

H. H. PFEIFER & F. M. TOWLES.

MEDICAL IRRIGATOR.

APPLICATION FILED AUG. 24, 1908.

Patented Sept. 28, 1909.

935,227.

Fig. 2.

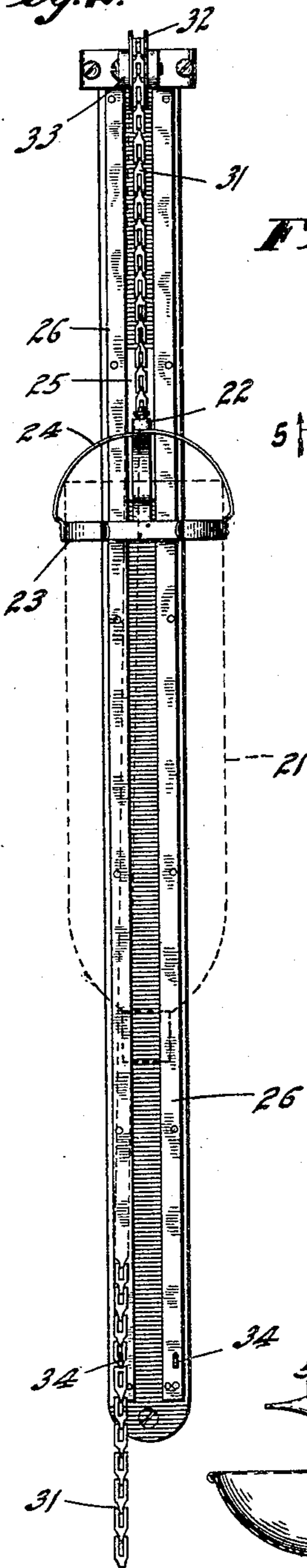


Fig. 3.

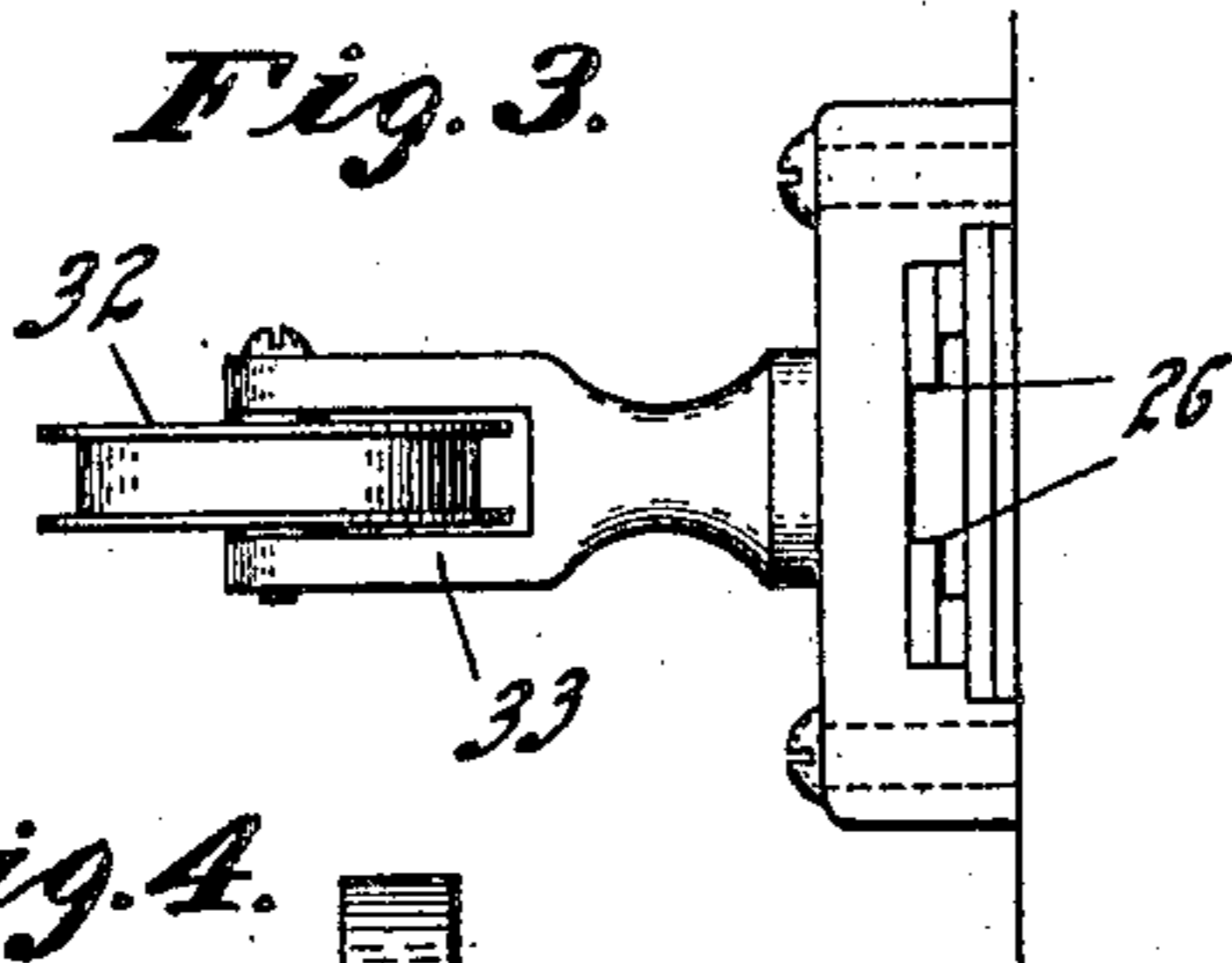


Fig. 4.

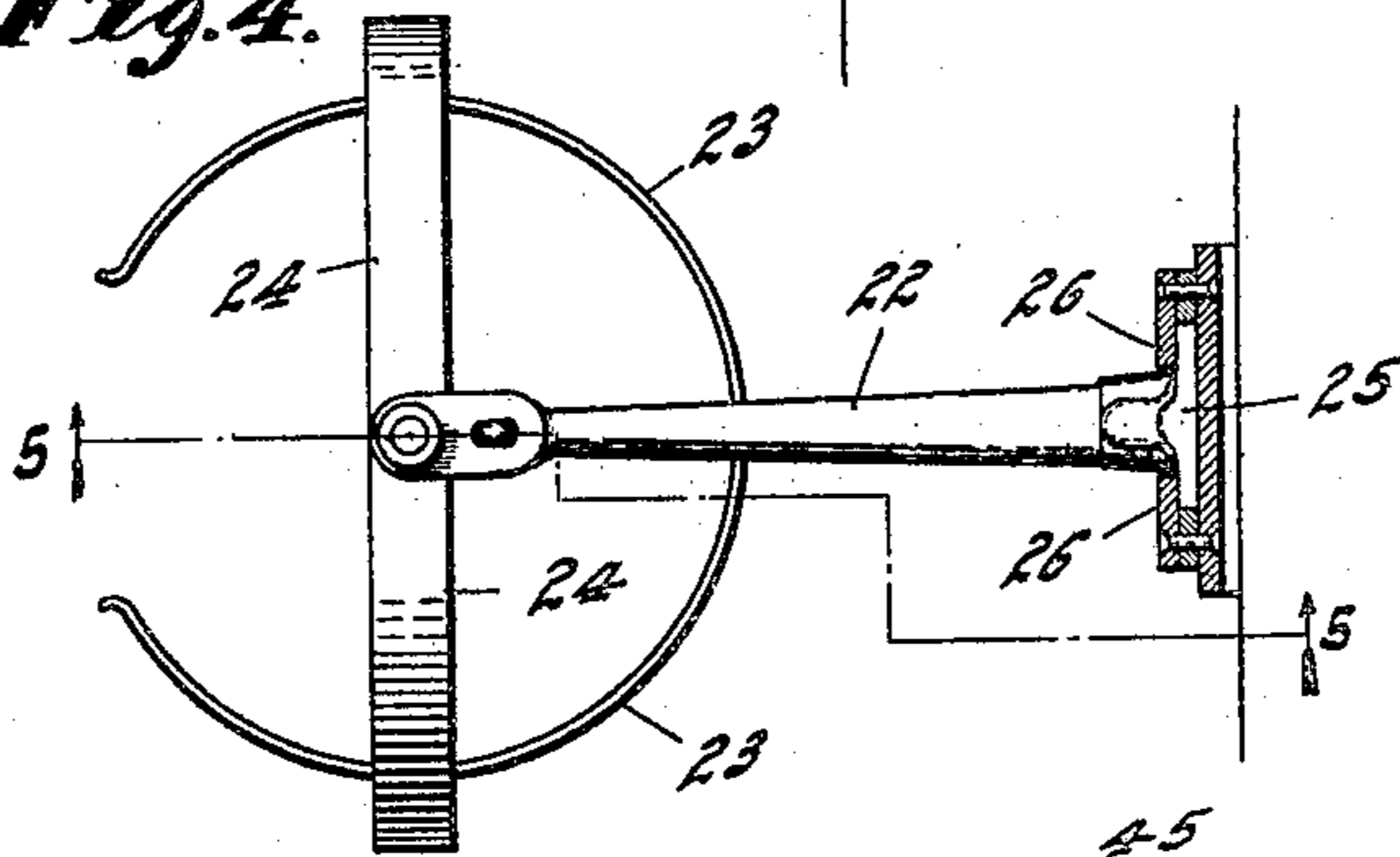


Fig. 1.

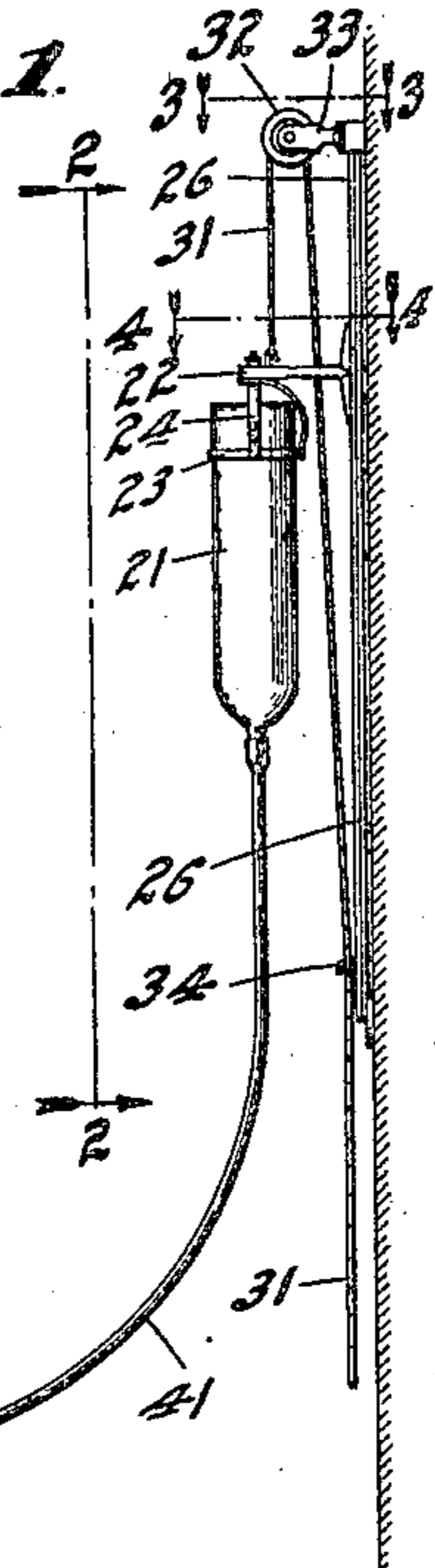


Fig. 7.

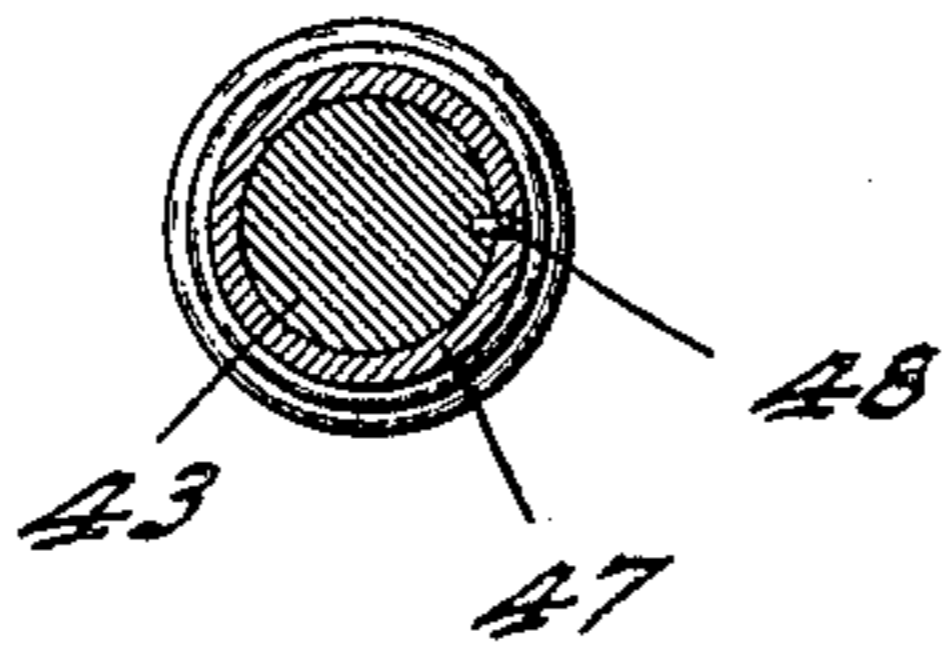


Fig. 5.

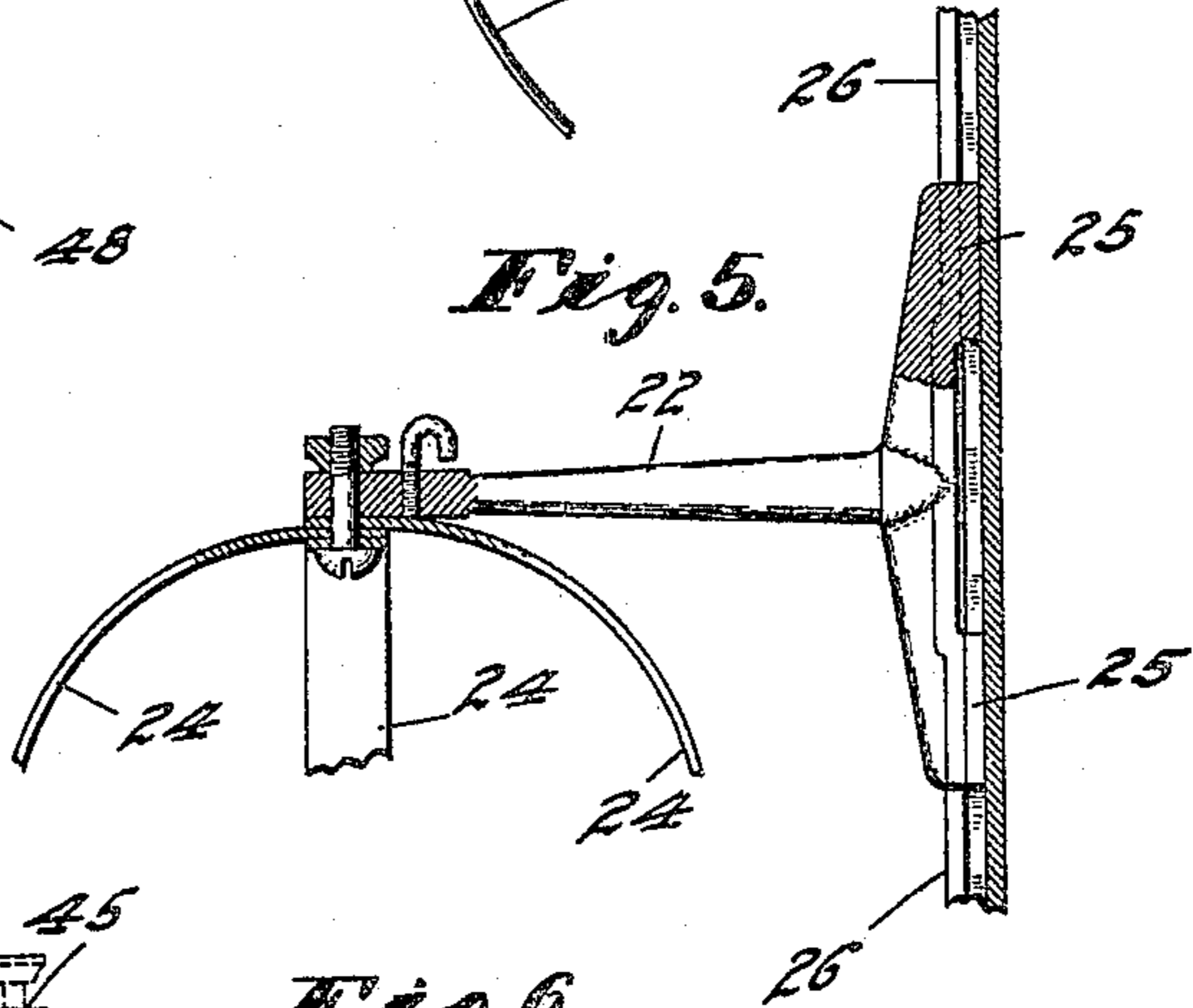
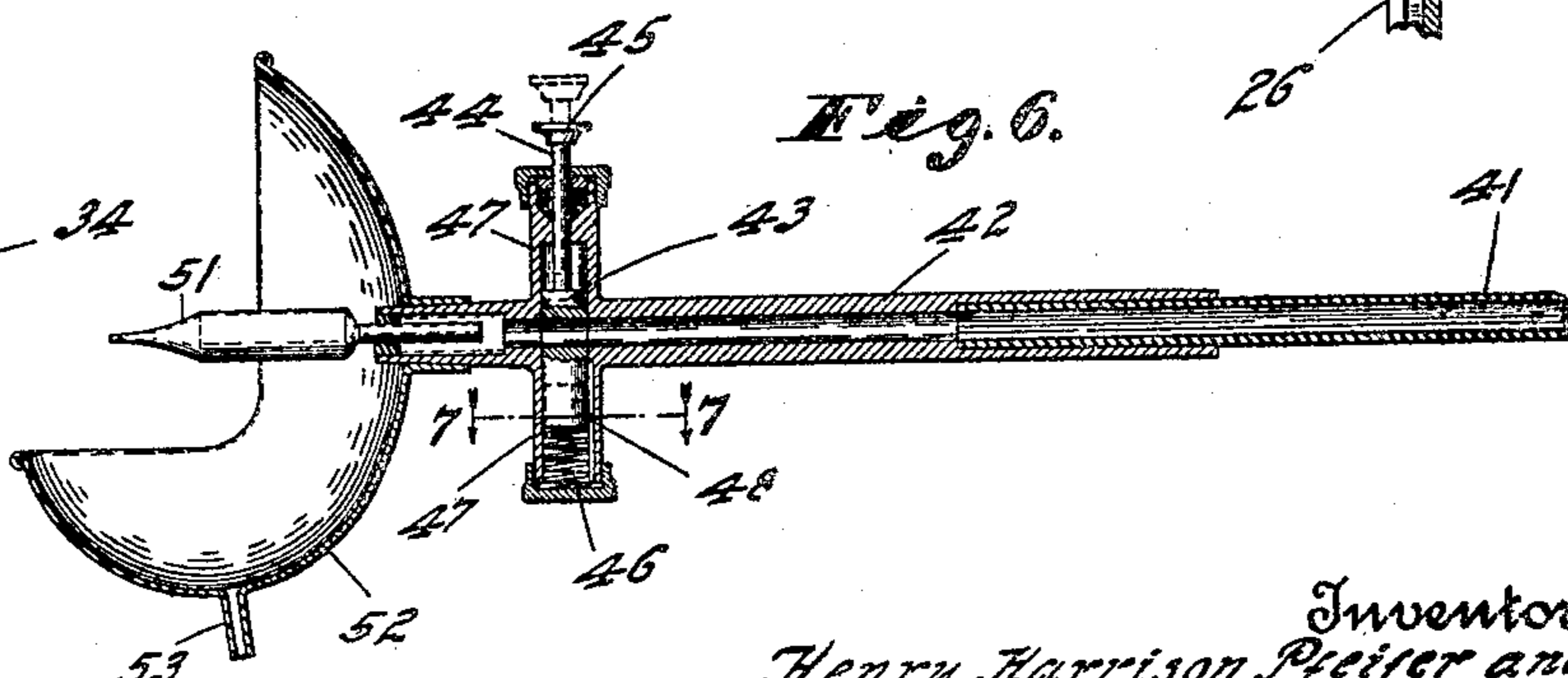


Fig. 6.



Witnesses
Frank A. Sahle
Thomas H. McMeans

Inventors
Henry Harrison Pfeifer and
Fred M. Towles,
By Bradford & Hood,
Attorneys.

UNITED STATES PATENT OFFICE.

HENRY HARRISON PFEIFER AND FRED M. TOWLES, OF INDIANAPOLIS, INDIANA.

MEDICAL IRRIGATOR.

935,227.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed August 24, 1908. Serial No. 449,900.

To all whom it may concern:

Be it known that we, HENRY HARRISON PFEIFER and FRED M. TOWLES, M. D., citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Medical Irrigators, of which the following is a specification.

Our present invention relates to an apparatus for physicians' use by means of which a convenient and efficient irrigation or washing of diseased parts, either for purposes of cleansing or treatment, may be accomplished. Said invention will be first fully described, and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters represent similar parts, Figure 1 is a side elevation of an apparatus of the character in question, embodying our present invention, assembled and in condition for use; Fig. 2 a front elevation thereof on an enlarged scale, as seen from the dotted line 2 2 alongside Fig. 1; Fig. 3 a top or plan view thereof, as seen from the dotted line 3 3 above Fig. 1; Fig. 4 a horizontal sectional view as seen when looking downwardly from the dotted line 4 4 in Fig. 1; Fig. 5 a detail view, partially in elevation and partially in section, as seen from the dotted line 5 5 in Fig. 4; Fig. 6 a detail sectional view of the nozzle and immediately adjacent parts, and Fig. 7 a detail horizontal sectional view at the point indicated by the dotted line 7 7 in Fig. 6.

The cleansing or medicinal liquid to be used with this apparatus is contained within a vessel 21, which is preferably of glass. This vessel is suspended to an arm or traveler 22, as by means of suitable bands or clasps 23 and 24, and said arm has a base 25, in the form of a crosshead, which is mounted in a track or way 26, secured to a wall or post.

A chain or cord 31 is attached at one end to the arm 22, and passes thence up over a sheave 32 mounted in a housing 33 secured at or above the upper end of track 26, and passes thence down to a point convenient to the user, and is adapted to engage, at any point desired, to a hook or belaying pin 34. By this means the height of the container 21 may be accurately and easily adjusted, and the force with which its contents is dis-

charged thus controlled. If the diseased part requires in its treatment that the fluid shall be discharged therein or thereon with only a small force, the container may be lowered until it is only slightly above the position in which said part is placed or held for treatment; whereas, when an increased force is required, the container may be raised accordingly.

A flexible tube or hose 41 is connected to the container 21 and leads off to the point desired. At the other end of said flexible tube is a tubular structure 42 containing a valve 43 having a valve-stem 44 terminating in thumb piece 45. A spring 46 is inserted in the transversely-positioned valve-barrel 47, and holds said valve closed except when pressure is applied to the thumb-piece, when it is forced down to the position shown by full lines in Fig. 6, leaving a free discharge way therethrough. The valve is held from rotation, and thus getting out of alinement, by a pin 48, which engages with a suitable groove in the interior of the valve-barrel as shown.

Beyond the structure 42 is a suitable nozzle 51, of a size and character adapted to the particular requirements. That shown is similar to the nozzle of an ordinary syringe. Surrounding this is a receptacle 52 adapted to catch the waste fluid as it flows from the part after use. On the bottom of this receptacle is a nipple 53, which connects with a drain pipe 54, through which the used fluid may pass off to wherever desired. The nozzle 51, as is shown in Fig. 6, is mounted in a flexible bushing inserted in the end of the tubular structure 42, from which it is easily removed. This gasket also gives this nozzle a certain degree of elasticity, which is quite desirable.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent is:

1. The combination, in a medical irrigator, of a stationary vertically-positioned track, a traveler mounted in said track, a liquid receptacle connected to said traveler, a spring clamp forming a connection between the receptacle and the traveler, means for moving said receptacle and traveler in relation to said track and securing the same in adjusted position, a flexible tube leading from said receptacle, and a discharge device connected to the free end of said tube.

2. The combination, in a medical irriga-

tor, of a stationary vertically - positioned track, a traveler mounted in said track, a liquid receptacle connected to said traveler, means for moving said receptacle and traveler in relation to said track and securing the same in adjusted position, a flexible tube leading from said receptacle, an automatically-closing valve between the nozzle and said tube, a discharge device connected to the free end of said tube, a catch receptacle at the termination of said tube, and a waste pipe connected to said catch receptacle.

3. The combination, in a medical irrigator, of a stationary vertically - positioned track, a traveler mounted on said track, an arm extending out from said traveler and carrying a spring clamp, a liquid receptacle secured in said spring clamp, means for moving said receptacle and traveler in relation to said track and securing the same in adjusted position, a flexible tube leading from said receptacle, and a discharge device connected to the free end of said tube.

4. The combination, in a medical irrigator, of a stationary vertically - positioned track, a traveler mounted on said track, an arm extending out from said traveler and carrying a spring clamp, a liquid receptacle secured in said spring clamp, means for moving said receptacle and traveler in relation to said track and securing the same in adjusted position, a flexible tube leading from said receptacle, a discharge device connected to the free end of said tube, and a handle portion provided with an automatically-closing valve interposed between the discharge device and the free end of the tube.

In witness whereof, we have hereunto set our hands and seals at Indianapolis, Indiana, this twenty-first day of August, A. D. one thousand nine hundred and eight.

HENRY HARRISON PFEIFER. [L. S.]
FRED M. TOWLES. [L. S.]

Witnesses:

CHESTER BRADFORD,
THOMAS W. McMEANS.