

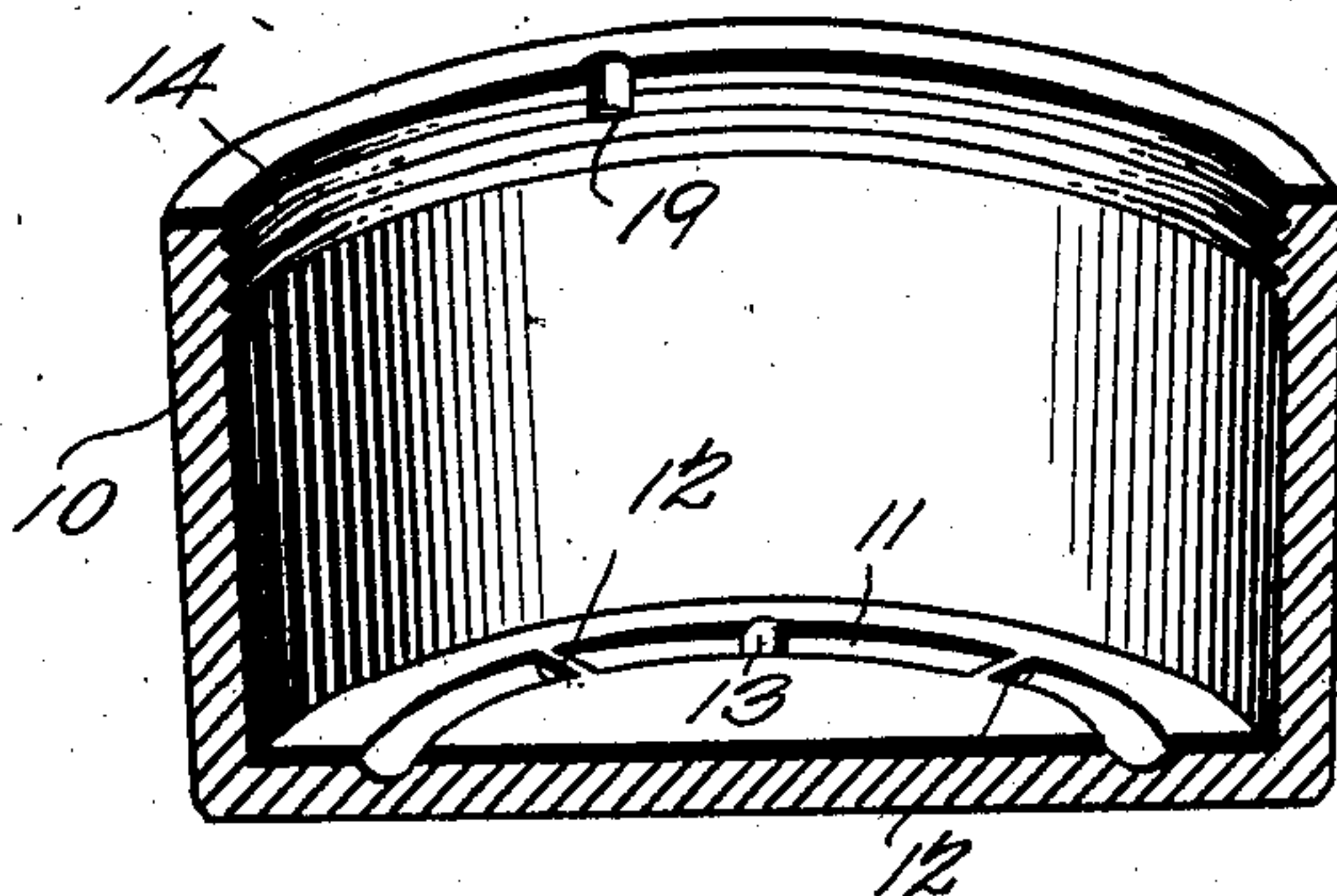
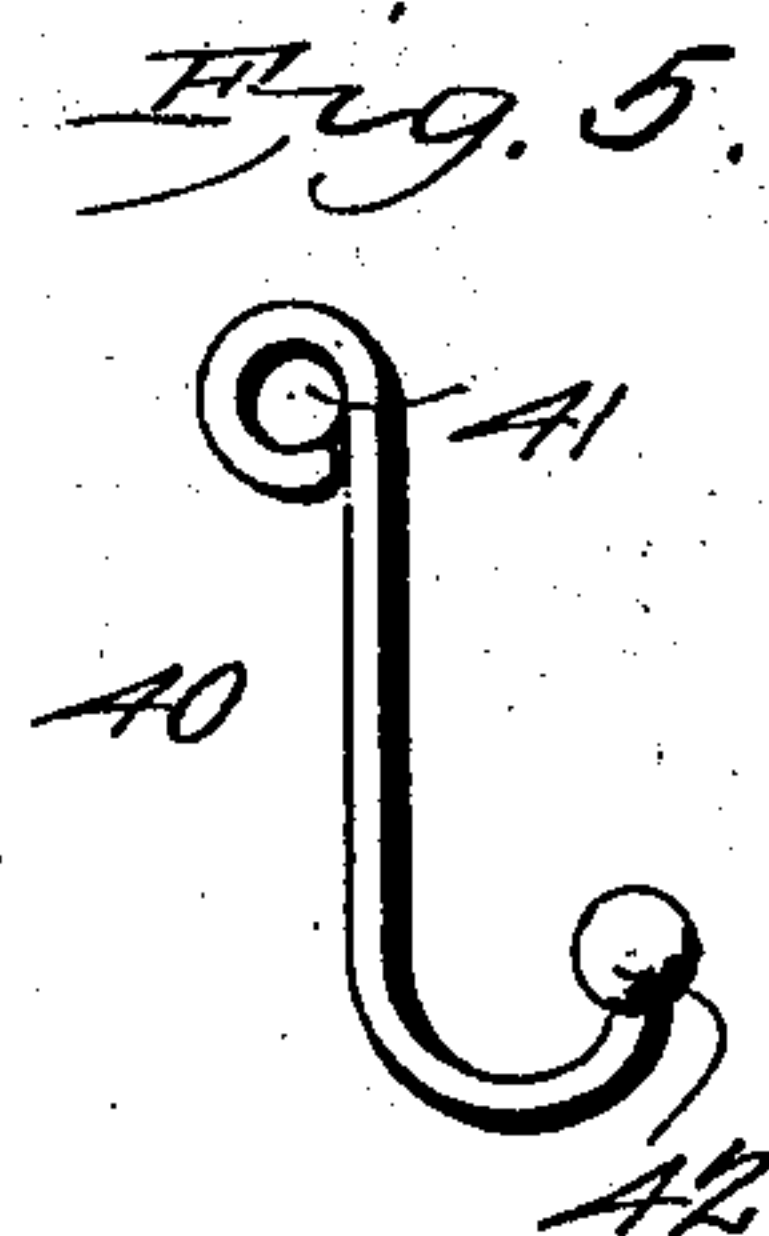
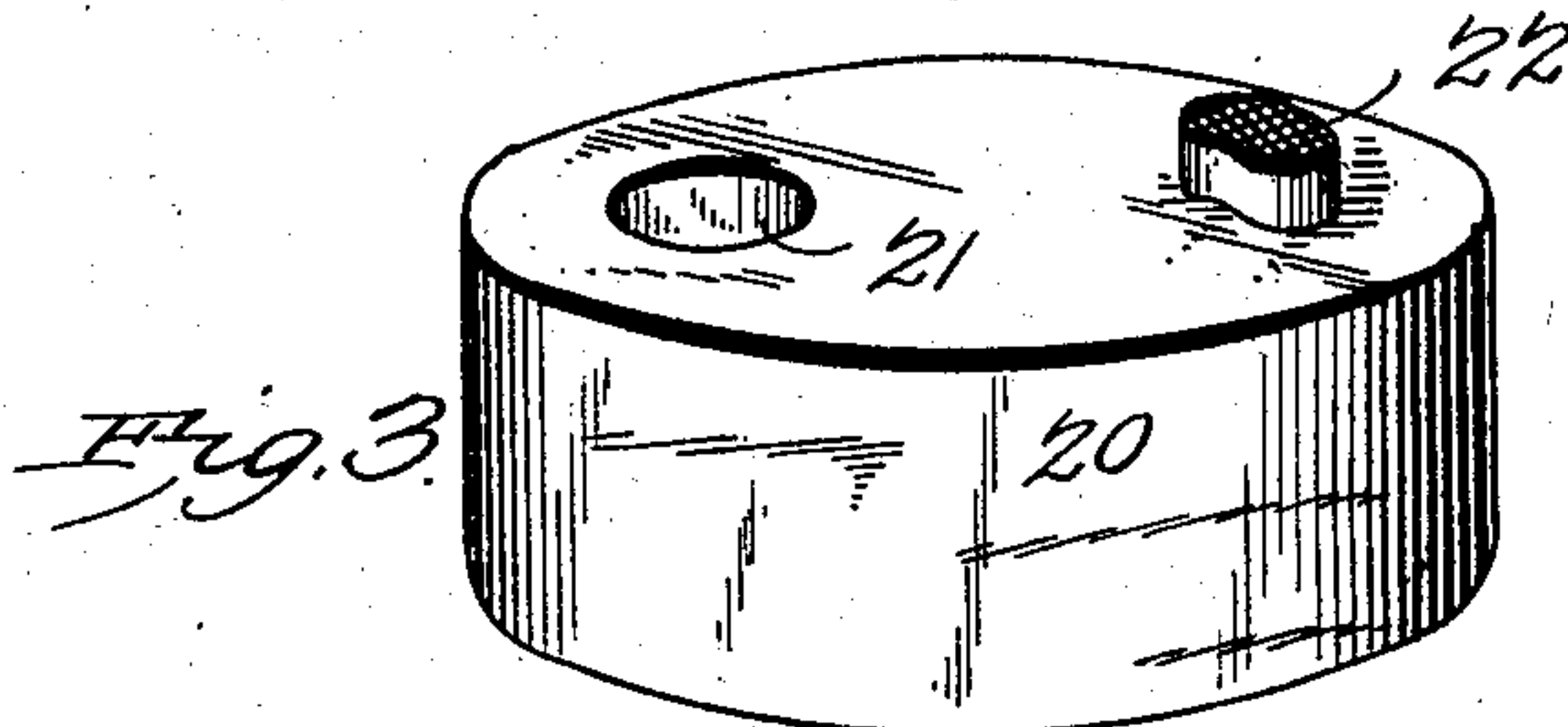
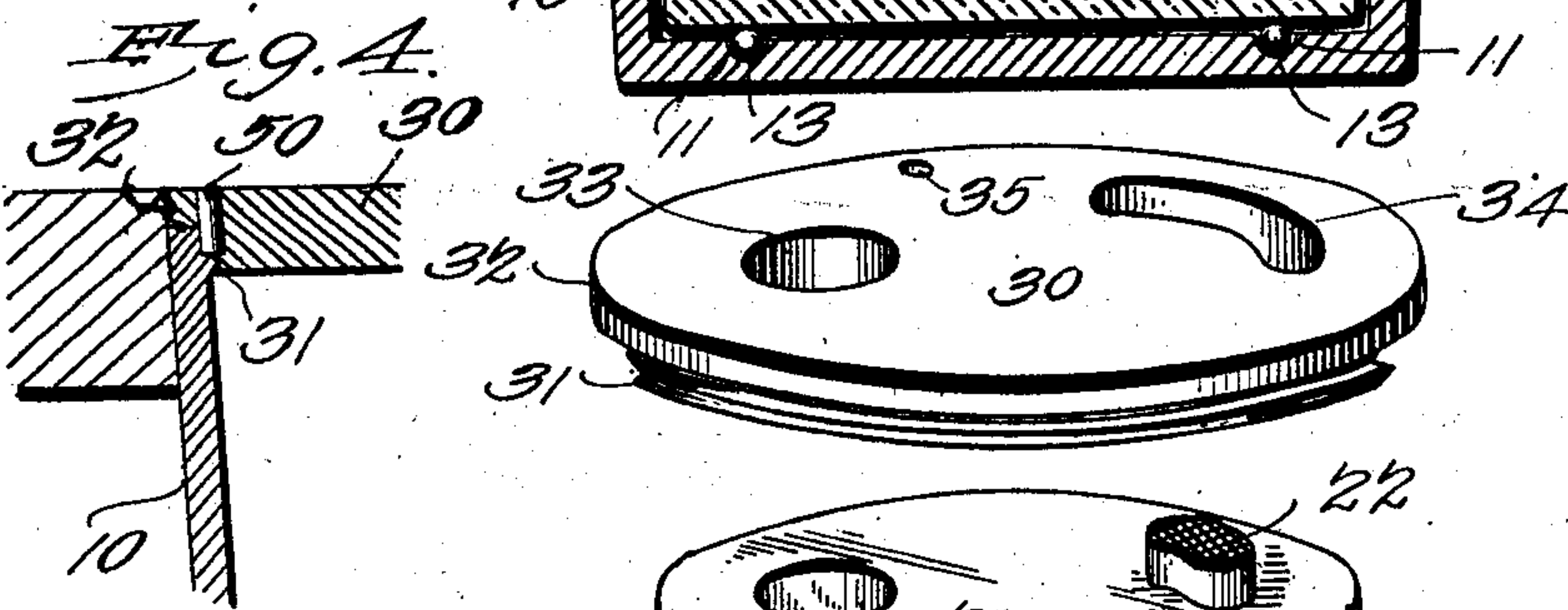
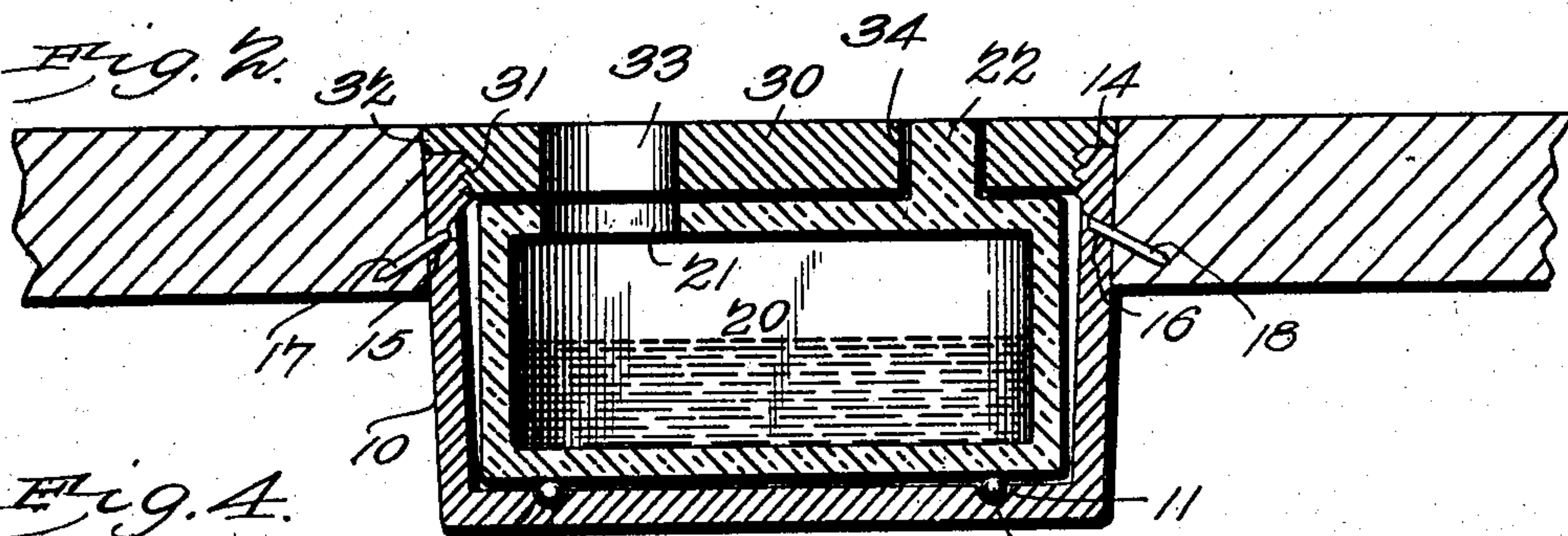
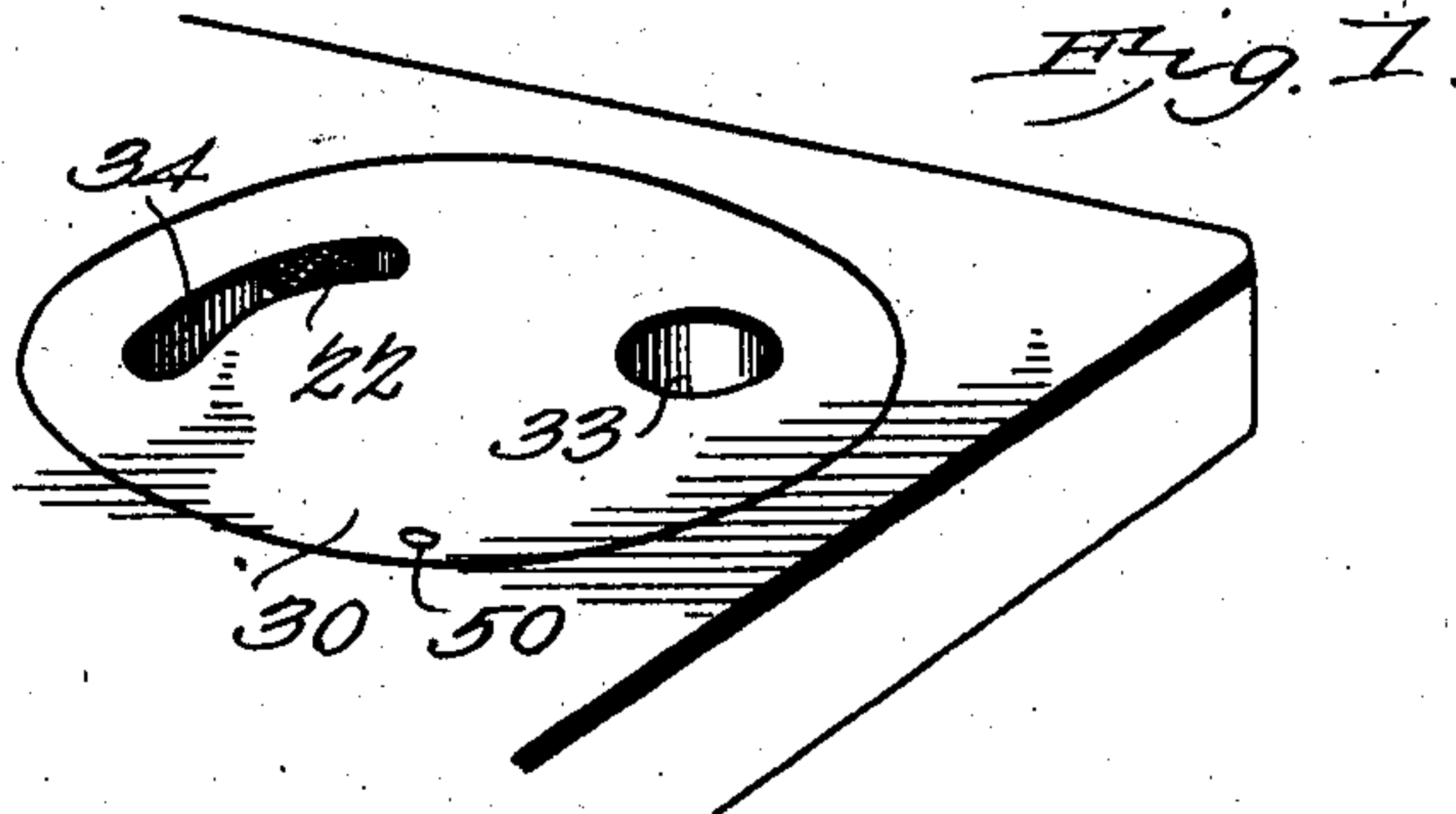
No. 721,542.

PATENTED FEB. 24, 1903.

A. L. CARTER.  
INK WELL.

APPLICATION FILED JAN. 22, 1902.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ALVAH LAURENCE CARTER, OF CHICAGO, ILLINOIS.

## INK-WELL.

SPECIFICATION forming part of Letters Patent No. 721,542, dated February 24, 1903.

Application filed January 22, 1902. Serial No. 90,843. (No model.)

*To all whom it may concern:*

Be it known that I, ALVAH LAURENCE CARTER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Ink-Well, of which the following is a specification.

The objects of the invention are to provide an air-tight and dust-proof ink-well of the flush-top type, whereof the upper surface is flat and is adapted to be arranged flush with the top of the desk to prevent injury to the well and to the objects on the desk, the invention being designed specially for use in connection with school-desks; to provide an ink-well of the type mentioned wherein the movable part by which the pen-hole is opened and closed is concealed and is out of the way of objects on the desk, only a sufficient portion of the movable part or member being exposed to enable it to be moved to open or close the pen-hole; to provide an ink-well having the foregoing qualifications, wherein the ink-receptacle is of non-corrosible material—such as glass, porcelain, or pottery—and, moreover, to provide an ink-well of such a construction and form as to have a comparatively large capacity for ink for the space occupied, while preventing the introduction of a pen to such a distance as to allow the ink to reach the holder or handle even when freshly filled; to provide an ink-well of which the frangible member or members shall be entirely protected from injury, and at the same time to provide means whereby in case of accidental breakage the fragments and the liquid contents thereof will be prevented from escaping and coming into contact with books or other objects on or in the desk; to provide an ink-well adapted for application with facility to old or new desks and without special manipulation or preparation of the desk further than that necessary to form an auger-hole in the top thereof, and, moreover, to provide an ink-well which may be manufactured at a comparatively small cost and which will be sanitary by reason of being capable of thorough cleansing.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended

claims, it being understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a perspective view of an ink-well embodying the invention applied in the operative position to a desk-top, a portion of the latter being indicated. Fig. 2 is a central sectional view of the ink-well and the adjacent portions of the desk-top. Fig. 3 is a view in perspective of the ink-well with the members thereof detached and the cup member of the outer receptacle in section. Fig. 4 is a detail sectional view to show the means for locking the cap or cover in place on the cup. Fig. 5 is a detail view of a tool adapted for use in removing the ink-receptacle from the cup.

Similar reference characters indicate corresponding parts in all the figures of the drawings.

In the illustrated embodiment of the invention the ink-well consists, essentially, of an inner ink-receptacle and an outer inclosing and protective receptacle or shell, the former being movable relatively to the latter to provide for opening and closing the pen-passage whereby access is had to the interior of the inner receptacle.

In the construction illustrated the outer receptacle consists of an approximately cylindrical cup 10, preferably of metal and slightly tapered toward its closed bottom to fit snugly in an opening which may be formed by means of an auger or similar boring-tool in the desk-top, said cup being fitted with a removable cap-plate or cover 30, having an interlocking engagement with the wall of the cup, adapted to be arranged with its upper surface flush with that of the desk-top and designed to be removable only when the inner or ink receptacle 20 is to be removed for cleansing. The top is preferably constructed of metal to serve as an efficient protection for the inner receptacle, which is preferably of frangible material, such as glass or porcelain, and in practice the cup may be secured in the opening of the desk-top in any suitable manner, as by pins or screws 17 18 driven through openings 15 and 16 in the wall of the cup and engaged with the desk-top, access to these fastening



devices being possible only when the inner receptacle is removed, and thus guarding against tampering with the fastening devices when the parts of the ink-well are in their normal positions. The cap or covering plate may be flanged, as at 32, to overhang the upper edge of the wall of the shell and fit snugly in the opening in the desk-top, and thus conceal the same, so that when of metal only the upper surface of the cap or covering plate requires ornamentation or finishing, such as nickeling or polishing; but as the edges of this cap or covering plate are protected by the abutting edges of the opening in the desk-top said cap may be constructed of transparent material, such as glass, which, obviously, is more readily cleansed, and hence is more sanitary than metal, and provides for giving an unobstructed view of the interior of the ink-receptacle to facilitate filling without causing the ink to overflow. In the construction illustrated this cap or cover is provided below its overhanging flange 32 with a threaded periphery 31 for engagement with corresponding threads 14, formed near the upper edge of the wall of the cup.

The cap or cover forming the top wall of the outer receptacle and the top wall of the inner receptacle are provided with pen-holes 33 and 21, respectively, which when in registration constitute a pen-passage through which a pen-point may be introduced into the inner receptacle, and in order to provide for movement of the inner receptacle with relation to the outer receptacle to close this pen-passage the inner receptacle is provided with a finger-lug 22, preferably milled at its upper surface and arranged in a slot 34, formed in the cap or cover 30, the upper surface of said lug being flush with the upper surface of the cap or cover, so as to afford no projection above the latter and yet enable the inner receptacle to be moved by means of a finger resting on said milled surface. Also, this lug and cooperating slot constitute means for limiting the movement of the inner receptacle, so that when the lug is in contact with one end of the slot the pen-openings are in registration and when in contact with the other end of the slot said openings are out of registration. The top of the ink-receptacle is preferably arranged in contact with the under surface of the cap or cover to form an air-tight and dust-proof joint, and this relation between the parts may be secured even if the under surface of the cap or cover is cut away or hollowed to lighten the same, and in order to facilitate the movement of the inner receptacle and prevent adhesion an antifric-tion-bearing is preferably provided, the same in the construction illustrated consisting of a series of balls 13, arranged in a race 11, formed in the bottom of the cup 10 and divided by partitions 12, which prevent the balls from becoming grouped. In order to prevent accidental or surreptitious disengagement of the cap or cover from the cup,

the former is preferably provided near its periphery with a hole 35 for registration with a corresponding notch 19 in the wall of the cup, and a locking-pin 50 is dropped into said registering openings when the cap or cover has been turned to place.

In order to facilitate removal of the ink-receptacle from the cup for cleansing or other purposes, a hook 40 is provided, the same having at its extremities a ring or eye 41 and a knob 42. The hooked extremity of this device may be inserted through the pen-opening 21 to enable the receptacle to be removed without soiling the hands.

From the above description it will be seen that the movable member of the ink-well is entirely concealed and protected and is inaccessible except at the single point formed by the lug 22, which can be reached only by placing a finger over the slot in the cap or cover and pressing it downward sufficiently to engage the milled surface, and therefore the risk of breaking the ink-receptacle is reduced to the minimum. In the construction illustrated the ink-receptacle is mounted for rotary movement, and in practice this construction is preferred because of the greater facility of mounting a cylindrical or approximately cylindrical outer receptacle in the desk-top; but it will be understood that the essential feature of the invention is a relative arrangement of the parts such as to provide for the movement of an inner protected receptacle for the ink with relation to an outer protecting receptacle which forms the means for attaching the well to the desk-top, and as this inner movable receptacle is entirely closed by an outer protective cup even the breakage of the former will not result in scattering the fragments in or on the desk or in spilling the ink, and thus injuring the contents of the desk. Moreover, the construction illustrated provides for forming an ink-receptacle of large superficial area sufficient to give the necessary capacity for ink, while forming it of a depth insufficient to permit the introduction of a pen far enough to allow the ink to reach the pen-holder, the advantage of an ink-well of considerable capacity being that the necessity for frequent refilling is avoided. It will be seen, moreover, that the refilling of the inner receptacle may be accomplished when the pen-openings are in registration without removing said receptacle from the cup 10, and the progress of the filling operation may be watched either through the pen-passage or through the slot 34 in the cap or cover when the ink-receptacle is of glass or other transparent material.

Having described the invention, what is claimed is—

1. An ink-well comprising an external closure having a pen-opening, an inner ink-receptacle rotatably mounted within the outer closure and having an upper wall provided with a pen-opening which by moving the said



ink-receptacle, may be brought into and out of registration with the pen-hole in the external closure.

2. An ink-well having an outer protective receptacle comprising a cup having a removable cap or cover provided with a pen-opening, and an inner ink-receptacle movably mounted within the outer receptacle and provided in its upper wall within a pen-opening adapted for registration with the pen-opening in the cap or cover by the movement of said inner receptacle.

3. An ink-well having an outer protective receptacle comprising a cup and a cap or cover having an interlocking engagement with the said cup, and an inner ink-receptacle movably mounted in the outer receptacle, said receptacles being provided in their upper walls with pen-openings adapted for registration by the movement of the inner receptacle.

4. An ink-well having an outer protective receptacle comprising a cup and a cap or cover having a threaded engagement with the wall of the cup, locking means for securing the cap or cover against accidental movement with relation to the cup, and an inner ink-receptacle movably mounted in the outer receptacle, said outer and inner receptacles being provided in their upper walls with pen-openings adapted for registration by the movement of the inner receptacle.

5. An ink-well having an outer receptacle comprising a cup and a cap or cover having a threaded engagement with the wall of the cup, said cap or cover and the wall of the cup being provided with registering seats, a locking-pin for engagement with said seats, and an inner ink-receptacle movably mounted in the outer receptacle, said receptacles being provided in their upper walls with pen-openings for registration by the movement of the inner receptacle.

6. An ink-well comprising an outer protective receptacle provided with a removable cap or cover, said cap or cover having a pen-opening and a slot, and an inner ink-receptacle movably mounted in the outer receptacle and provided with a pen-opening for registration with that of the cap or cover, and also provided with a lug or projection arranged in said slot for limiting the movement of the inner receptacle.

7. An ink-well comprising an outer protective receptacle provided with a removable cap or cover, said cap or cover having a pen-opening and a slot, and an inner receptacle movably mounted in the outer receptacle and provided in its upper wall with a pen-opening for registration with that of the cap or cover, and also provided with a lug or projection extending into the slot of the cap or cover and terminating approximately flush with the surface of the latter to form means whereby the inner receptacle may be moved with relation to the outer receptacle.

8. An ink-well comprising an outer receptacle provided with a removable cap or cover and having in its bottom a divided ball-race and antifriction-balls, and an inner receptacle movably mounted in the outer receptacle on said balls, and with its upper surface in contact with the under surface of said cap or cover, the cap or cover and the upper wall of the inner receptacle being provided with pen-openings adapted for registration by the movement of the inner receptacle.

9. An ink-well comprising an outer protective receptacle having an open-topped approximately cylindrical cup and a removable cap or cover having an interlocking engagement with the wall of the cup, the wall of the cup being provided with openings for fastening devices, and an inner receptacle movably mounted in the outer receptacle and covering said openings in the wall thereof to conceal fastening devices engaged with said openings, the top walls of the outer and inner receptacles being provided with pen-openings adapted for registration by the movement of the inner receptacle.

10. An ink-well comprising an outer protective receptacle, an inner cylindrical ink-receptacle mounted for rotary movement on its vertical axis in the outer receptacle and inclosed on all sides by the latter, and means for limiting said rotary movement, said receptacles having registrable pen-openings, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALVAH LAURENCE CARTER.

Witnesses:

J. HOWARD MEGREW,  
A. J. NYSTROM.