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S. ANENBERG

1,777,820

HUMIDIFIER

Filed Feb. 3, 1928

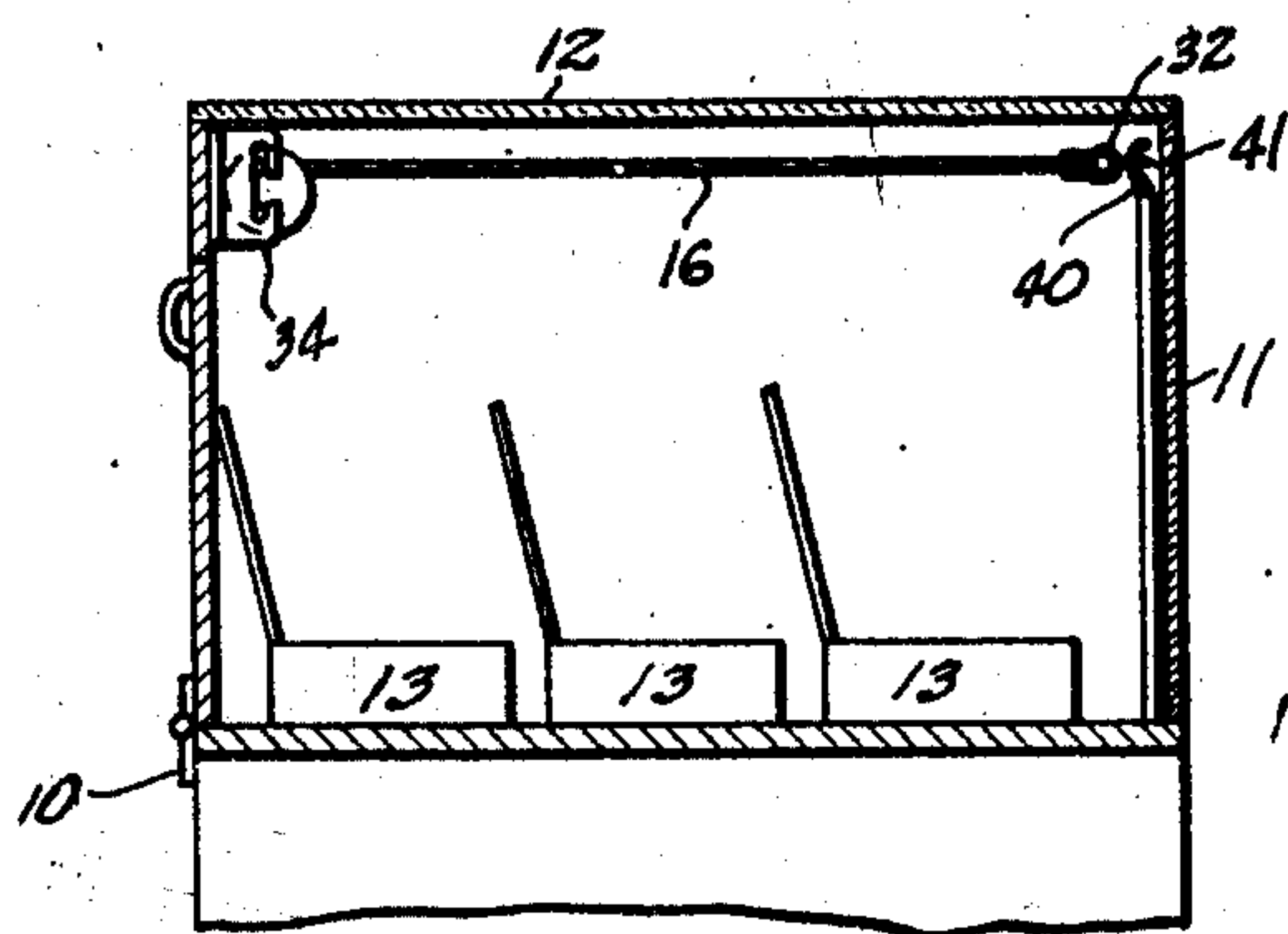


Fig. 1.

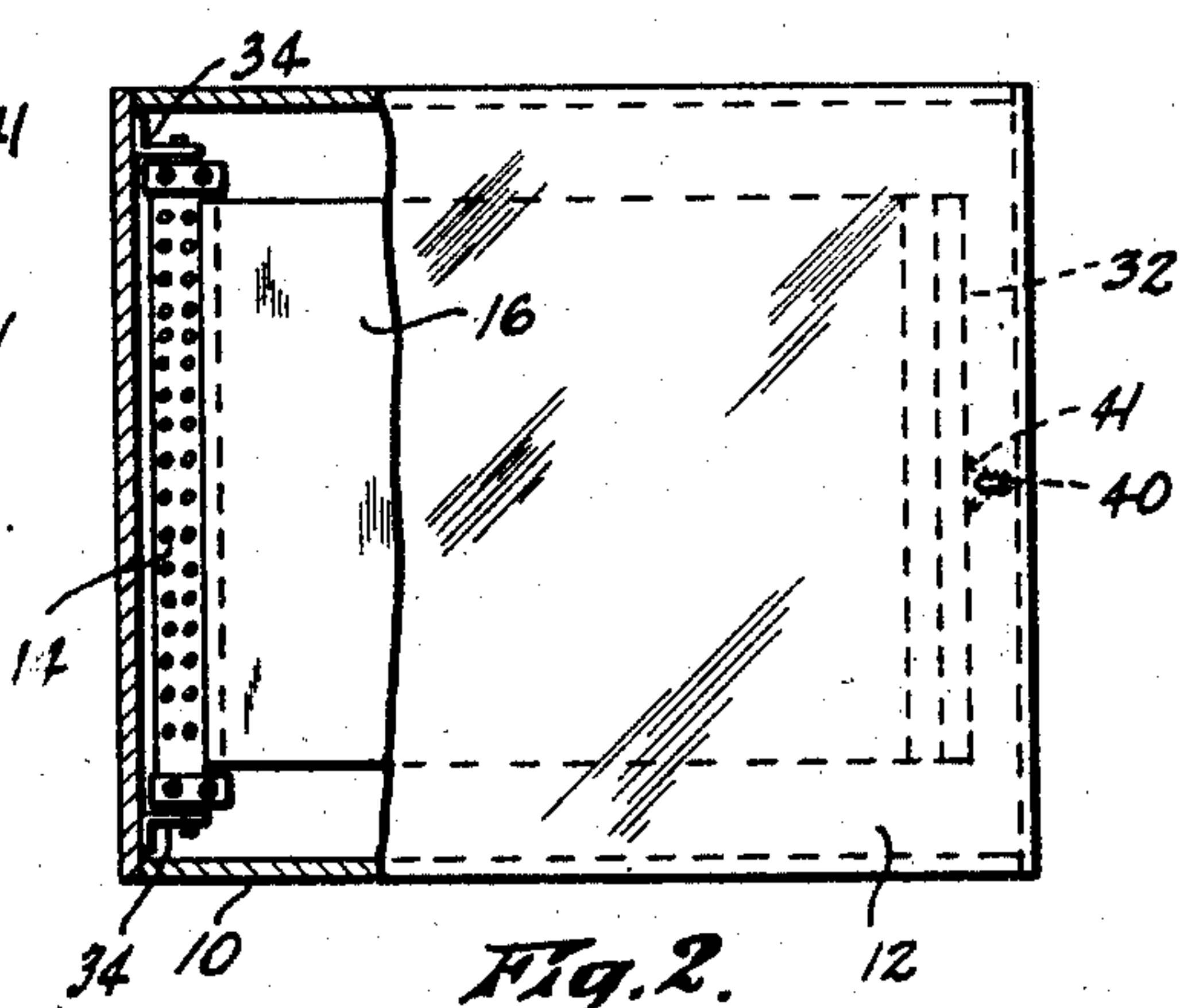


Fig. 2.

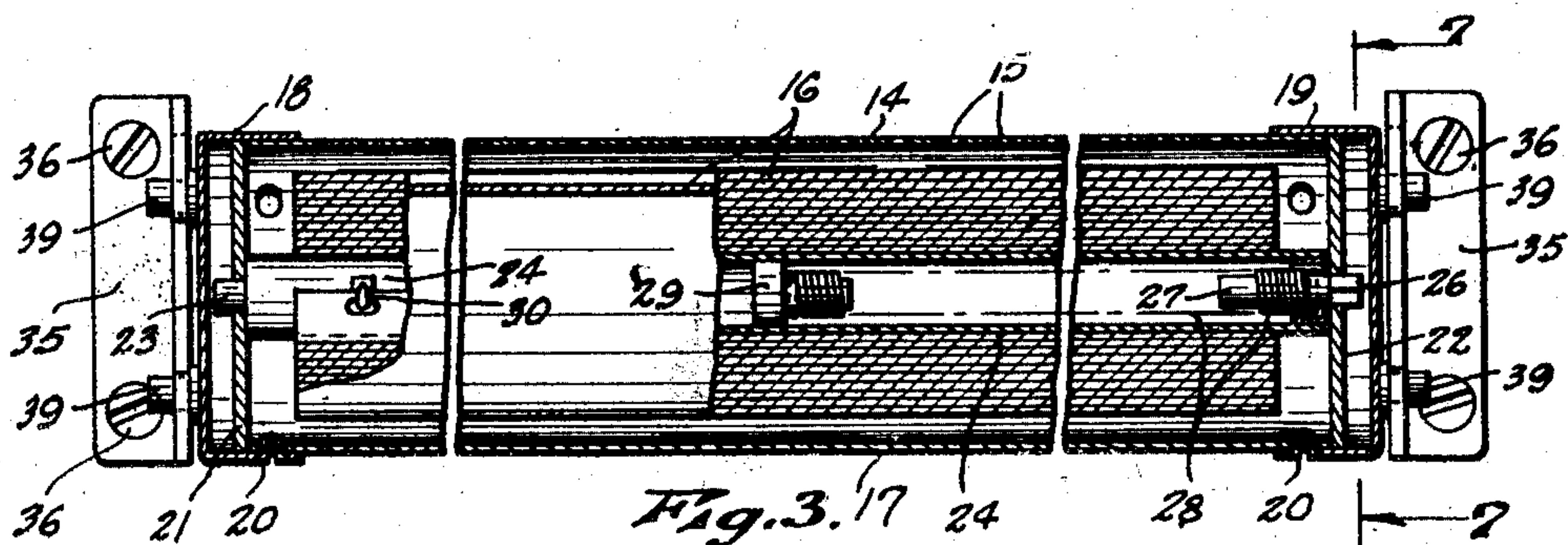


Fig. 3.

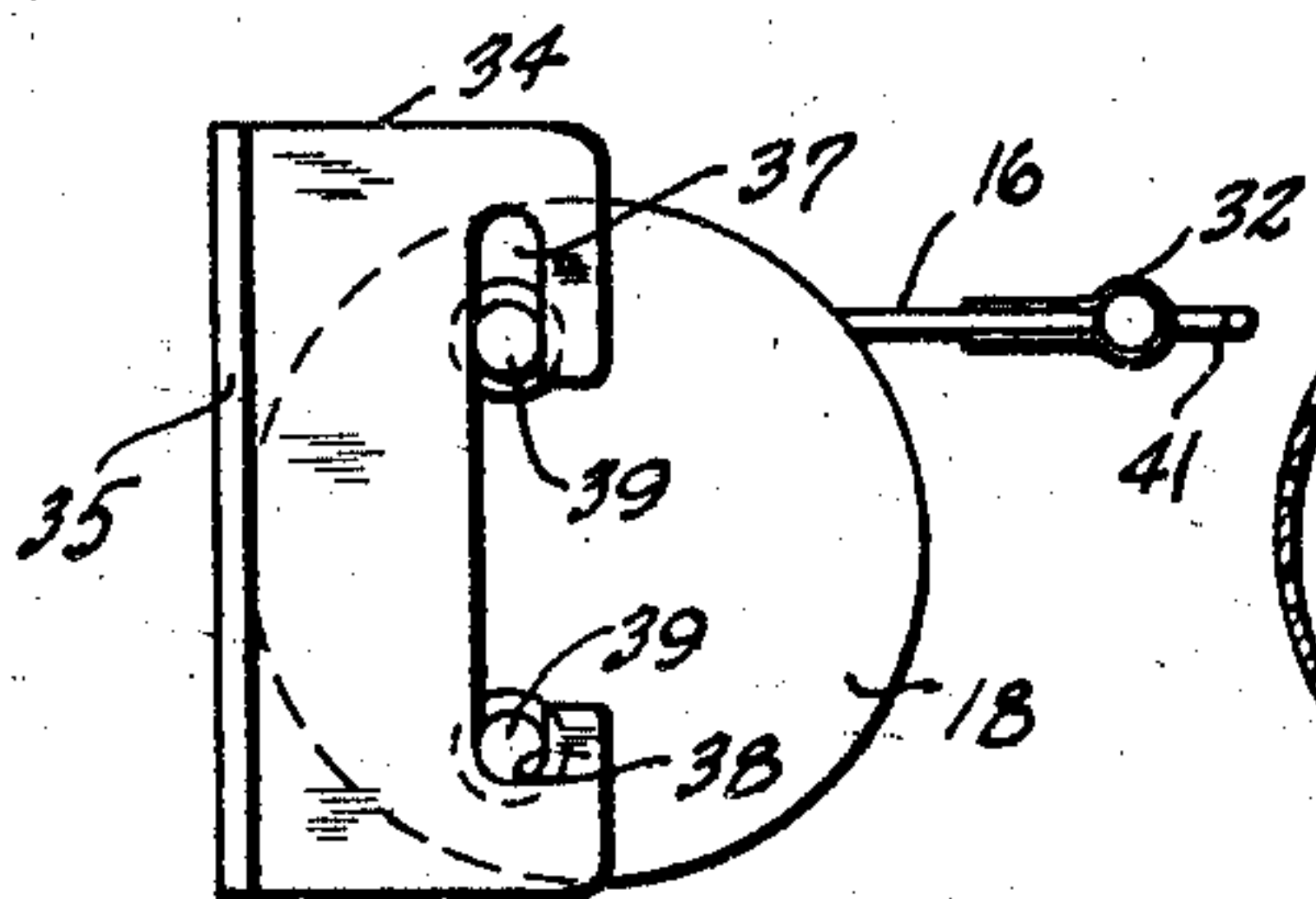


Fig. 4.

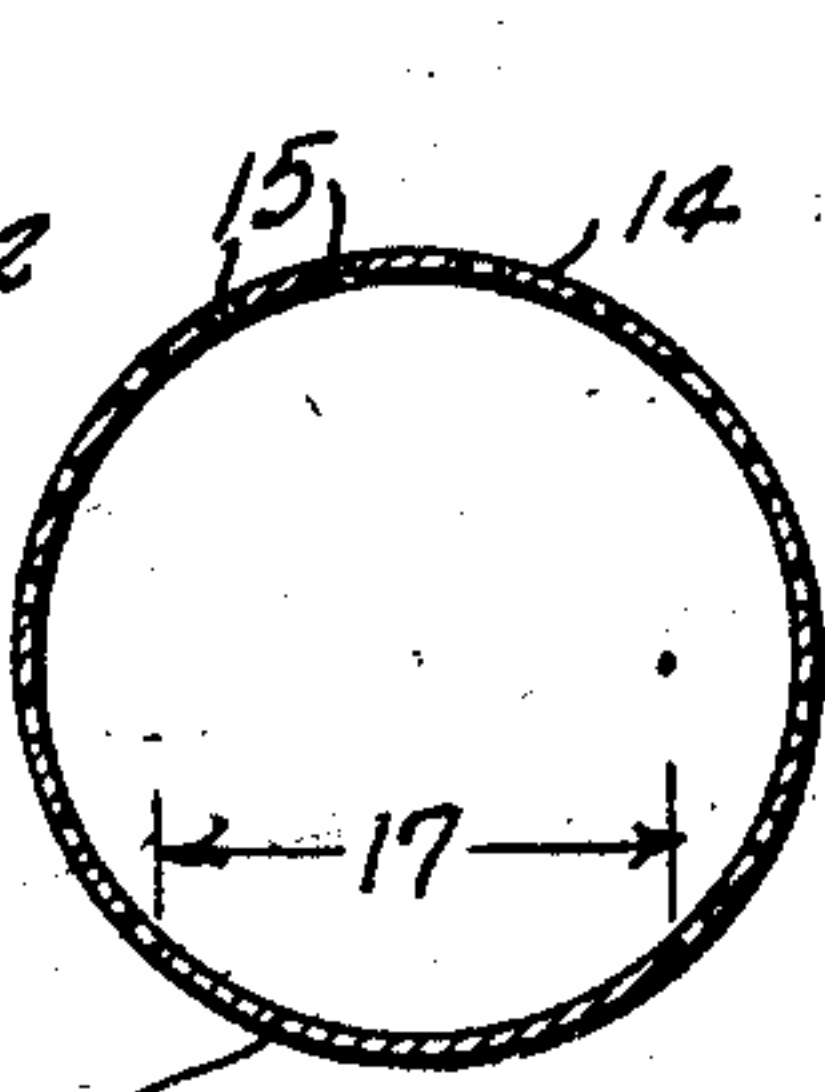


Fig. 5.

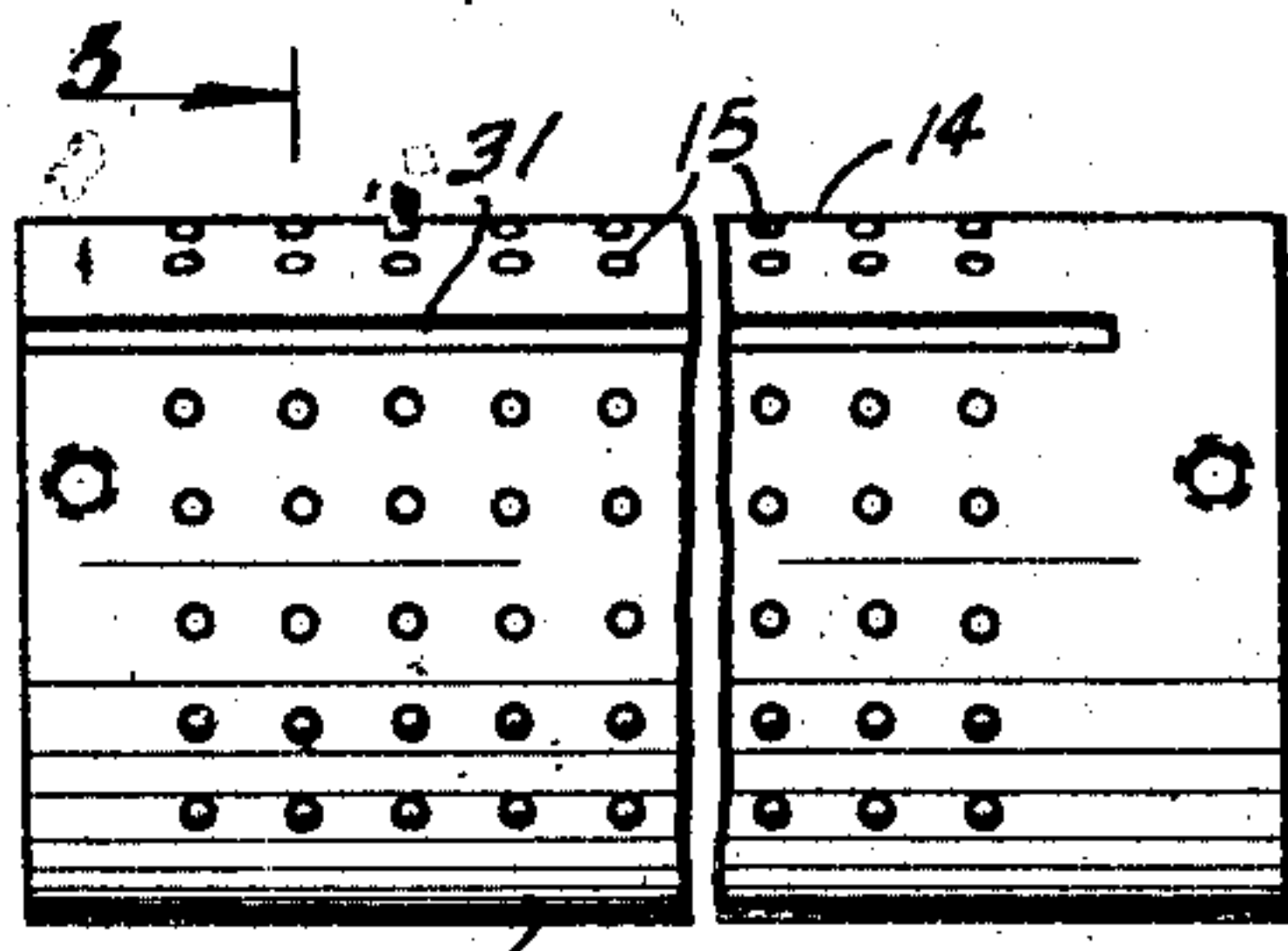


Fig. 6.

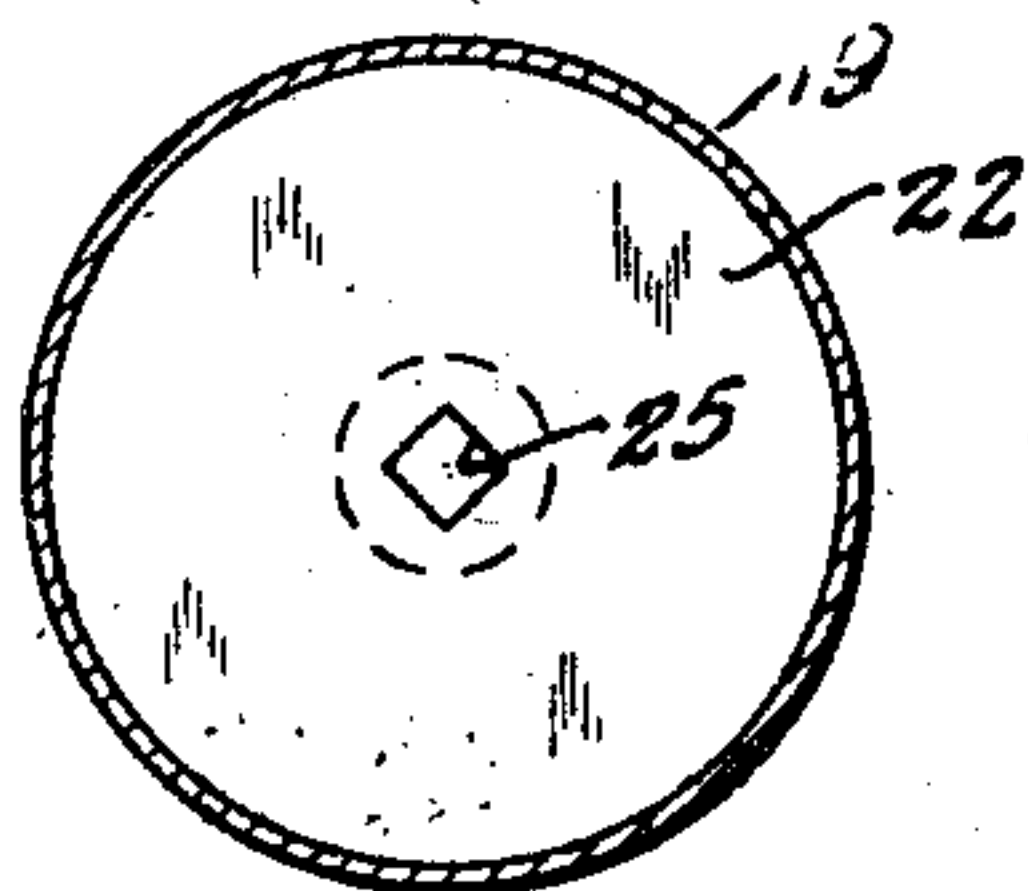


Fig. 7.

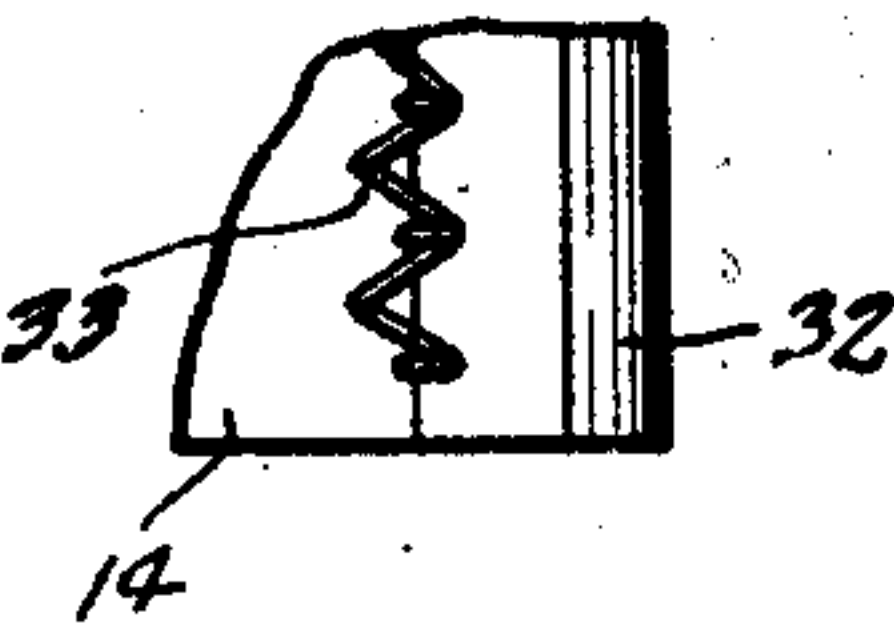


Fig. 8.

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HUMIDIFIER

Application filed February 3, 1928. Serial No. 251,536.

This invention relates to humidifiers for cigar showcases, wall boxes and the like, and has for an object to provide an air moistening device which may be mounted in a showcase out of the way where it will not interfere with the examination of the cigars by a customer, but will effectively moisten the air in the case, and at night may be extended to provide a greater amount of moisture.

It is also an object of the invention to provide a structure and mounting therefor by which the device may be easily removed for the purposes of renewing the moisture.

With the foregoing and other objects in view, I have devised the construction illustrated in the accompanying drawing forming a part of this specification. In this drawing,

Fig. 1 is a somewhat diagrammatical showing of a showcase for cigars, in vertical section with my improved humidifier applied thereto.

Fig. 2 is a top plan view thereof with a part of the top wall broken away.

Fig. 3 is a longitudinal vertical section through the device.

Fig. 4 is an end elevation of the device showing one of the mounting brackets.

Fig. 5 is a transverse section through the casing substantially on line 5—5 of Fig. 6.

Fig. 6 is a side elevation of the tubular casing.

Fig. 7 is a transverse section of one of the caps at the end of the casing substantially on line 7—7 of Fig. 3, and

Fig. 8 is a detail showing a stiffening bar for the free edge of the absorbent curtain.

Referring to Figs. 1 and 2, a showcase for cigars is shown somewhat diagrammatically at 10 and has the usual front wall 11 and top wall 12 of glass to permit easy examination of cigars by a customer, cigar boxes being shown at 13. My improved humidifier is preferably mounted adjacent the upper rear corner of this case where it is out of the way, and when the curtain is not extended will not interfere with the proper view of the cigars.

This improved humidifier comprises a tubular casing 14 which is provided with a

large number of openings or perforations 15 throughout the greater portion of its surface to permit circulation of air through the casing whereby it may become moistened by an absorbent flexible curtain 16 which holds the moisture. The lower portion of the casing, however, as indicated at 17 in Fig. 5, is not perforated but is left imperforate to provide a trough at the under side of the casing to collect moisture which might drop from the absorbent curtain or sheet. It is preferred that this casing be made of metal, but, of course, it may be of any other suitable material.

The opposite ends of this tubular casing are closed by cupped caps 18 and 19 which are slipped over the ends of the casing and are secured to it by any suitable means, such as screws 20. Each cap carries a transverse disc or partition 21 and 22 respectively, the partition 21 having a circular opening forming a bearing for the circular bearing 23 on one end of a roller 24. The disc 22, however, is provided with a non-circular opening, preferably square, to receive a similarly shaped portion 26 on a stud or short shaft 27 which forms a bearing support for the other end of the roller. Mounted in the roller is a coil spring 28 secured at its inner end to the roller through a block 29, and at its other end is secured to the stud or short shaft 27. As its inner end is secured to the roller through the block 29 this spring when wound will tend to rotate the roller in one direction to wind up the curtain or sheet, the inner end of this curtain being secured to the roller by any suitable means, such as a series of hooks 30. It will be apparent that by removing the securing screws 20 for the cap 19 this cap may be rotated, and through the partition 22 and short shaft 27 will wind the spring 28 to give it the desired tension, after which the cap may be secured to the casing by again inserting the screws.

The casing has a longitudinal slot 31 through which the curtain extends, and this slot runs out one end of the casing, as shown in Fig. 6, preferably the left hand end which is closed by the cap 18. By removing this cap, therefore, the roller with its curtain may be

slid longitudinally from the casing and it provides simple means for assembling the curtain in the casing. The free edge of the curtain is stiffened and held flat by a metal bar 32 which is preferably of sheet metal bent to substantially U-shaped to embrace the opposite sides of the free edge, and it is secured to the curtain by any suitable means, such as stitching 33. This bar strengthens and holds the free edge of the curtain flat and prevents its being drawn through the slot 31 into the casing when the curtain is wound on the roller.

The casing and the roller should be mounted so that they are easily removable for moistening the curtain to supply the moisture which has been evaporated. I have devised a simple and effective means for doing this. These supports comprise a pair of brackets 34 having feet 35 at substantially right angles to the body of the bracket provided with openings for securing screws 36. Each bracket is provided in its front wall with a pair of opposed and vertically spaced notches 37 and 38. Extending outwardly from each of the caps 18 and 19 is a pair of spaced lugs or studs 39 which are so spaced so as to be adapted to be inserted in the notches 37 and 38. The upper notch 37 is of greater depth than the lower notch 36 and is of sufficient depth so that the upper stud 39 may move into the notch sufficiently to permit the lower stud to be free from its notch. Therefore, in removing the device from its supports all that is necessary is to lift it upwardly to free the lower stud 39 from its notch, and then turn the device counterclockwise as viewed in Fig. 4, to carry the lower lug 39 outwardly, when the whole device may be dropped to remove the upper lugs from the notches 37. The curtain may then be moistened either by placing the device in a suitable container of water, or it may be held under a faucet, and is easily inserted back in the brackets by reversing the operation just described.

During the day time the curtain is wound on the roller within the casing, but it moistens the air in the show-case because the air will circulate through the openings in the casing and take up moisture from the curtain. In this position the curtain is out of the way where it does not interfere with the inspection of the cigars. In order to provide a greater amount of moisture to the air the curtain is unwound and extended at night as shown in Figs. 1 and 2, and may be held in this position by any suitable means, such as a hook 40 at the forward end of the show-case over which a ring 41 on the stiffening bar 32 may be engaged. It will be obvious that when in this position a large surface of the moistened curtain is exposed to the air and will supply a large amount of moisture to this air.

Having thus set forth the nature of my invention, what I claim is:

1. A humidifier for cigar showcases and the like comprising a perforated casing having a longitudinal slot, means for removably supporting the casing in the case or the like, a roller mounted in the casing, a flexible absorbent curtain secured to the roller, means for rotating the roller to wind the curtain thereon, and means for holding the curtain extended from the casing.

2. A humidifier of the class described comprising a perforated tubular casing having a longitudinal slot, means for removably mounting the casing, a spring operated roller in the casing, a flexible absorbent curtain connected to the roller and passing out through the slot, and means to hold the curtain extended.

3. In a humidifier, a tubular casing having a longitudinal slot, a roller mounted in the casing, a flexible absorbent curtain extending through the slot, pairs of spaced studs projecting from the ends of the casing, and supporting brackets having spaced opposed notches to receive said studs, one of said notches being of sufficient depth to permit the stud therein to move sufficiently to release the other stud from its notch.

4. In a device of the character described, a perforated tubular casing, a flexible absorbent curtain in said casing, a pair of spaced lugs extending from each end of the casing, and a pair of brackets each having opposed notches to receive said lugs, one notch being of sufficient depth to allow its lug to move inwardly sufficiently to clear the other lug from its notch.

5. In a humidifier, a tubular perforated casing, caps secured to and closing the ends of the casing, a roller mounted in the casing, a pin forming a bearing for one end of the roller and secured to the adjacent cap, a spring secured at one end to the roller and at its other end to said pin so that rotation of the cap will wind the spring, and a flexible absorbent curtain connected to said roller.

6. A humidifier comprising a perforated tubular casing having a longitudinal slot, a cap closing one end of the casing, a roller mounted in the casing, a bearing pin for one end of the roller having a non-circular end projecting into a similarly shaped opening in the cap, a coiled spring connected at one end to said pin and at the other end to the roller so that turning of the cap on the casing will wind the spring, and a flexible absorbent curtain connected to the roller and extending through the slot.

7. A humidifier for cigar showcases or the like comprising a perforated tubular casing having a portion on one side imperforate to form a trough for collection of moisture, said casing having a longitudinal slot, a roller mounted in the casing, a flexible absorbent

sheet connected to the roller and extending
through said slot, means for operating the
roller to wind the sheet thereon, and brack-
ets for removably mounting the casing in
a horizontal position with the imperforate
5 trough portion thereof at the under side.

In testimony whereof I affix my signature.

SOLOMON ANENBERG.

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