, the cup 6^a of the oil pot 6 closely resembles the body hoop 3. The hoop 3 above the cup 6^a which fits over it, is provided with a row of perforations 10 through which the necessary supply of air is received for admission to the interior of the globe 11 and to the flame to support combustion.

As shown in Figs. 1 and 2, the upper portion of the hoop 3 has an annular internal ledge 3^a, between the inner edge of which and the oil pot 6 an annular space 12 is left through which the air entering the row of perforations 10, and after reaching the wall of the oil pot, is admitted between it and the inner edge of the ledge to the interior of the globe. The portion 3^b of the hoop 3 forming the wall around the ledge 3^a may be vertical or given a slight curve to conform to the curve or angle of the lower part of the wall of the globe 11, which as seen is devoid of the vertical lower flange heretofore common in globes for lanterns of this class. The internal ledge 3^a and the portion 3^b of the hoop surrounding it, and forming its wall, together provide a convenient and firm seat for the globe 11, to and from which it may be readily fitted and removed, while the annular space 12 between the ledge and the oil pot, acting in conjunction with the annular row of perforations 10, permits a free but attenuated current of air to enter the globe, the lower part of which, by reason of its outward flare, has a tendency to divert the attenuated current away from the flame, thus lessening the danger of its extinguishment, and insuring a steady light. The oil pot may extend slightly above the ledge, thus forming an inner wall acting in conjunction with the wall furnished by the globe for guiding or deflecting the air as it ascends within the globe. In the modification, Fig. 5, hereinafter described, such a construction is shown. In Figs. 3 and 4, while the same principle of operation is shown, the ledge 3^b is provided with an annular row of holes 12^a through which the air ascends after admission through the lower perforations 10 to the

interior of the globe. In both constructions the action is substantially identical. An advantage possessed by the modification shown in Figs. 3 and 4 is that provision is more especially made for breaking up or dividing the air current as it passes to the flame.

In Fig. 5 the body hoop is shown drawn up from one piece of metal, and containing as a part thereof the wall 3^b which surrounds the lower part of the globe 11, while the horizontal member, or ledge, 3^a is separate from said wall. Thus the outer diameter of the ledge is greater than the diameter of the body hoop, and extends outwardly therefrom. This construction would be used in the event that a globe were employed with a bottom edge having a diameter greater than that of the body hoop; and it is the intention, as shown in Fig. 5, to provide a construction admitting of the use of a globe not conforming to the standard at present used. It is obvious that the horizontal ledge and the wall 3^b may be in one piece, and also that the ledge may be removable from the hoop. Furthermore, the ledge and wall, as seen in Figs. 1 and 3, may be made detachable from the hoop, although in practice the connection is a permanent one. In Fig. 5 the oil pot is shown extending slightly above the ledge on which the lower part of the globe rests so as to assist in deflecting the current of air away from the flame, and it is to be understood that in the construction illustrated in Figs. 1 and 3 the same extension of the oil pot above the ledge may be adopted if desired.

I do not restrict myself to the exact details of construction, combination and arrangement herein set forth, it being obvious that minor variations thereof, not involving

the exercise of invention, may be made by the skilled mechanic; and such departures from what is herein described and claimed, not involving invention, I consider as within the scope and terms of my claims.

Having thus described my invention, I claim:—

1. In a lantern, the combination of a body hoop, a globe and an oil pot removably fitted to the hoop, the hoop being provided with a lower row of perforations for the initial admission of air and with an internal flat ledge extending substantially to the body of the oil pot, said ledge being adapted to receive the lower edge and side portions of the globe, and provided at its inner margin with means for admitting air past the ledge from between the oil pot and the hoop to the combustion chamber of the lantern, substantially as set forth.

2. In a lantern, the combination of a body hoop, a globe and an oil pot removably fitted to the hoop, the hoop being provided with a lower row of perforations for the initial admission of air and with an outwardly walled internal flat ledge extending substantially to the body of the oil pot, said ledge being adapted to receive the lower edge and side portions of the globe, and provided at its inner margin with means for admitting air past the ledge from between the oil pot and the hoop to the combustion chamber of the lantern, substantially as set forth.

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

WILLIAM S. HAMM.

Witnesses:

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P. G. EMERY.