

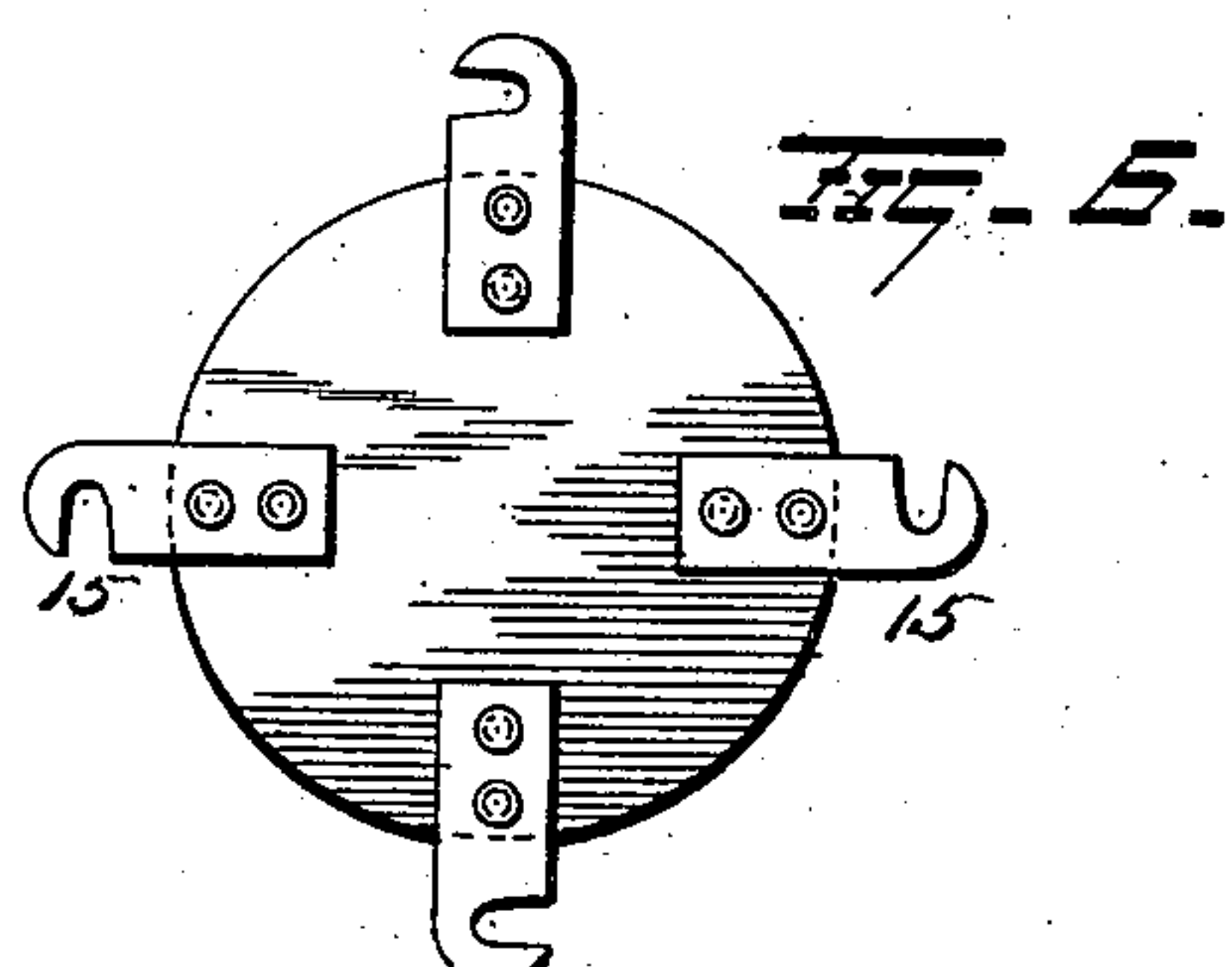
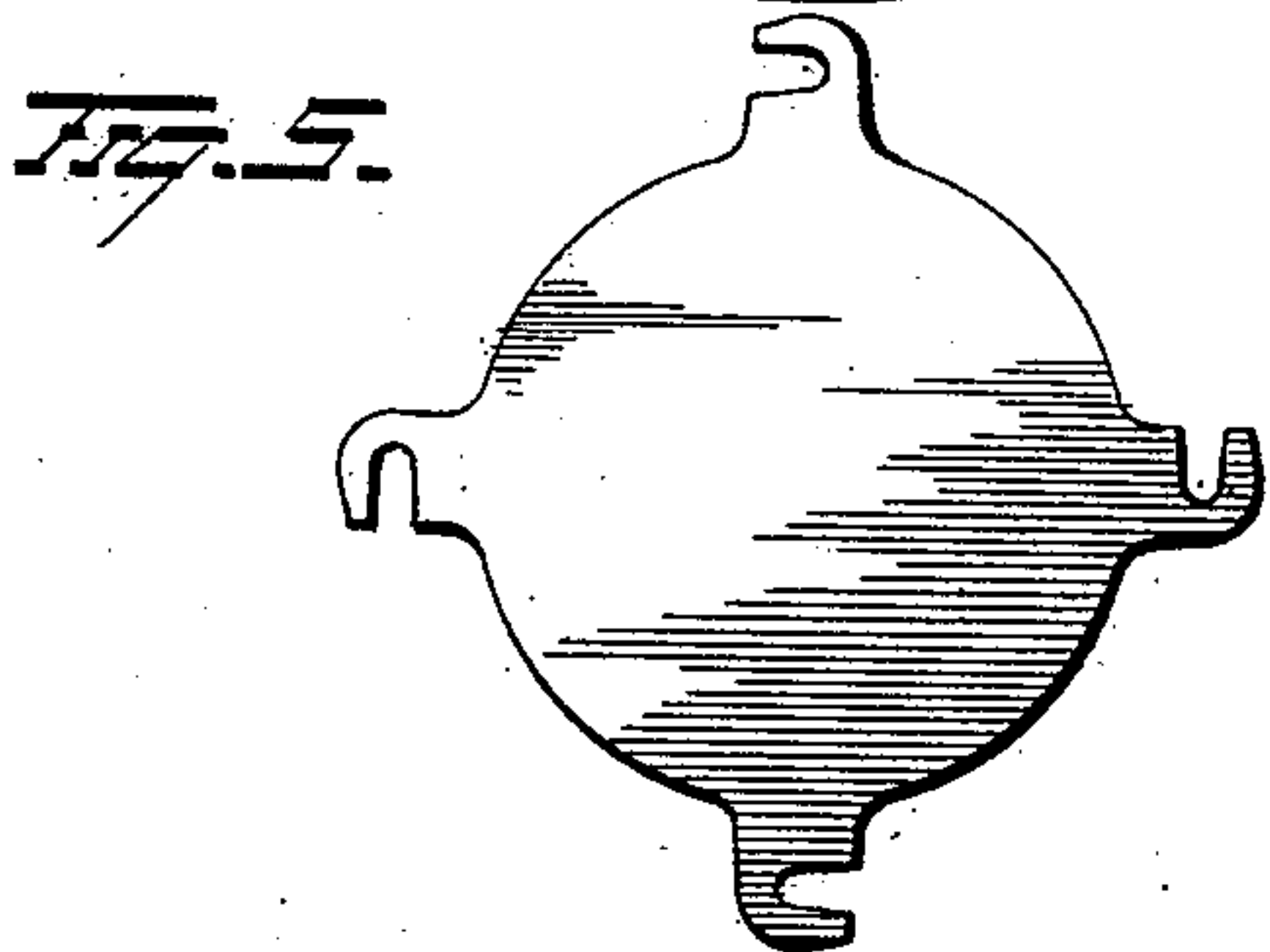
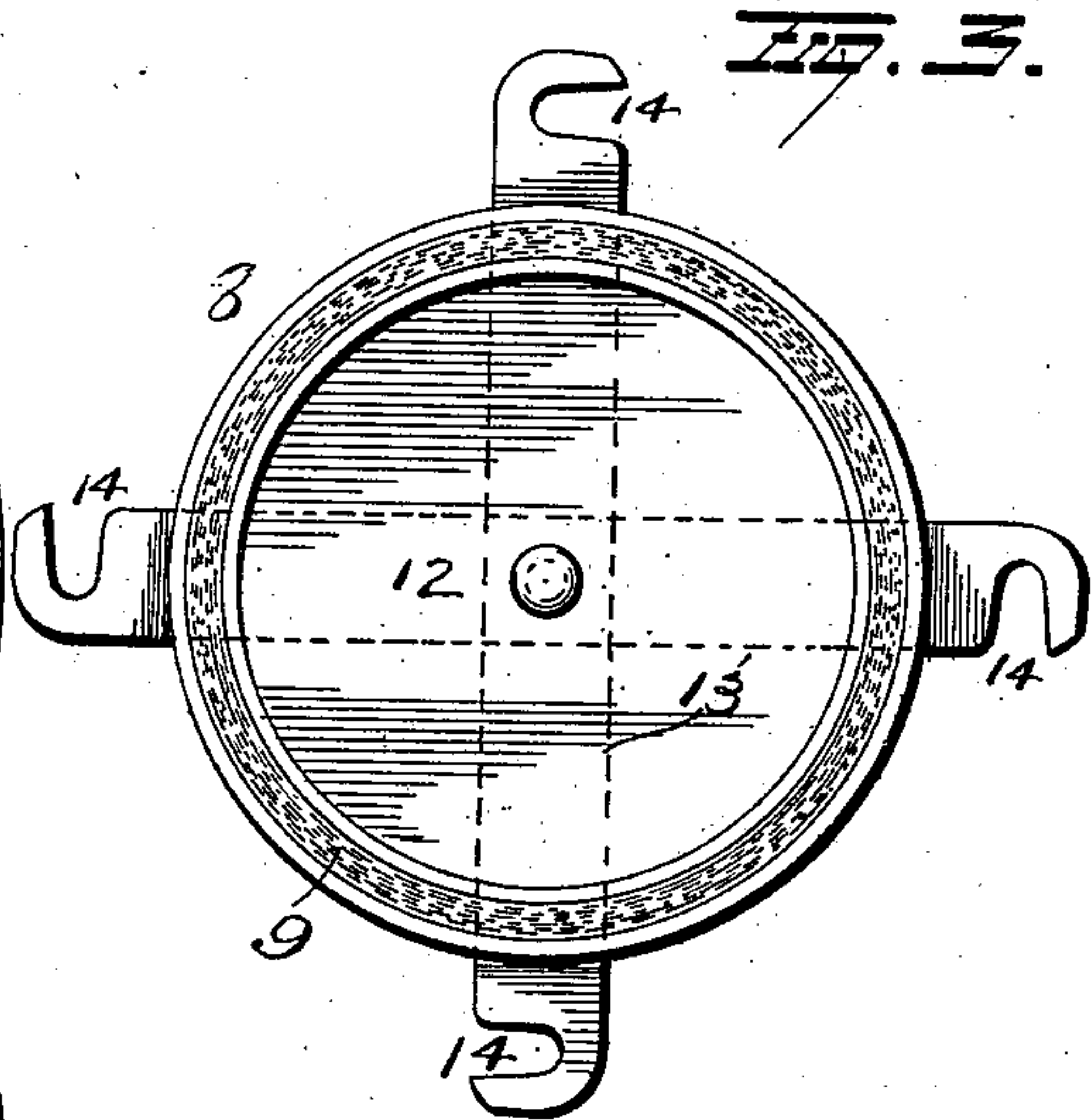
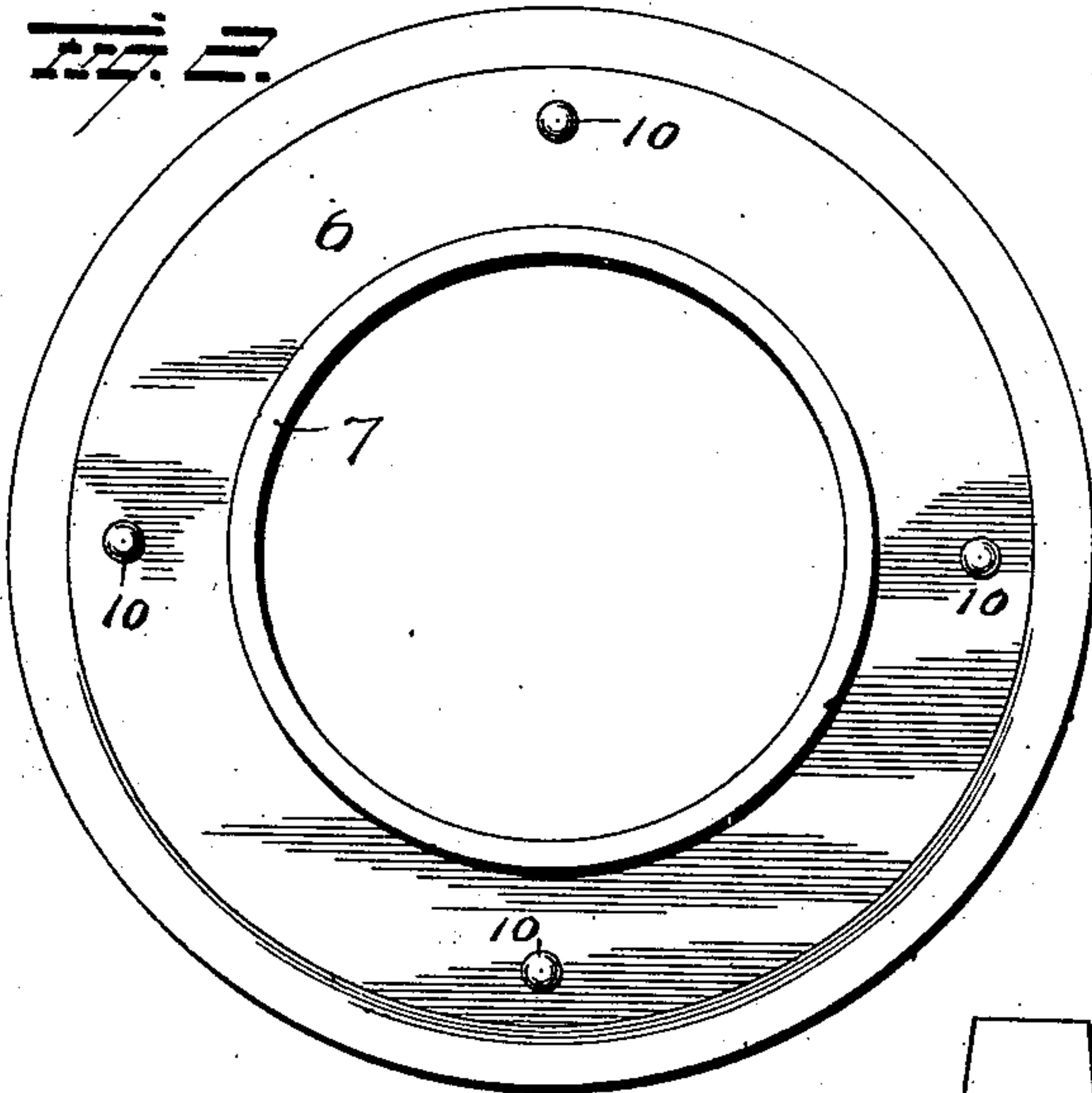
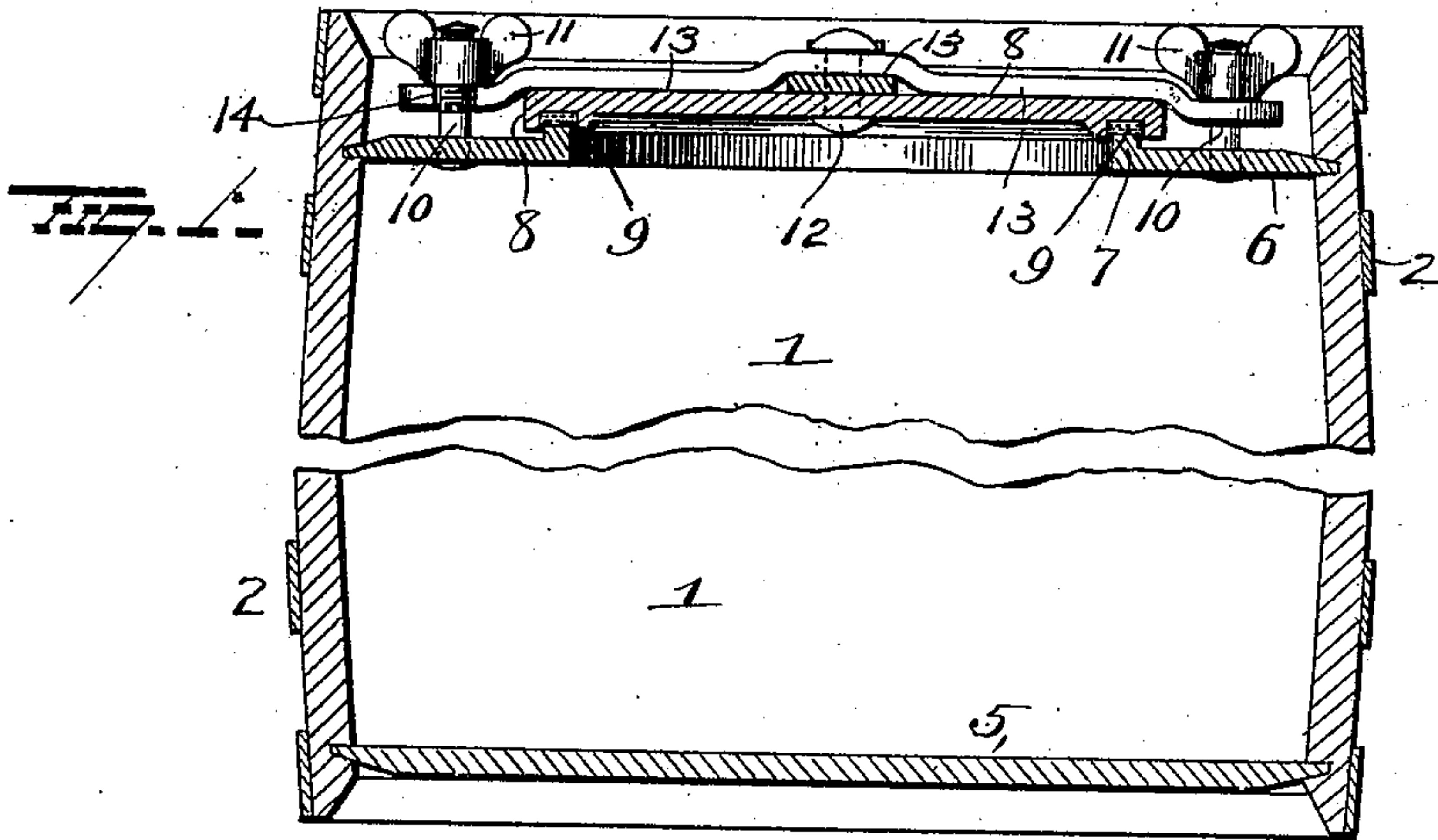
No. 711,984.

Patented Oct. 28, 1902.

H. P. LEMPER.  
BARREL OR CASK.

(Application filed Oct. 3, 1901.)

(No Model.)



WITNESSES  
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# UNITED STATES PATENT OFFICE.

HENRY P. LEMPER, OF GALENA, ILLINOIS.

## BARREL OR CASK.

SPECIFICATION forming part of Letters Patent No. 711,984, dated October 28, 1902.

Application filed October 3, 1901. Serial No. 77,485. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY P. LEMPER, of Galena, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Barrels or Casks; 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 an improvement in barrels or casks designed particularly for use in packing plants and for curing meats, the object of the invention being to provide a barrel or cask with a removable head and with means for locking the head in place whereby a liquid and practically air tight closure is secured, the parts being so constructed and arranged that the head can be removed without loosening any of the hoops or otherwise weakening the barrel.

With these objects in view my invention consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in longitudinal section of a barrel embodying my invention. Fig. 2 is a plan view of the rim or head. Fig. 3 is a view in elevation of the under side of the cover. Fig. 4 is a view of the bung-stave, and Figs. 5 and 6 are views of modified forms of covers.

1 represents a barrel or cask made up of staves held in place by a series of soft-steel hoops 2, preferably galvanized. One stave of the barrel is provided with an opening 3 for the passage of air and an opening 4 for the introduction of brine, the two openings 3 and 4 having metal linings or bushings, which latter receive, respectively, a vent plug and bung of any material and of any approved construction. The bushings and, in fact, all the metal parts of the barrel or cask should be galvanized or otherwise properly treated to prevent corrosion incidental to contact with the brine.

The lower end or head 5 of the barrel is permanently secured in place, while the upper end is open and is provided with a rim 6, permanently secured within a groove in the upper ends of the staves. This rim may be made of hard wood; but I prefer to make it of metal, and it is provided on its inner edge

with a raised rib or lip 7, which forms a seat on which the cover 8 rests. This cover is circular in form and of a diameter sufficient to overlap the rim and is provided on its under face near its periphery with a recess to receive a filling of cork or other suitable material 9, which rests on the lip. From this it will be seen that when the cover is forced home on the lip of the rim the lip and yielding face of the cover-plate form a liquid and approximately air tight joint. The rim is provided with a plurality of screws 10, preferably four, permanently secured to the rim, and each screw carries a thumb-nut 11, the free ends of the screws being upset to prevent the displacement of the nuts. The rim sets well down below the upper ends of the staves, so as to bring the nuts and screws within or below the horizontal plane of the upper ends of the staves, which protects them against accidental injury while moving the barrel or cask from place to place.

The cover 8 is provided on its upper face with a central stud 12, carrying two metal cross-bars 13, disposed at right angles to each other. These cross-bars project beyond the outer edge of the cover, and each is provided near its end with a slot 14 for the passage of the screws 10. From this it will be seen that by placing the cover on the rim and turning the cover until the screws are within the slots in the cross-bars or turning the cross-bars on the stud 12 until the screws are within the slots and then screwing home the nuts the cover will be securely locked in place, the joint between the rim and cover being water and approximately air tight.

In the tierces heretofore used in packing-houses for curing meats the constructions are such that four to five or more hoops have to be removed or loosened up in order to remove the head for both filling and removing the contents. This not only requires skilled labor, but the repeated removal and replacement of the head soon destroys the latter or so injures the staves as to render the tierce unfit for further service. With my improvements the head can be removed and replaced by an unskilled laborer. Hence while the first cost of my device may exceed the cost of the ordinary tierce now nearly universally employed this extra cost is more than offset



by the saving in labor employed in the subsequent manipulations of the cover and cask. Again, in view of the fact that the removal and replacement of the cover does not injure the cask in the slightest it lasts much longer than those now employed.

Instead of providing the cover with cross-bars having hooked ends the hooks may be cast or forged integral with the cover, as shown in Fig. 5, or, if desired, the cover may be of wood, such as white oak, and provided either with cross-bars, as shown in Fig. 1, or with hook-ears secured thereto, as shown in Fig. 6.

It is evident that other slight changes in the construction of the several parts might be resorted to without departing from the spirit and scope of my invention. I would have it understood that I do not confine myself to the construction shown and described, but consider myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

1. An apparatus for curing meats, comprising a barrel having two holes, one for the introduction of brine and the other for the exit of air, said barrel composed of an annular series of staves, hoops permanently securing

said staves together, a rim permanently secured within the barrel, an appreciable distance below the upper end of the barrel, an upwardly-projecting annular lip at the inner edge of said rim, a removable cover to close the opening in the rim and having an annular groove in its under face, packing in said groove to rest upon the lip on the rim, hooks projecting from the cover and engaging devices on the rim to receive said hooks, said cover and fastening devices being located below the upper edge of the barrel.

2. The combination of a barrel, a rim secured within said barrel below its upper end, a removable cover closing the opening formed by said rim, packing between said cover and rim, bars attached to the cover and projecting beyond the periphery thereof, said bars having hooks at their free ends, screws secured to the rim and projecting upwardly therefrom to be engaged by the hook ends of the bars and thumb-nuts on said screws and adapted to bear on said arms to clamp the cover on its seat on the rim.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HENRY P. LEMPER.

Witnesses:

TONY NACK,  
JOSEPH M. NACK.