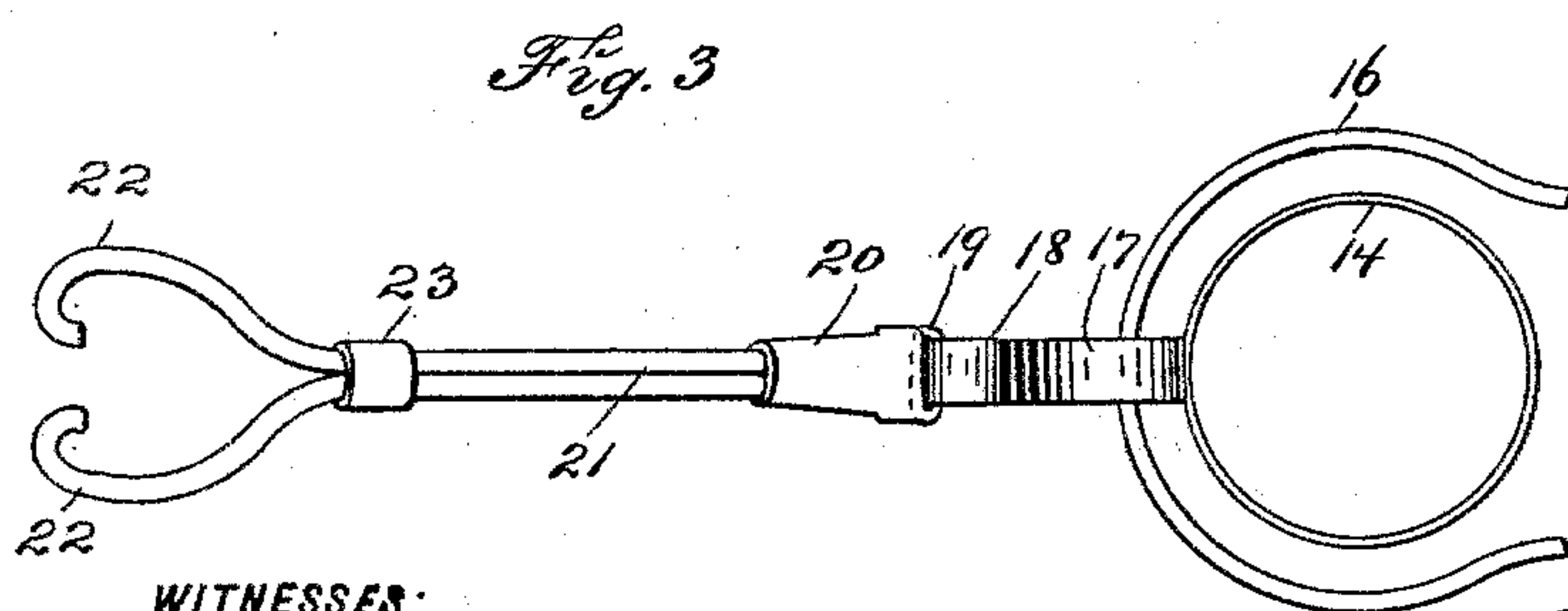
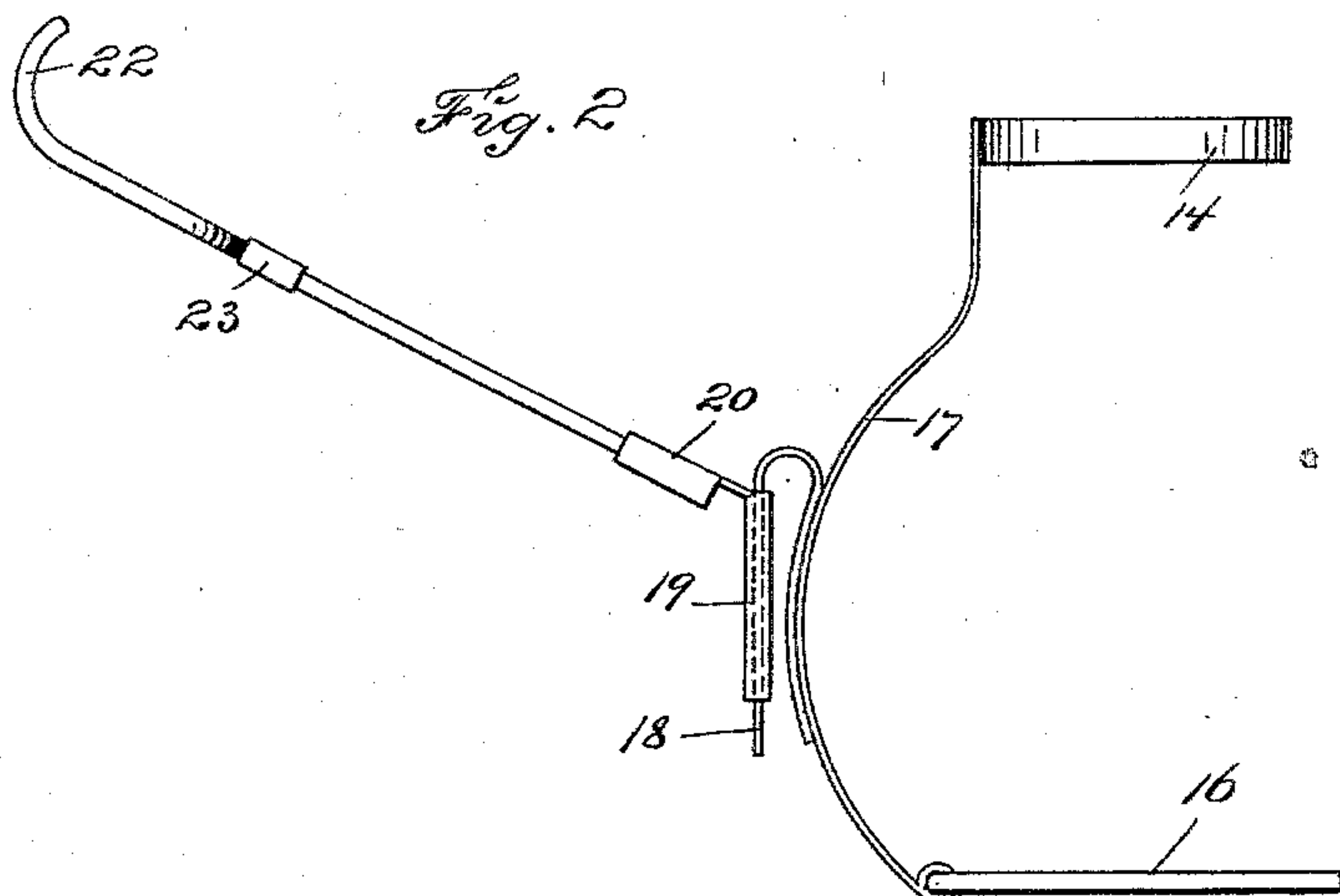
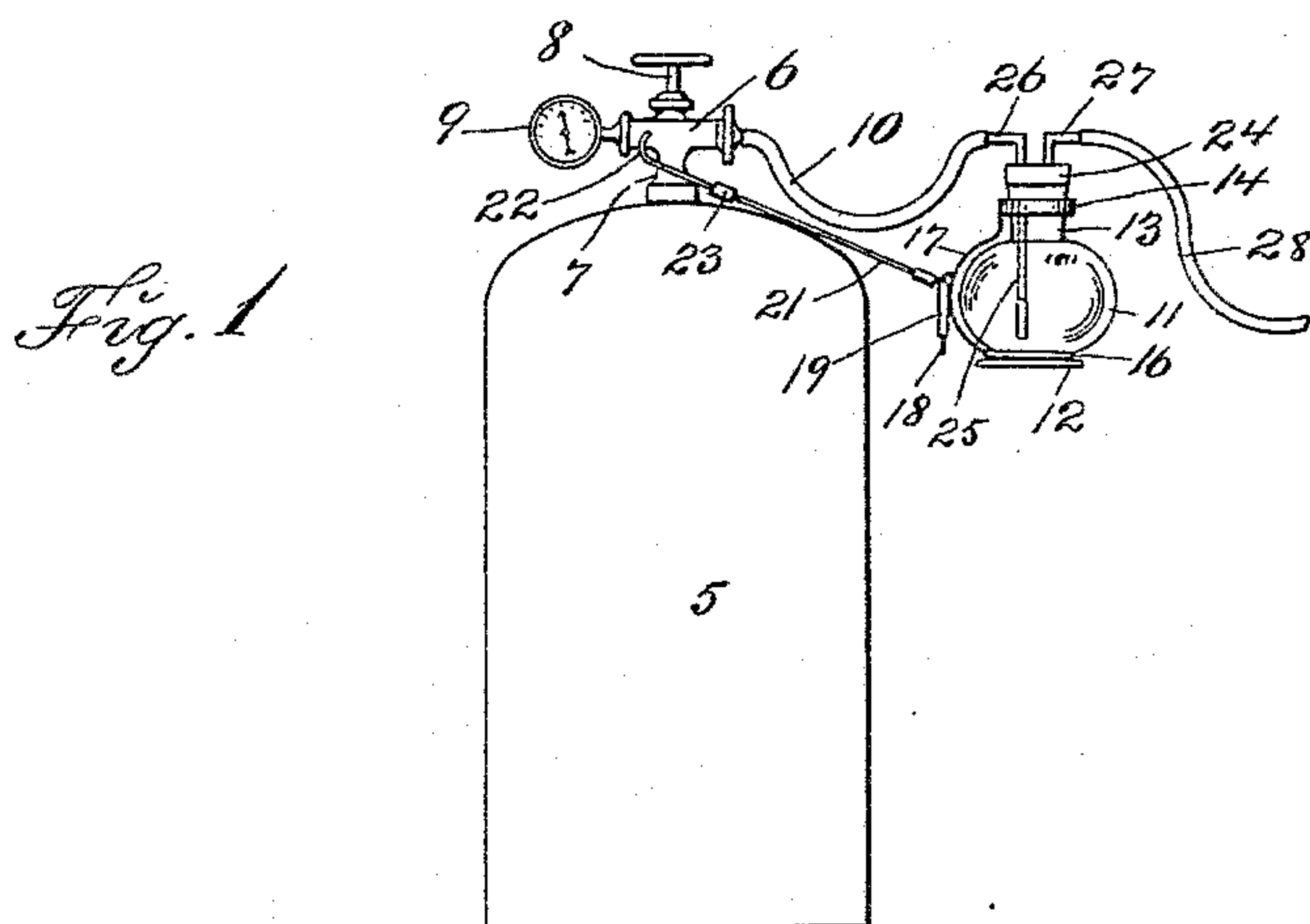


(No Model.)

P. RING.
APPARATUS FOR ADMINISTERING GAS.

No. 597,781.

Patented Jan. 25, 1898.



WITNESSES:

C. Fordford
C. Gerst

INVENTOR

Paul Ring
BY
Edgar Tate & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

PAUL RING, OF NEW YORK, N. Y., ASSIGNOR TO THE CRANE & KING
OXYGEN WORKS, OF SAME PLACE.

APPARATUS FOR ADMINISTERING GAS.

SPECIFICATION forming part of Letters Patent No. 597,781, dated January 25, 1898.

Application filed June 3, 1897. Serial No. 639,268. (No model.)

To all whom it may concern:

Be it known that I, PAUL RING, a subject of the Emperor of Germany, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Apparatus for Administering Oxygen and other Gas, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to apparatus for use in administering oxygen gas; nitrogen, or oxygen and ozone to patients; and the object thereof is to provide an improved apparatus of this class which is simple in construction and operation and which is adapted to be connected with a cylinder or tank containing the gas to be administered, a further object being to provide an improved apparatus of the class specified, by means of which the gas is passed through water before being administered.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of a gas-tank provided with my improved apparatus; Fig. 2, a side view of a holder which I employ for connecting the water vessel with said tank, and Fig. 3 a plan view thereof.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawings I have shown at 5 an ordinary tank for receiving oxygen or other gas, and this tank is provided at the top thereof with a tubular cross-head 6, which is provided with a depending tubular neck 7, by means of which connection is made with the tank, and passing vertically into the tubular cross-head 6 is a valve 8, by which the flow of gas through the cross-head 6 is controlled, and said cross-head is provided at one end with a gage 9 for measuring the pressure of the gas as the same is administered and the opposite end is adapted to receive a flexible tube 10, all these parts being of the usual or any preferred construction, and in the practice of my invention I provide a bottle or receptacle 11, which is

provided with a base flange or rim 12 and a neck 13, and I also provide a holder, by means of which said water vessel or receptacle 13 may be connected with the tank 5. The said holder constitutes the chief feature of this invention, and consists of a top ring or band 14 and a bottom ring or band 16, which are connected by a curved spring-strap 17, and the top ring or band 14 is adapted to encircle the neck 13 of the bottle or vessel and the ring or band 16 to encircle the bottom thereof above the flange or rim 12, and said strap 15 is provided with a downwardly-directed spring-arm 18, which is secured thereto and which is adapted to pass through a sleeve 19, to the upper end of which is secured a tubular socket or head 20, in which are secured two spring wires or rods 21, which are provided at their outer ends with downwardly, outwardly, and upwardly curved hooks or jaws 22, and the wires or rods 21 are provided with a sliding sleeve or band 23.

By moving the sleeve 23 downwardly in the direction of the tubular head or socket 20 the hooks or jaws 22 may be separated and passed around the neck-shaped portion 7 of the cross-head 6, and then by passing said sleeve outwardly into the position shown in the drawings the said hooks or jaws may be caused to securely grasp said neck and said cross-head, so as to hold the bottle or vessel 11 in the position shown in Fig. 1.

The bottle or vessel 11 is provided with a detachable plug or stopper 24, through which passes a tube 25, which passes downwardly almost to the bottom of said bottle or vessel, and which is provided at its upper end with an angular extension 26, with which the flexible tube 10 may be connected, and passing through the stopper 24 is another angular tube 27, with which a flexible tube 28 is connected, and the flexible tube 28 may be provided with a nozzle or other device for use in administering the gas.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

When the bottle or vessel 11 is connected with the tank 5, as described, and the valve 8 operated to open the passage through the

tubular cross-head 6, the gas will flow through the pipe 10 into the bottom of the bottle or vessel 11 and pass up through the water therein and out through the pipe 28.

5 This apparatus is simple in construction and operation and perfectly adapted to accomplish the result for which it is intended, while being comparatively inexpensive, and it will be apparent that changes in and modifications of the construction described may
10 be made without departing from the spirit of my invention or sacrificing its advantages.

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

The herein-described apparatus for administering oxygen and other gas, comprising the combination with a gas-tank having a tubular connecting-valve 6, provided with a gage
20 9, and flexible tube 10, of a bottle or receptacle 11, having a base flange or rim 12 and neck 13, a holder by which the said bottle may be connected with the said gas-tank consisting of a top ring or band 14, a bottom
25 ring or band 16, a curved spring-strap 17 con-

necting the same, said top ring or band being adapted to encircle the said neck 13 of the bottle or vessel and the said ring or band 16 being adapted to encircle the bottom thereof above the said flange or rim 12, a spring-arm 30 18 secured to said strap, 17, a sleeve 19 through which the said arm 18 is adapted to pass, a head 20 secured thereto, two spring wires or rods 21, mounted therein, each of which is provided at its outer end with downwardly, 35 outwardly and upwardly curved jaws 22, and a sliding sleeve or band 23, mounted on said spring-rods and adapted to draw the same together, said bottle being adapted to hold a liquid and being provided with means for 40 passing gas through the said liquid, substantially as and for the purpose described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 26th 45 day of May, 1897.

PAUL RING.

Witnesses:

C. GERST,

A. C. VAN BLARCOM.