

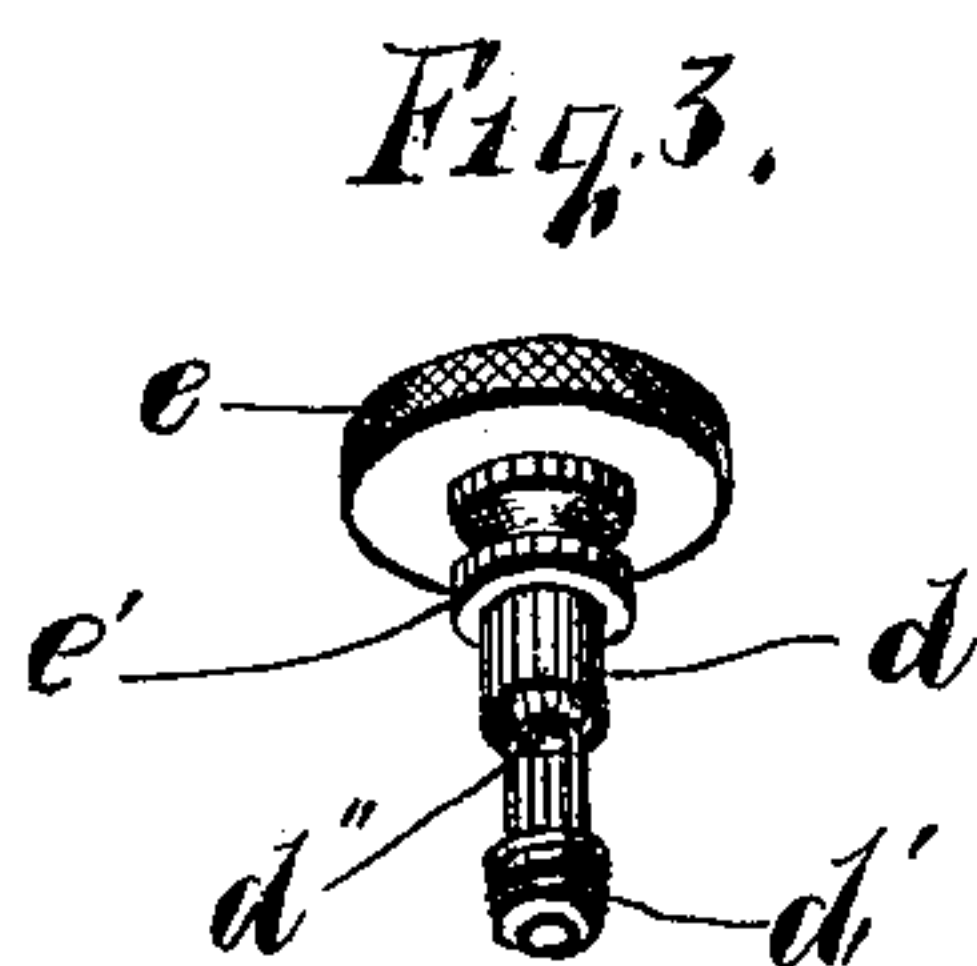
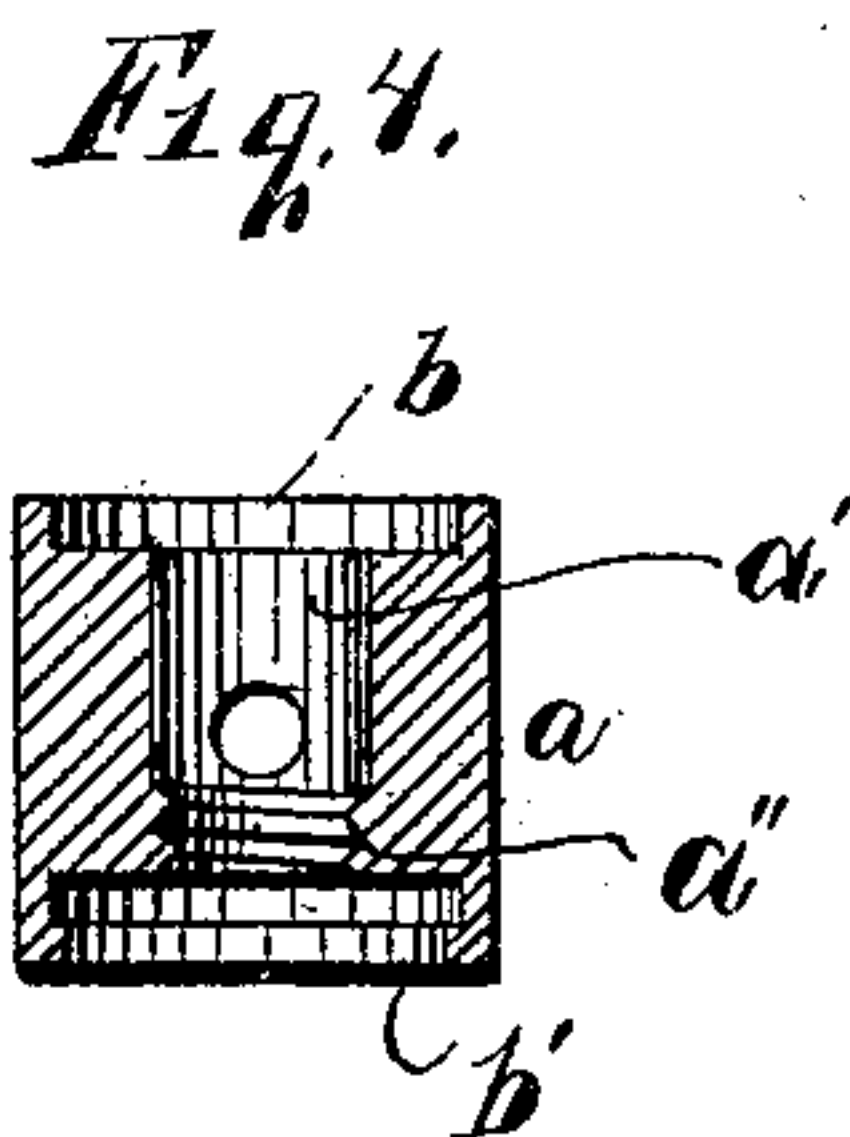
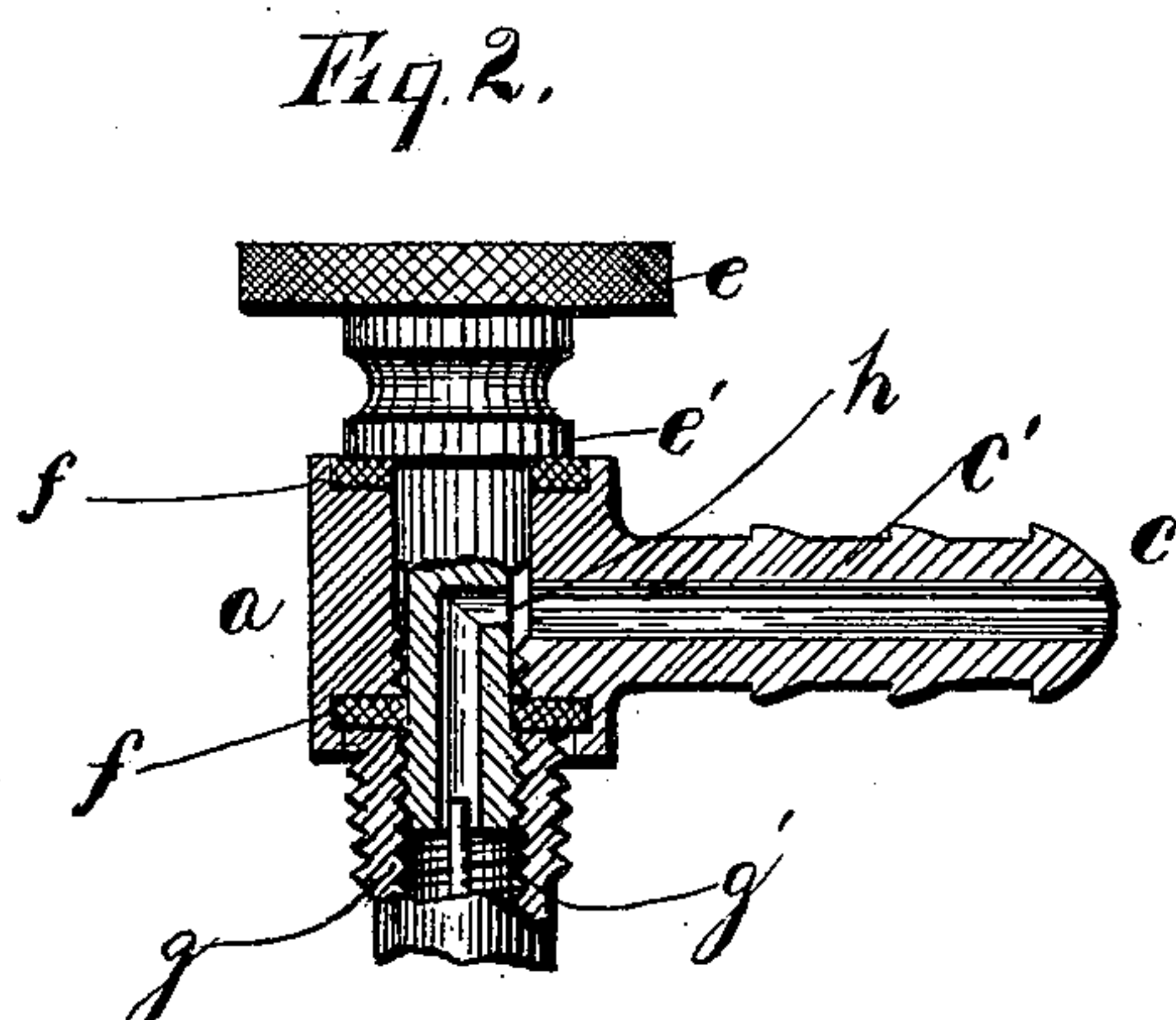
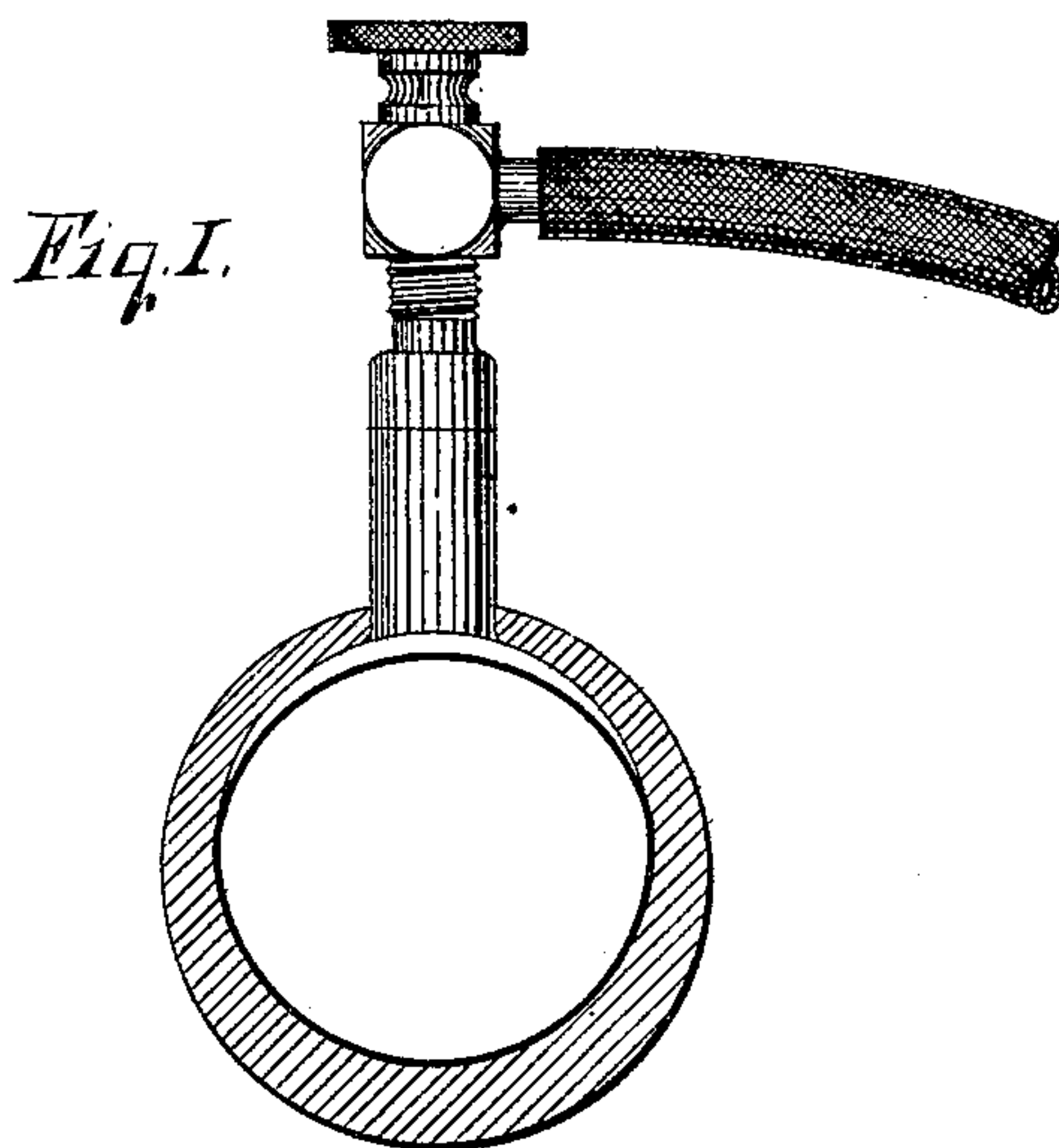
No. 712,738.

Patented Nov. 4, 1902.

F. N. STEVENS.
PUMP CONNECTION.

(Application filed Feb. 10, 1902.)

(No Model.)



WITNESSES:
G. H. Greene.
M. M. Nott.

INVENTOR
Frank N. Stevens
BY
Smith & Ormiston
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK N. STEVENS, OF NEW YORK, N. Y.

PUMP CONNECTION.

SPECIFICATION forming part of Letters Patent No. 712,738, dated November 4, 1902.

Application filed February 10, 1902. Serial No. 93,440. (No model.)

To all whom it may concern:

Be it known that I, FRANK N. STEVENS, of New York, in the county of New York, in the State of New York, have invented new and
5 useful Improvements in Pump Connections, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in
10 pump connections, having more particular reference to pumps for inflating tires.

One of the objects of this invention is to construct a right-angle connection, so as to avoid a bending or the arching of the hose
15 when in use, thereby permitting the hose to lie normal. This enables me to use a shorter hose than is now in use with the present connection.

The further object is to render the connection more durable by constructing the stem of steel, the casing being of brass, in the usual manner; and a further object is to so construct the connection that one is able to replace the gaskets when necessary by removing the stem.
25

My invention consists in the several new and novel features of construction and operation, which are hereinafter fully set forth in the claims hereunto annexed.

30 It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 shows a side view of the pump connection as it appears in use. Fig. 2 is a
35 vertical section through the connection except the upper end of the stem. Fig. 3 is a view of the stem detached. Fig. 4 is a vertical section of the body of the connection, taken at right angles to the hose-stem, showing the
40 recesses for the gaskets and the interior thread.

Similar letters of reference indicate corresponding parts.

a is the body of the connection, having a central opening *a'*, the lower end of which is
45 threaded, as shown at *a''*, and having recesses *b* and *b'* at the top and bottom, respectively, for the reception of the gaskets. The body is counterbored below the recess *b'* to readily receive the upper end of the valve *g*, referred
50 to later. The body *a* is also provided with a laterally-extending tube-arm *c*, having the

usual annular ribs *c'* for the purpose of retaining the hose thereon.

d is a steel pin or tube threaded at its lower end, as shown at *d'*, and having a lateral opening *d''* in alinement with the opening in the lateral tube *c*. At the upper end is a thumb-screw *e*, and adjacent thereto is an annular shoulder *e'*, and *f* represents gaskets or packing-rings mounted in the recesses *b* and *b'*
60 and serve to make the joint air-tight.

g, as shown in the cut, is the upper end of a valve, in this instance an ordinary bicycle-tire valve, threaded interiorly to receive a thread upon the stem *d*.
65

It will be observed that when for any reason the gaskets *f* are worn out and it becomes desirable to replace them they may be replaced by withdrawing the stem *d* from the body, and when the stem is replaced it passes
70 down through the body, engaging with the interior thread *a''*, so that it is impossible for the stem to become displaced should the gasket for any reason become lost. It will also be observed that by constructing the stem *d* of
75 steel I render it more durable than would otherwise be done by the use of brass in the ordinary way. It will also be observed that by reducing the size of the stem just above the thread a recess will be formed for the
80 opening *d''*, so as to permit the air to pass down through the tube under all circumstances and without reference to whether the opening *h* is in alinement with the opening in the tube *c*. It will also be observed that when
85 the threaded part of the stem *d'* is screwed clear through the body *a* and through the lower washer the stem is free to rotate in either direction and may be turned to the left and unscrewed from the valve *g* without
90 unscrewing it from the gasket or body *a*.

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

1. A device of the type set forth, comprising a body having a central opening threaded at its lower portion with a tubular arm communicating with said opening, a tubular stem having a threaded end engaging in the lower portion of the body, the stem above the
100 threaded end being reduced for a slight distance, a washer embedded within said body

and a second washer on the upper end of the body, the threaded end of the stem engaging through the first-named washer, the lower end of the body beneath the first-named
5 washer being counterbored, to receive and enable the first-named washer to engage with the valve, substantially as described.

2. A device of the type set forth, comprising a body having a central opening threaded
10 at its lower portion with a tubular arm communicating with said opening, a tubular stem having its lower end threaded and engaging in the threaded portion of the opening, the lower end of the body being counterbored to
15 readily receive the end of the valve, and a washer embedded within the body at the upper end of said counterbored portion.

3. A device of the type set forth, comprising a body having a central opening threaded

interiorly at its lower end, with a tubular arm 20 communicating with the said opening, a tubular stem having a threaded lower end engaging said threaded portion of the body, a shoulder on the stem, with a washer on the upper face of the body engaged by said shoulder, and a second washer embedded within
25 the body and adapted to be engaged by the upper end of the valve, the threaded portion of the stem passing through the second-named washer and into the valve, and moving the body downwardly so as to compress
30 both of the said washers.

In witness whereof I have hereunto set my hand this 16th day of January, 1902.

FRANK N. STEVENS.

Witnesses:

C. A. HAUCK,
JAS. J. HALL.