

No. 722,757.

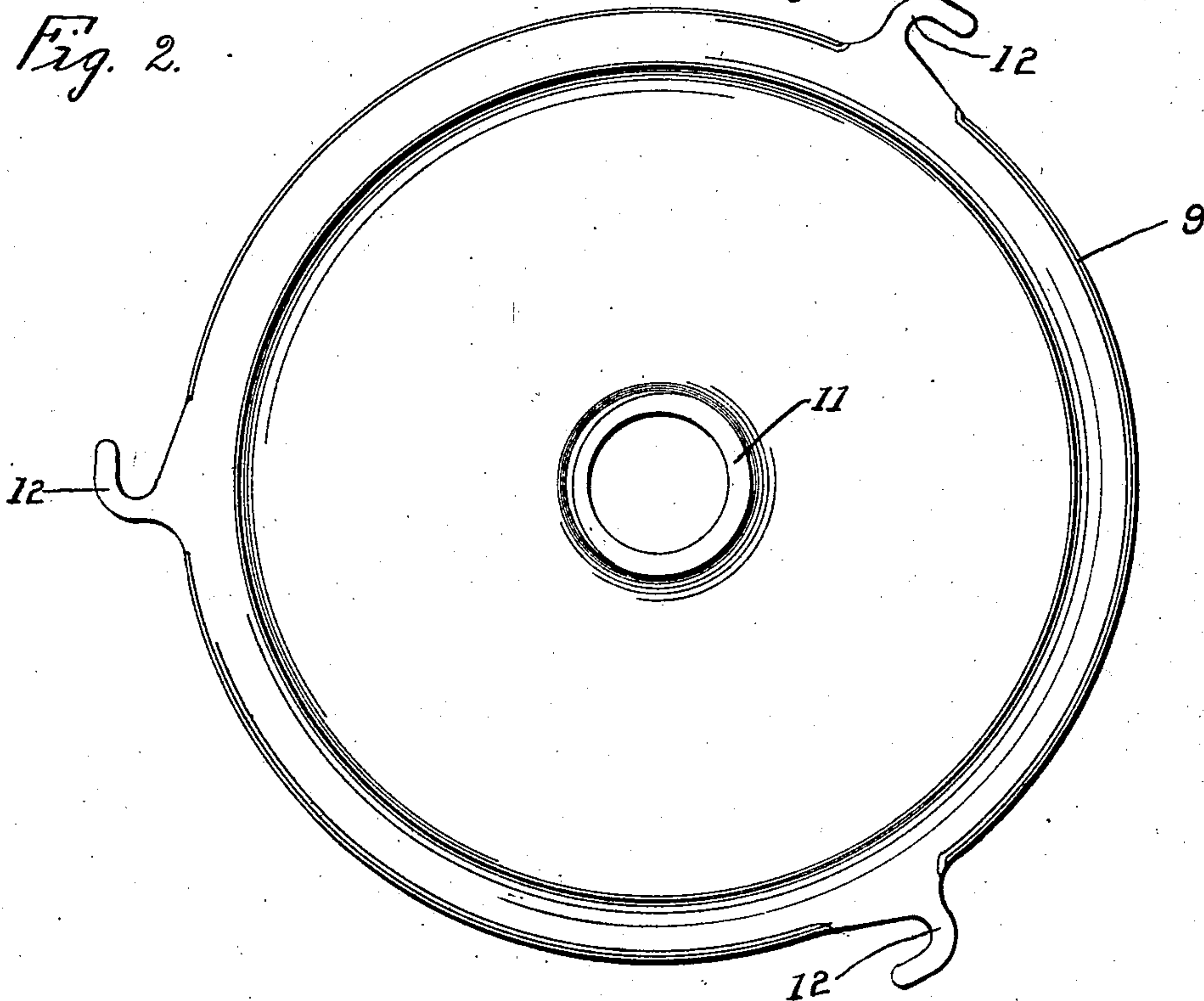
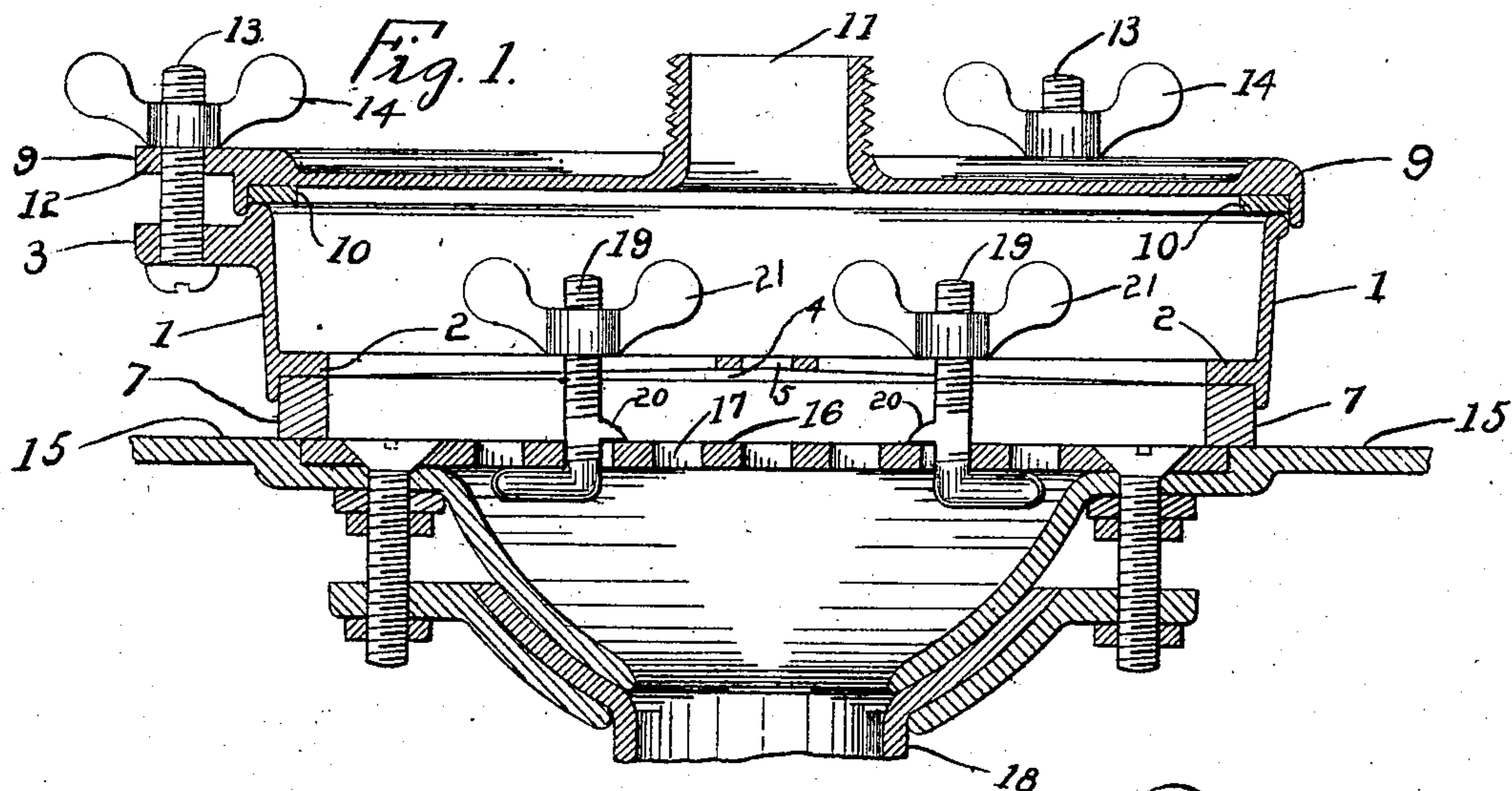
PATENTED MAR. 17, 1903.

A. ROEKEL.
FLUSHING DEVICE.

APPLICATION FILED MAY 19, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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Samuel Ward.

INVENTOR
August Roekel

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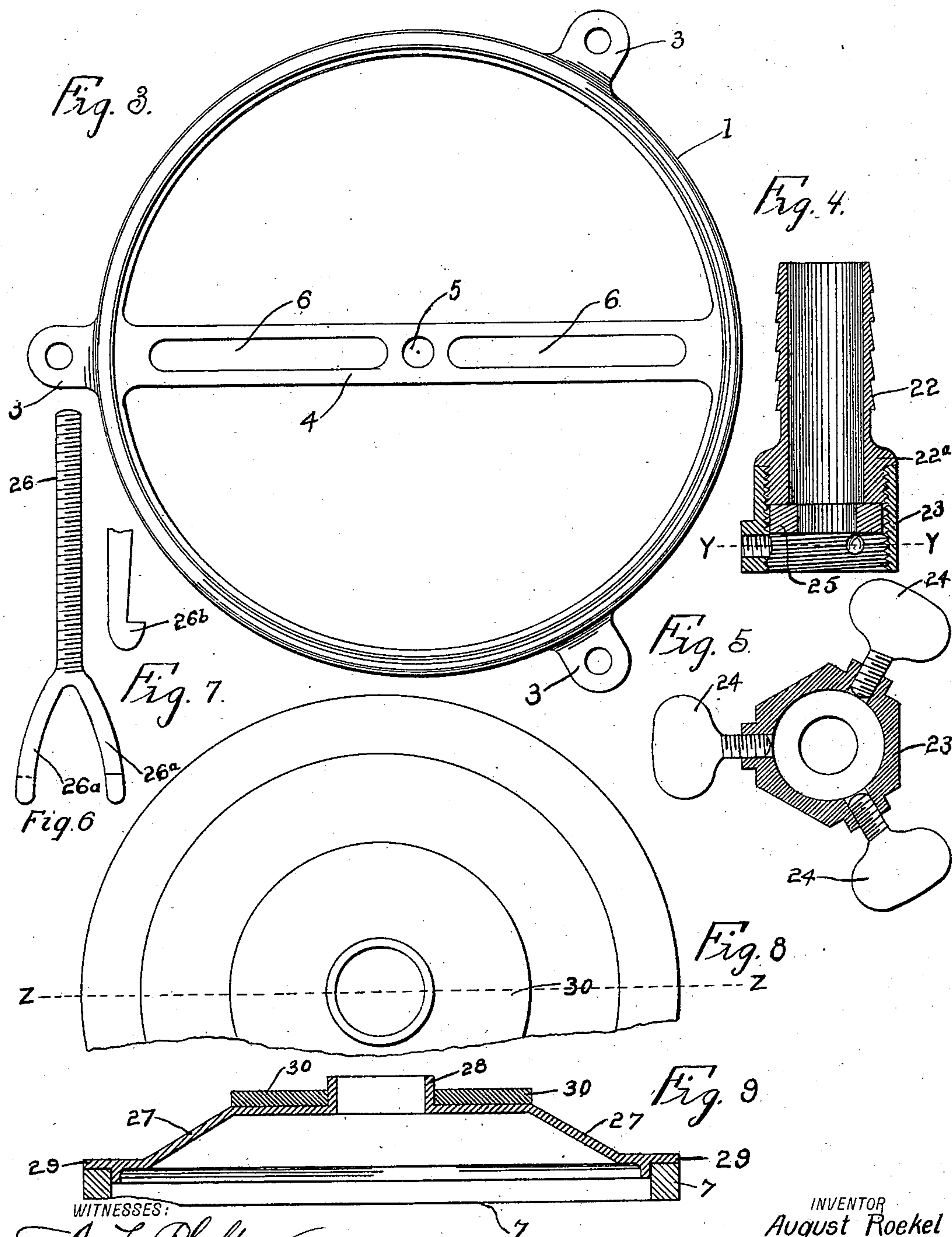
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UNITED STATES PATENT OFFICE.

AUGUST ROEKEL, OF FINDLAY, OHIO, ASSIGNOR OF ONE-HALF TO EDWIN B. PHILIPP, OF COLUMBUS, OHIO.

FLUSHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 722,757, dated March 17, 1903.

Application filed May 19, 1902. Serial No. 107,953. (No model.)

To all whom it may concern:

Be it known that I, AUGUST ROEKEL, a citizen of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented a certain new and useful Improvement in Flushing Devices, of which the following is a specification.

My invention relates to the improvement of waste-pipe flushing and cleansing devices; and the objects of my invention are to provide a device of this class of improved construction and arrangement of parts, to so construct the same as to permit of its being readily and effectively connected with the waste-pipe outlet of a water-sink, washbowl, or similar article, to so produce said connection as to insure the production of a close water-chamber with said outlet, to provide improved means for readily detaching the device from the water-outlet of a sink or similar article, to so construct my improved flushing device as to admit of the same being readily separated into the various parts of which the same is constructed, to provide improved means for producing a water-tight joint between a section of hose with my device, and to produce other improvements the details of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section of my improved flushing device, showing in connection therewith a sectional view of a portion of a sink-bottom and its waste-pipe outlet. Fig. 2 is a plan view of the top plate of my device. Fig. 3 is a plan view of the device with the top plate removed. Fig. 4 is a central vertical section of my improved hose connection. Fig. 5 is a transverse section of said connection, taken on line *y y* of Fig. 4. Fig. 6 is a detail view in elevation of an attaching device which I may employ in the manner hereinafter described. Fig. 7 is a similar view of a portion of one of the arms of said attaching device, taken at right angles with that shown in Fig. 6. Fig. 8 is a partial plan view of a modification of the flushing device; and Fig. 9 is a sectional view on line *z z* of Fig. 8, showing the device inverted.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention I employ a ring-like frame or body 1, this frame-ring having formed on its inner side and lower portion an inwardly-projecting flange 2. Formed on the periphery of the ring adjacent to its upper side are the desired number of outwardly-projecting clamping-lugs 3, the latter being provided with vertical screw-holes, as shown. The internal flange 2 of the ring 1 has connected therewith at opposite points the ends of a horizontal bridge-bar 4, the latter preferably being formed with a central opening, such as is indicated in Fig. 3 at 5, and on opposite sides of said opening with elongated slotted openings 6. The under side of the ring-flange 2 is adapted to bear upon a base-ring of soft rubber, such as is indicated at 7, the latter being thus located within the angle formed by the downwardly-extending sides of the ring-body 1 and the inwardly-projecting flange 2.

9 represents a top plate or disk which is designed to bear upon a circular gasket 10, of rubber or other suitable material, which is interposed between said top plate 9 and the upper side of the ring 1. The plate 9 is provided with a central upwardly-extending externally-threaded neck 11, the interior of which leads to the interior of the casing or ring 1. As indicated in the drawings, the top plate 9 has its outer or rim portion formed at intervals with outwardly-projecting hooks 12, which are designed to engage vertically-arranged screws 13, which pass through the openings in the lugs 3, these hook-like projections and lugs being adapted to be connected through the medium of said screws and held in such connection rigidly by thumb-nuts 14.

In Fig. 1 of the drawings I have shown my device in connection with the outlet portion of the water-sink or similar device, of which 15 represents the sink-bottom, and 16 the strainer-plate, which is provided with the usual perforations 17 and which is arranged over the mouth of the inlet of the waste-pipe 18 in the usual manner. In order to utilize my device, the casing-like body above de-

scribed is so arranged in the sink or similar article as to cause the rubber base-ring 7 to surround the sink-outlet, the device being secured in this position through the medium of one or more angular attaching-screws 19, the lower end portions of which may be passed through and made to engage in the manner shown in Fig. 1 of the drawings suitable perforations 17 of the plate 16, while the upwardly-extending bodies of said screws may pass through the slotted openings 6 of the bar 4, or where but one of said screws is used its upwardly-extending portion may pass through the central opening 5 of said bar. In constructing each of these screws I form the same in the lower part of its vertical portion with a laterally-projecting suitably-shaped stop-lug 20, which when the screw is in its place is adapted to bear upon the upper side of the perforated strainer-plate. The screws are held in the positions described by means of thumb-nuts 21, which are adapted to be screwed upon the upper end portions of said screws and be turned downward to clamp against the upper side of the bar 4. By the means described it will be observed that the flushing-case, which comprises the ring-body 1, its under side bearing-ring 7, and top plate 9, is thus secured firmly about the outlet-opening of the sink or other article and that a water-tight connection with the bottom of said sink is thereby produced. The usual means of supplying water under pressure to the interior of the case, and consequently to the waste-pipe, consists in attaching a section of hose to the threaded neck of the top plate 9, said hose leading from a suitable source of water-supply.

In order to insure a desirable and water-tight joint between the hose and the faucet-nozzle of a water-supply pipe, I have provided the construction which is illustrated in Figs. 4 and 5 of the drawings and which may be described as follows: 22 represents a tubular attaching-body, which throughout the greater portion of its length is roughened or corrugated in the usual manner to receive the end portion of a section of rubber hose. The outer end portion of this tubular body 22 is enlarged, as indicated at 22^a, and on said enlargement is screwed one end of a sleeve extension 23, the latter being internally threaded and, as indicated more clearly in Fig. 5 of the drawings, being provided at intervals with radially-arranged screw-holes, through which are adapted to pass suitably-formed set-screws 24. Within the extended portion of the sleeve 23 and abutting against the end of the tubular body 22 I provide a gasket of rubber 25, the latter being arranged on the inner side of the inner ends of the screws 24 when said screws are turned inwardly. It will be understood that in attaching the section of hose, which is connected with the body 22, with a faucet having external threads the threads of said faucet may be made to engage the internal threads of the sleeve 23

and that by turning the body 22 inward the yielding gasket 25 may be made to form a water-tight packing between the end of said body 22 and the end of the faucet. It is obvious that where the connection of the hose is formed with an unthreaded faucet or water-pipe termination the connection between said parts may be effected by turning inward the set-screws 24 until the inner ends thereof firmly engage the periphery of that portion of the faucet which is embraced by the sleeve or nut 23. This being accomplished, the water-tight connection between the end of the faucet and the hose-section may be insured by the rotation of the body 22 in the manner prescribed for connecting the same with the threaded faucet. It is obvious that the remaining end of the hose-section may be screwed into connection with the externally-threaded neck 11 of the top plate 9 in the usual manner.

It will readily be understood that the operation of flushing the waste-pipe of a sink or similar article consists in discharging water under pressure into the casing or body of my improved flushing device, thence through the strainer-plate outlet-openings, and into the waste-pipe.

In cases where my device is desired to be used for flushing the outlet or waste pipe of a washbowl, where the entrance to said waste-pipe is comparatively small and where instead of the perforated strainer-plate shown in Fig. 1 of the drawings it is usual to employ radially-arranged intersecting arms at the mouth of the outlet, I may employ in place of the screws 19 (indicated in Fig. 1 of the drawings) screws of a modified construction, such as indicated in Figs. 6 and 7. This modified form of screw consists, as shown in said figures, of a straight-threaded or body portion 26, the lower end of which is bifurcated to form two diverging arms 26^a, which terminate in oppositely-projecting shoulders 26^b, these terminal shoulders being adapted when inserted into the radially-arranged openings of the usual outlet-covering of the waste-pipe of a washbowl or similar body to engage the under sides of the arms of the same.

In order to utilize my device in connection with washbowls or similar articles which are so shaped as to impart thereto a substantially oval concavity and at the same time insure a water-tight connection between my device and the surface of the bowl, I may provide the additional structure illustrated in Figs. 8 and 9 of the drawings. In cases of the latter kind I employ a substantially saucer-shaped plate 27, the horizontal lower side of which is formed with a short downwardly-extending neck 28, while the inclined or flaring side portion of said plate terminates in an outwardly-extending rim 29, which is adapted to receive and form a seat for the soft-rubber ring or gasket 7, heretofore described. The under side of the plate 27 is provided with a

comparatively wide rubber ring or gasket 30, which surrounds the neck portion 28 of the plate and which is adapted to bear in close connection with the surface of the washbowl about its outlet when the neck 28 is received by the mouth of the waste-pipe.

From the construction and operation herein shown and described it will be seen that a simple, reliable, and effective flushing device is provided for waste-pipes which may be readily connected with or disconnected from a sink, washbowl, bath-tub, or other similar article. It will also be seen that simple means are provided for producing a connection of my device with the substantially oval form of washbowls and for attaching said device where different forms of waste-pipe outlets are provided.

In order to facilitate the cleansing of the waste-pipe, it is evident that I may charge my improved casing-body, prior to the introduction of the water, with any desired or well-known cleaning material, such as lye or other cleaning compound.

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

1. In a flushing device, the combination

with a casing, comprising a ring-body 1 and a detachable top plate, the latter having a water-inlet and the ring-body having a transverse bar formed with slotted openings and angular attaching-screws, the lower portions of which are adapted to engage the openings of a waste-pipe-outlet cover and the upper portions of which are adapted to be adjustably connected with said casing-bar, substantially as specified.

2. In a flushing device, the combination with a casing having a water-outlet in its upper side and a rubber gasket on its lower side and a transverse open-work bar in said casing, of angular attaching devices 19 formed in their vertical portions with laterally-projecting shoulders 20, the lower ends of said attaching devices below said shoulders adapted to engage the cover-plate of a waste-pipe outlet through openings in said plate and means for adjustably connecting said attaching devices with said bar, substantially as specified.

AUGUST ROEKEL.

In presence of—

A. L. PHELPS,
W. L. MORROW.