

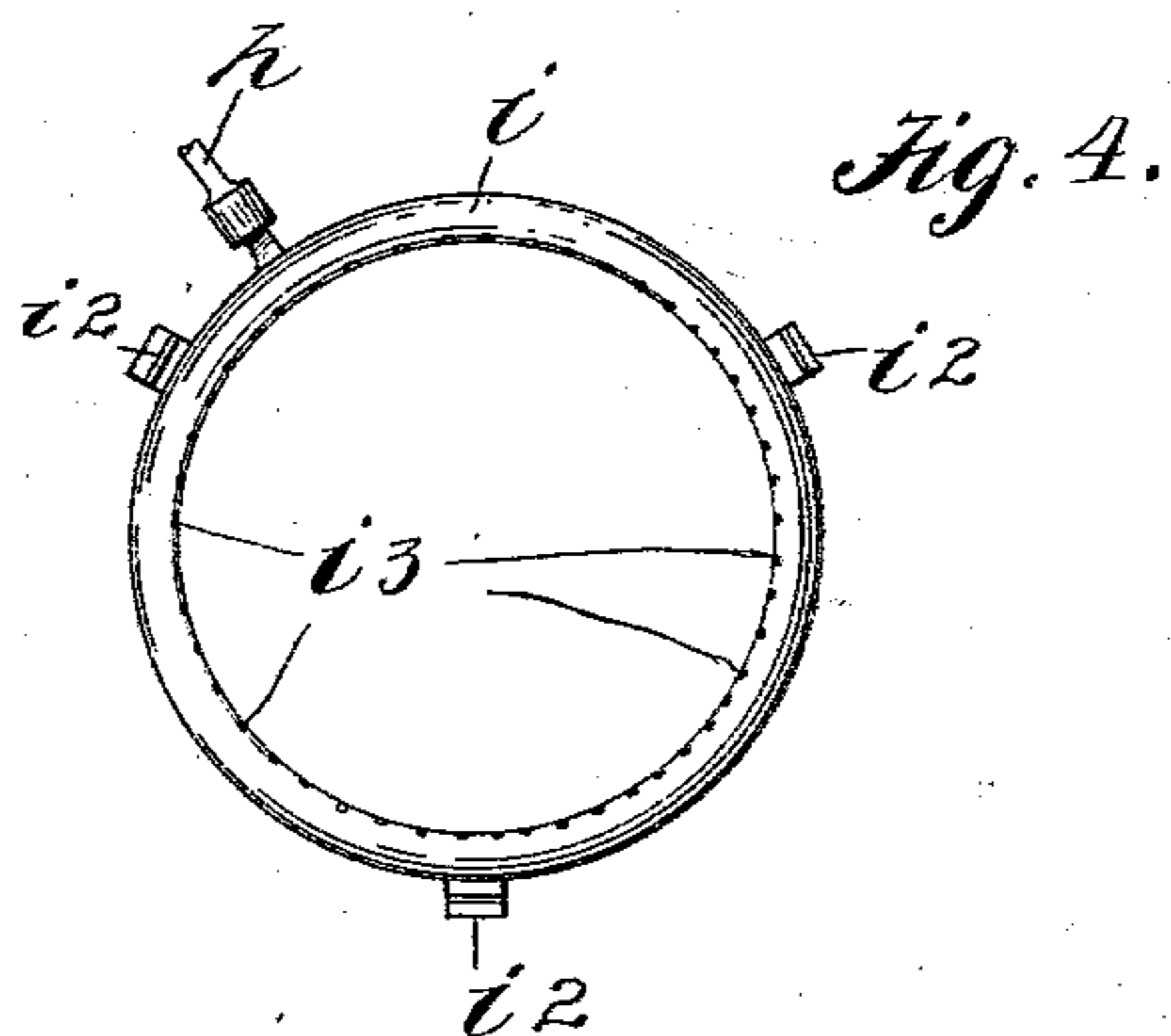
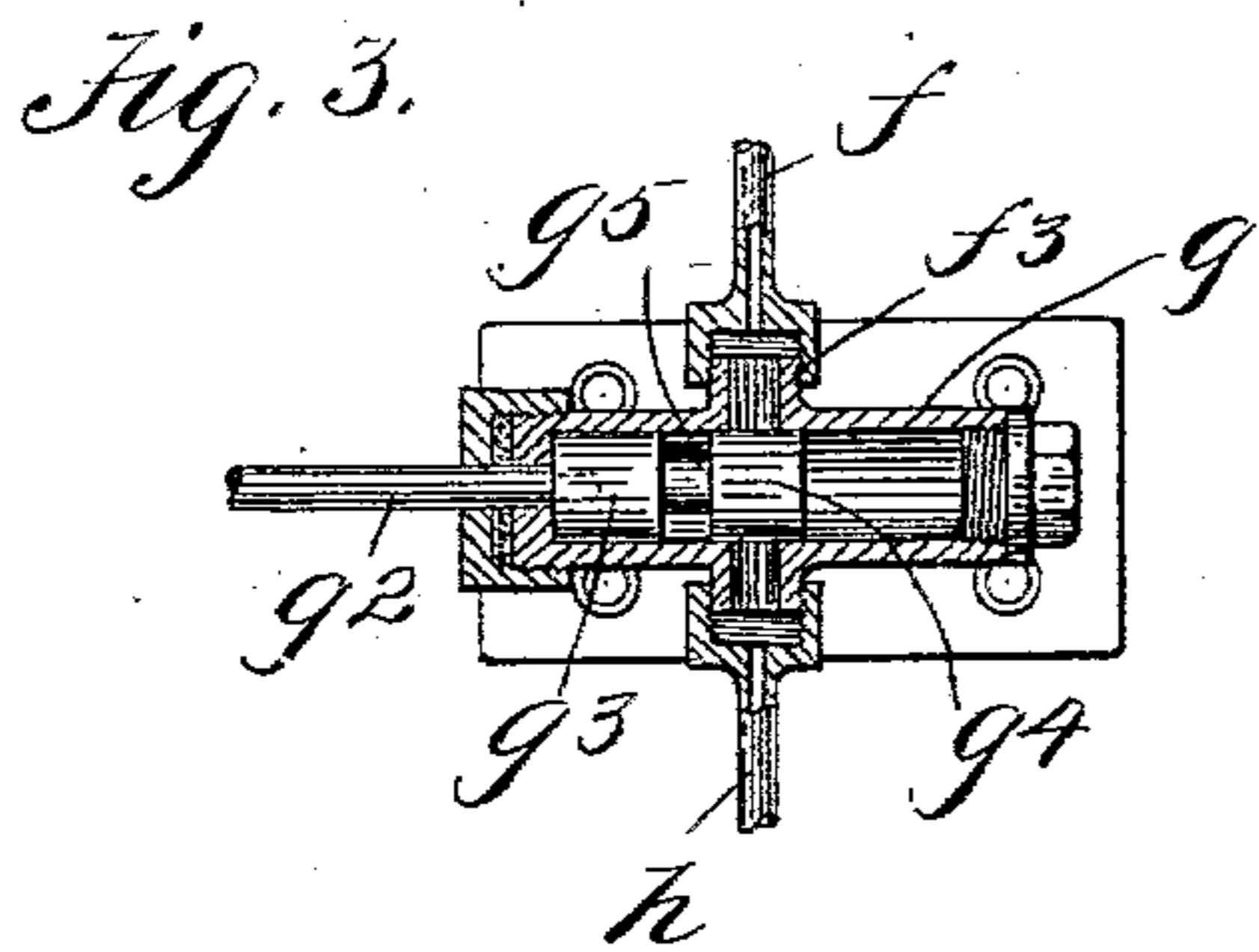
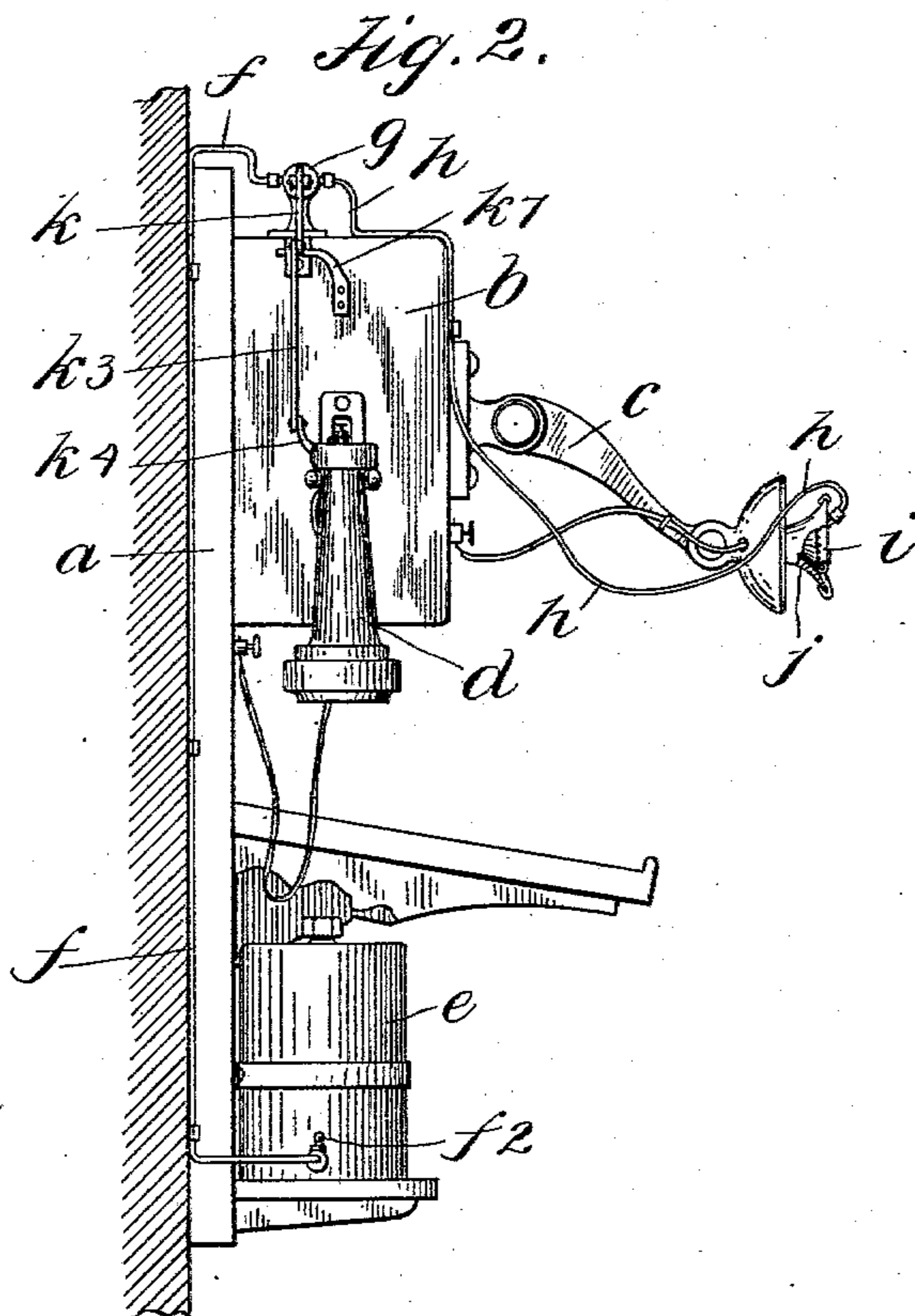
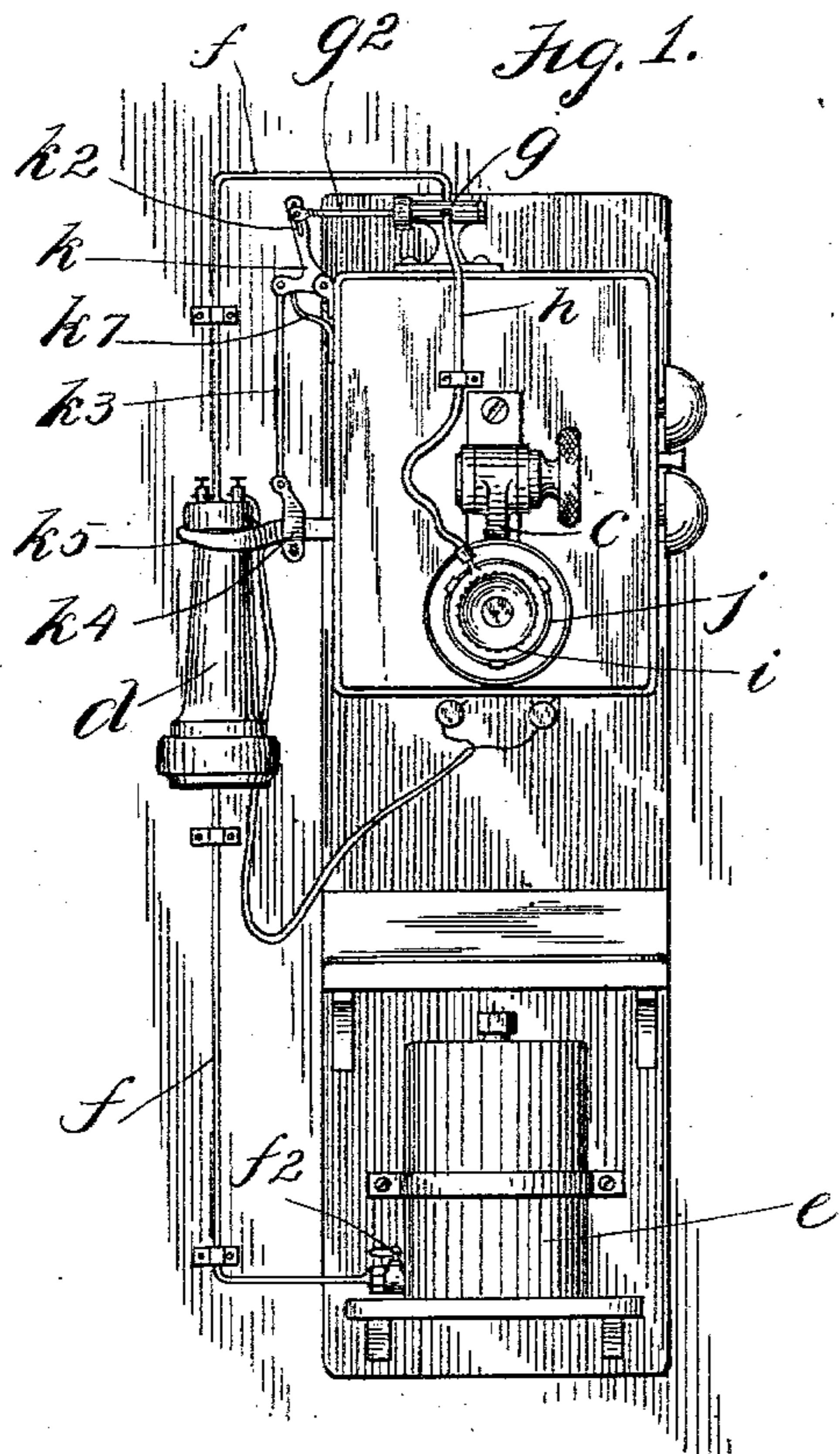
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PATENTED MAR. 1, 1904.

C. BRAVI-BERTINI.
DISINFECTING ATTACHMENT FOR TELEPHONES.

APPLICATION FILED SEPT. 16, 1903.

NO MODEL.



WITNESSES

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DISINFECTING ATTACHMENT FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 753,466, dated March 1, 1904.

Application filed September 16, 1903. Serial No. 173,389. (No model.)

To all whom it may concern:

Be it known that I, CARLO BRAVI-BERTINI, a subject of the King of Denmark, residing at Perth Amboy, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Disinfecting Attachments for Telephones, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide improved means for disinfecting the mouthpiece or transmitter of a telephone whenever it is used, so as to avoid the collection therein of microbes and the transmitting of diseases occasioned thereby.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a front view of a telephone apparatus provided with my improvement; Fig. 2, a side view thereof; Fig. 3, a section of a valve attachment which forms a part of my improvement, and Fig. 4 a view of a ring device connected with the mouthpiece or transmitter.

In the drawings forming part of this specification I have shown an ordinary telephone apparatus comprising a plate *a*, adapted to be secured to a wall or other support, a box *b*, secured to said plate and with which the transmitter-arm *c* is connected in the usual manner, and the usual receiver *d*, and all these parts being of the usual or any preferred construction.

In the practice of my invention I secure to the bottom portion of the plate *a* or at any point adjacent thereto a tank *e*, which contains a liquid disinfectant under pressure, and connected with this tank is a small pipe *f*, provided with a valve *f*², which is carried up above the telephone apparatus and is connected at *f*³ with a horizontally-supported valve-casing *g*, which in the form of construction shown is supported over the box *b*. Connected with the bottom of the valve-casing *g*, cen-

trally thereof, is another pipe, *h*, one end of which is connected with a ring *i*, which is adapted to be secured in the mouthpiece *j* of the transmitter.

The valve-casing *g* is cylindrical and oblong in form, and passing therethrough is a valve-rod *g*², provided with two piston-valves *g*³ and *g*⁴, between which is an annular space *g*⁵, and the ports or passages in the opposite sides of the valve-casing *g*, with which the pipes *f* and *h* communicate, are adapted to be closed by either of the piston-valves *g*³ and *g*⁴. The outer end of the rod *g*² is connected with one arm of a crank-lever *k* by means of a pin which passes through a slot *k*² in said arm of said crank-lever, and connected with the other arm of said crank-lever is a rod *k*³, which is provided at its lower end with a link device *k*⁴, through which the arm of the fork *k*⁵, which normally supports the receiver *d*, passes. A spring *k*⁷ is secured to the box *b* and helps to move the crank-lever *k* upwardly, and it will be understood that the fork *k*⁵ is also moved upwardly in the usual manner when the receiver *d* is detached therefrom.

When the parts are in their normal position and the receiver *d* is suspended from the fork *k*⁵ in the usual manner and as shown in the drawings, the passage through the valve-casing *g* is closed by the valve *g*⁴, and when the receiver *d* is removed from the fork *k*⁵ the crank-lever *k* moves upwardly, the valve *g*⁴ is forced to the right, and the said passage is closed by the valve *g*³; but between the opening and the closing of said passage there is an instant of time in which the contents of the tank *e*, or a small part thereof, is forced through the pipes *f* and *h* into the tubular-ring *i*.

The ring *i* is provided with hooks *i*², by which it may be connected with the mouthpiece *j*, and when in position it is secured within the perimeter of said mouthpiece and does not interfere with the operation of the latter. The ring *i* is provided with a large number of fine perforations *i*³, which are directed inwardly, and when the liquid disinfectant is forced into said ring, as hereinbefore described, it passes through said perforations inwardly into the mouthpiece *j* in the

form of a fine spray and is distributed over the interior of said mouthpiece, and this operation is repeated both when the receiver *d* is removed from the fork *k*⁵ and when it is replaced in said fork, as the downward movement of the fork when the receiver is placed therein causes the valves *g*³ and *g*⁴ to assume the position shown in Fig. 3, and as this is done there is an instant of time in which the passage through the valve-casing *g* is open, and the liquid disinfectant is again forced through the tubes *f* and *h*.

The operation of my improvement does not in any way interfere with the operation of the telephone, and by means thereof the mouthpiece of the telephone is kept at all times in a perfectly clean and sterilized condition.

My invention is not limited to any particular means of connecting the tube *h* with the tubular ring *i*, and various changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

The combination with a telephone apparatus of a tank of liquid disinfecting material, a tubular ring adapted to be secured in the mouthpiece of the transmitter and provided with fine perforations, tubes connecting said tank with said ring, a valve-casing placed in said tube and provided with a horizontally-movable valve-rod, two valves connected with said rod within said casing and between which is a space, and a spring-operated crank-lever connected with said valve-rod, said crank-lever and the support of the receiver being also in operative connection, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 15th day of September, 1903.

CARLO BRAVI-BERTINI.

Witnesses:

F. A. STEWART,
C. J. KLEIN.