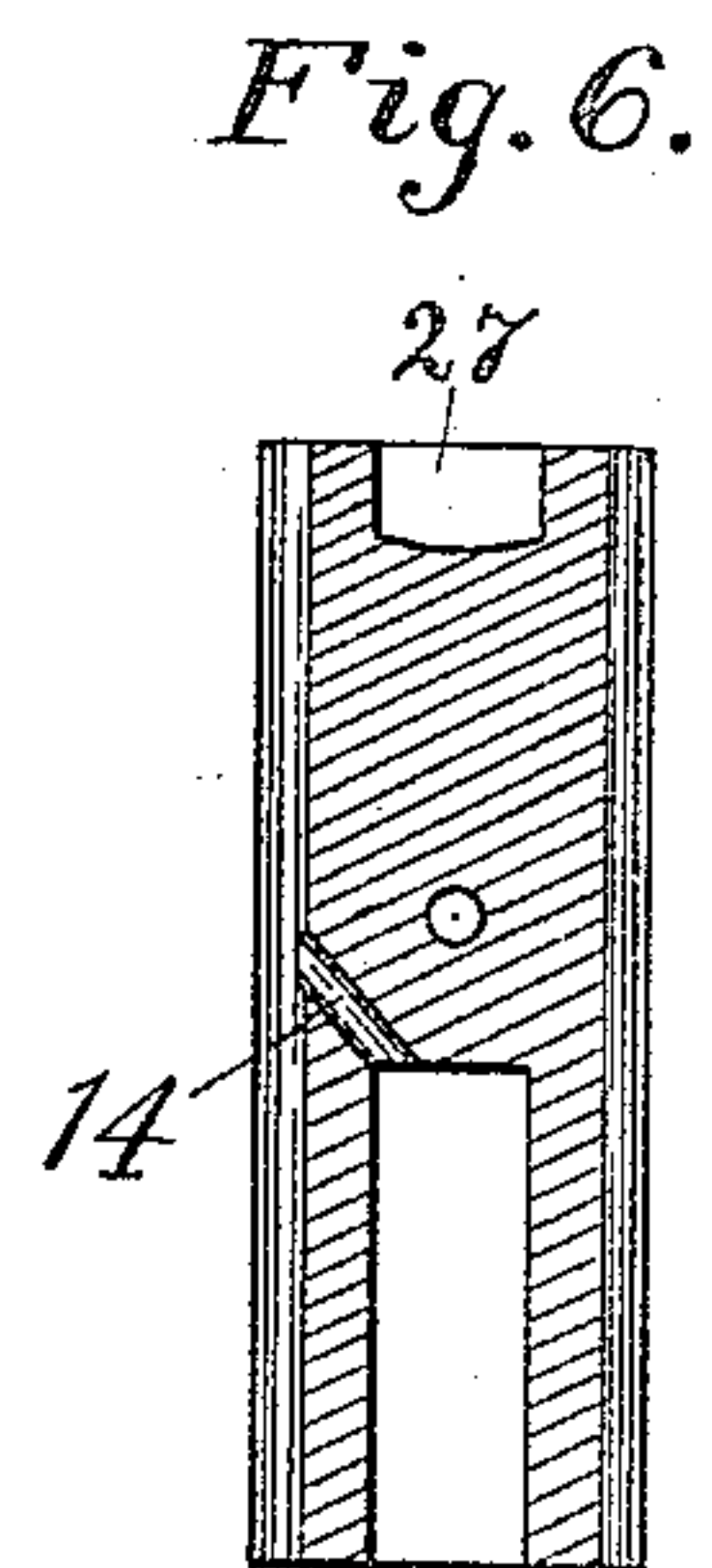
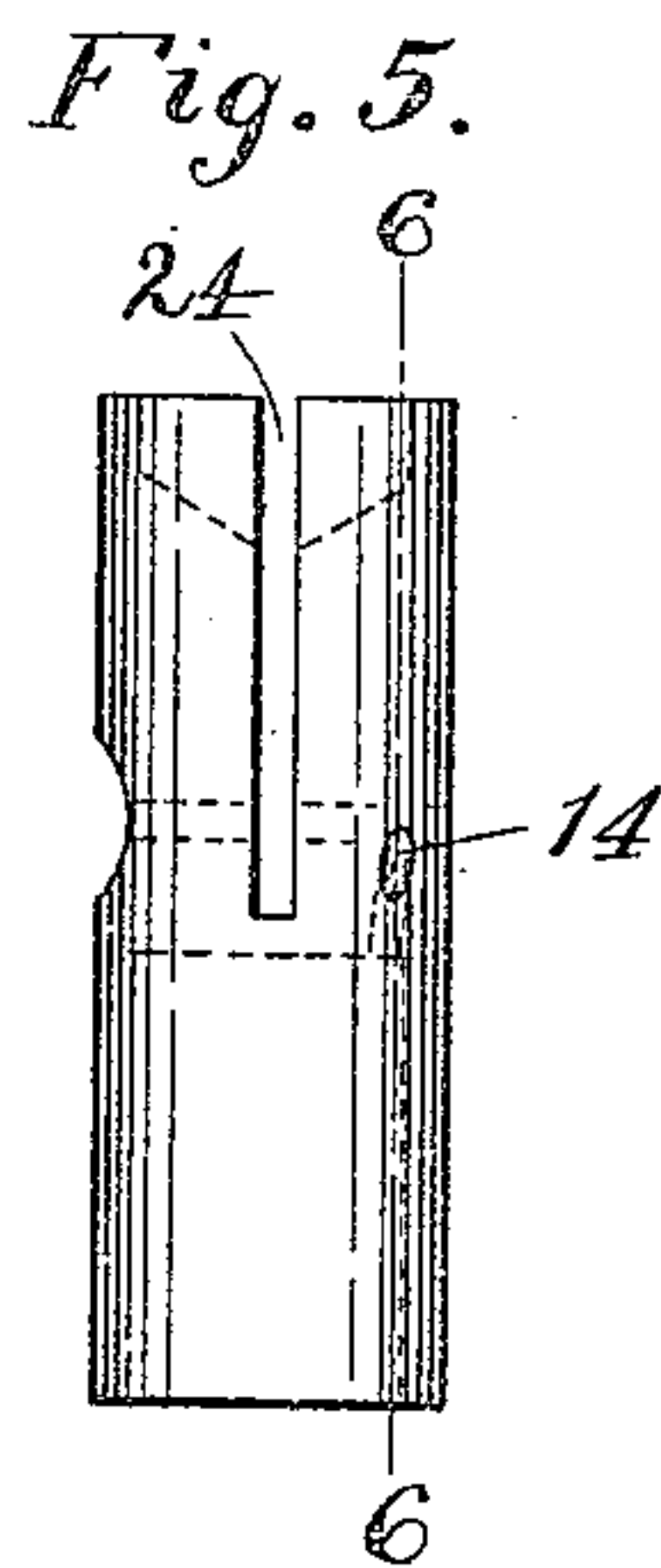
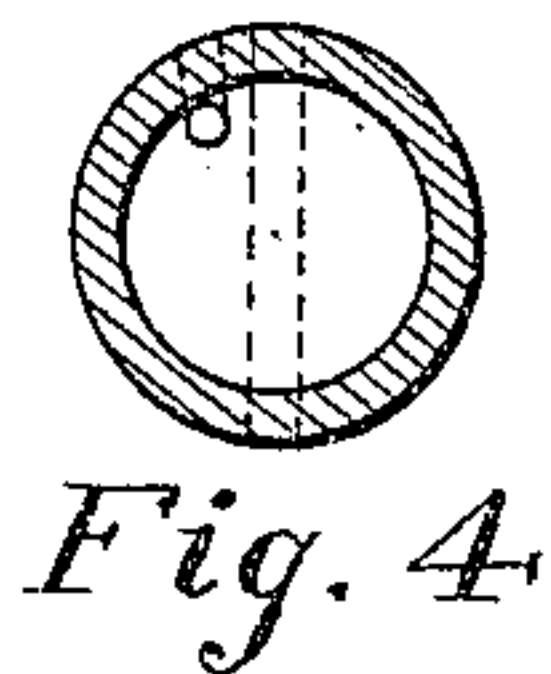
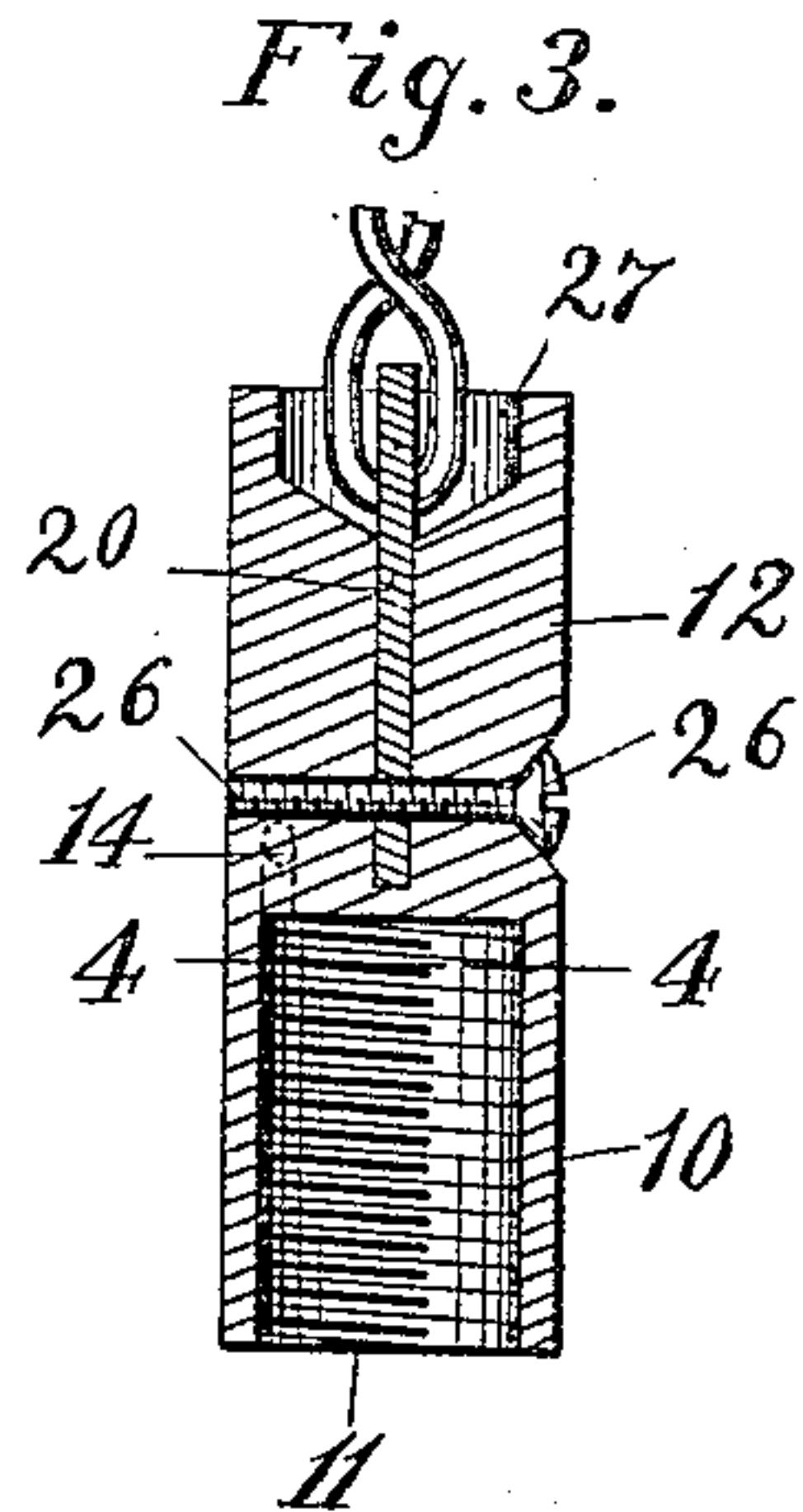
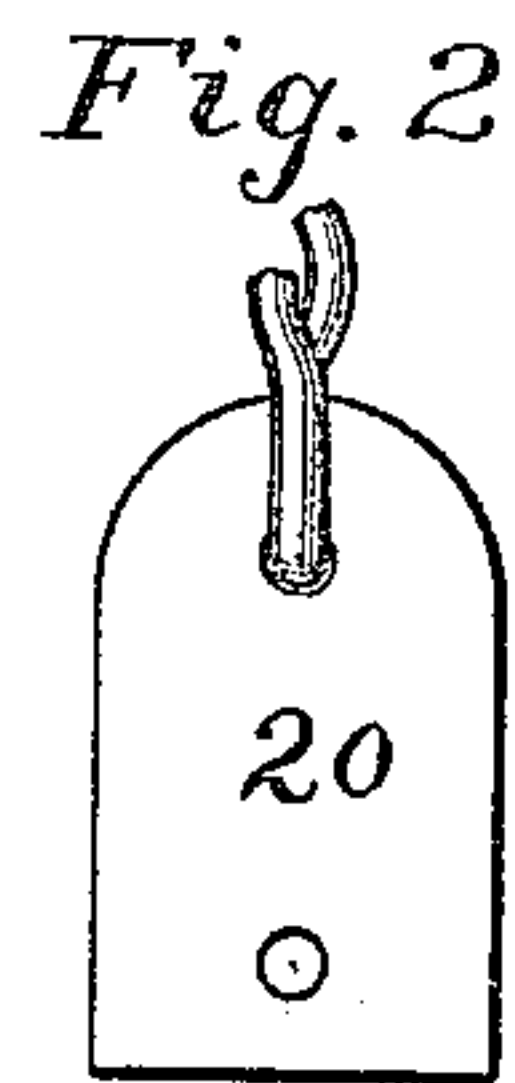
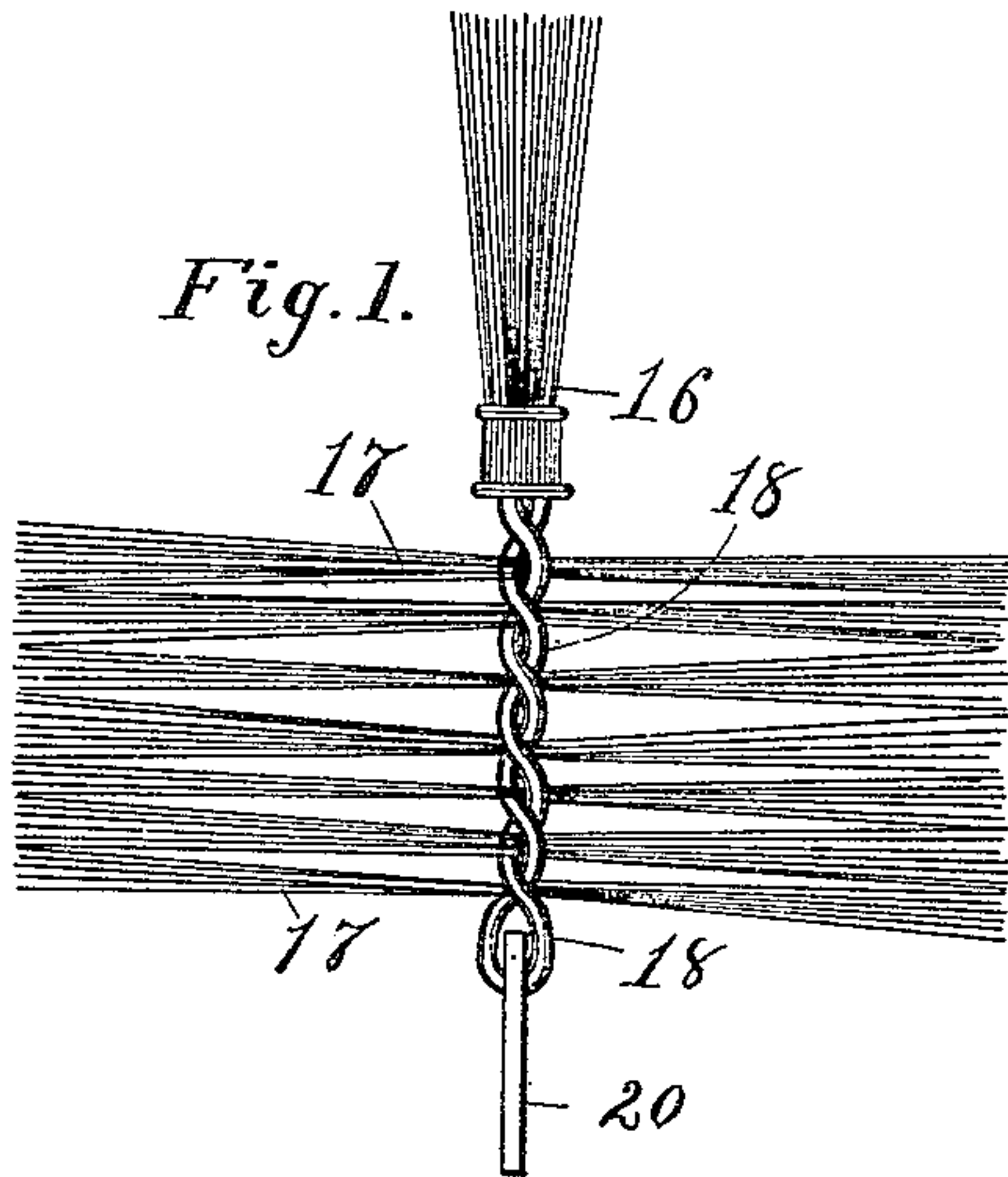


No. 816,818.

PATENTED APR. 3, 1906.

H. H. POGGENSEE.
BOTTLE WASHING DEVICE.
APPLICATION FILED NOV. 29, 1904.



Witnesses:

A. J. Ostrander
Leon Stroh

Inventor:

Henry H. Poggensee

UNITED STATES PATENT OFFICE.

HENRY H. POGGENSEE, OF CHICAGO, ILLINOIS.

BOTTLE-WASHING DEVICE.

No. 816,818.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed November 29, 1904. Serial No. 234,704.

To all whom it may concern:

Be it known that I, HENRY H. POGGENSEE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Bottle-Washing Devices, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to bottle-washing machines wherein water is employed under pressure to wash bottles, brushes being employed for effecting a thorough application of the water.

The invention is an improvement upon Edward B. Poggensee's prior patent, No. 728,006, issued May 12, 1903, which patent contains a detailed description of the method of using the brush in general machinery of the class described.

My improvement consists in a novel form of mechanism for attaching the cleaning-brush to the tubular stock inserted in or on the water-supply pipe.

The invention in detail consists in attaching to the lower end of the brush a metallic disk or plate adapted to fit within the tube of the stock and preferably within a slotted space in the walls thereof and in means for securing said plate in position.

My invention also consists in details of construction, which will be hereinafter more fully described and claimed as the specification proceeds.

Referring to the drawings, Figure 1 is a front elevation of a brush adapted to be attached to the tubular stock by the device of my invention. Fig. 2 is a side view of the attaching plate or disk. Fig. 3 is a vertical sectional detail view through the center of a tubular stock, showing the details of the method of attachment of my brush thereto. Fig. 4 is a sectional bottom view of the parts shown in Fig. 3, taken on line 4 of that figure. Fig. 5 is a side view of a tubular stock, showing the slot for the insertion of the disk or plate to which the brush is attached and the orifice through which the water comes from the inside side of the tubular stock. Fig. 6 is a sectional detail view on line 6 of Fig. 5.

As more fully appears from an inspection of Edward B. Poggensee's prior patent, the device is intended to be used in machines for cleaning bottles and other similar articles by

the use of water under pressure in combination with a brush.

In referring to Fig. 3 we see a tubular stock 10 of quite a common type of construction adapted to be attached by screw-threads 11 to a water-pipe or other source of fluid to be used in the cleaning process. In the particular tubular stock here shown the upper end 12 is made solid and the water passes from the inside of the tube 10 out through the side through a discharge-passage 14.

I provide a brush, such as is shown in Fig. 1, of the ordinary type of construction, consisting in the one here shown of a vertical portion 16 and a horizontal portion 17, both portions being mounted on a twisted wire-support or frame 18, as shown in Fig. 1. There is nothing novel about this portion of the mechanism, and other methods of making the brush may be used without departing from my invention. On the lower end of the wire-support 18 or any other corresponding suitable support for a brush which may be used I loosely mount a flat plate or disk 20. The connection between this plate and the brush is loose enough, so that the brush has considerable play about the top of the plate 20 as a center. This plate 20 is made of approximately the same width as the diameter of the tubular stock 12 and is adapted to fit down into that stock in a slot 24, clearly illustrated in Fig. 5, and is secured in position by a screw 26, inserted crosswise of the tubular stock. The upper end of the tubular stock 12 has a recess 27 cut in it, adapted to receive the lower end of the brush-frame 18 and allow it to move upon the end of the plate 20 in the manner heretofore described.

In the operation of the device a brush equipped with my invention is attached to one of a series of permanent tubular stocks in the manner thus described, and the brush and end of the tubular stock is inserted in a bottle or other article to be cleaned, or the bottle may be inserted over the brush and tubular stock. Water is admitted through the pipe connected with the lower end of the tubular stock and being under pressure is forced out through the orifice 15 into the bottle and fills the same, flowing around and through the brush. Either the brush and the tubular stock or the bottle, or both, may now be rotated and moved backward and forward with reference to each other either by hand or by suitable machinery for the pur-

pose of cleaning the bottle. When the operation is completed, the bottle is removed from the brush and another bottle substituted. In the natural course of events the brush wears
 5 out while the tubular stock remains as good as ever. When this condition occurs, the operator simply takes a screw-driver, removes the screw 26, and lifts the plate 20, with the brush upon it, out of the slot 24 in
 10 the tubular stock and inserts the corresponding plate 20 of the new brush in the slot 24 and replaces the screw 26.

By this construction I am able to make my brushes detachable much more cheaply and
 15 easily and am able to effect the exchange of brushes in much less time than has heretofore been required in devices capable of accomplishing the above-mentioned general object. The device when in operation is not
 20 readily liable to get out of order and thereby injure either the machine in which it is used or the bottles.

I do not wish to be understood as limiting myself to the exact details of construction,
 25 which may be varied within reasonable limits without departing from my invention.

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

30 1. In mechanism of the class described, the combination of a stock perforated for the passage of water and having a slot in its end and a brush adapted for cleaning purposes having a plate upon its lower end adapted to
 35 be inserted within said slot in said stock, and means for securing said plate in the stock.

2. In mechanism of the class described,

the combination of a stock perforated for the passage of water and having a slot in its end and a brush adapted for cleaning purposes
 40 having a plate upon its lower end adapted to be inserted within said slot in said stock, and a screw through said stock and plate at right angles to said plate adapted to detachably secure said plate in position in the stock.
 45

3. In mechanism of the class described, the combination of a stock perforated for the passage of water and having a slot cut lengthwise in one end and an enlarged recess in the
 50 same end, a brush loosely secured to a plate adapted to fit in said slot in said stock, the lower end of the brush being adapted to move freely within said enlarged recess in the end of the stock, and means for detachably
 55 securing said plate and brush in said position.

4. In mechanism of the class described, the combination of a stock perforated for the passage of water and having a slot cut lengthwise in one end and an enlarged recess in the
 60 same end, a brush loosely secured to a plate adapted to fit in said slot in said stock, the lower end of the brush being adapted to move freely within said enlarged recess in the end of the stock, and a detachable screw
 65 passing through said stock and plate at right angles to the plate.

In witness whereof I have hereunto subscribed my name this 25th day of November,
 A. D. 1904.

HENRY H. POGGENSEE.

Witnesses:

JOHN A. ANDERSON,
 DWIGHT B. CHEEVER.