

W. PENMAN.  
NECK CLEANING DEVICE FOR BOTTLE WASHERS.  
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975,066.

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FIG. 1

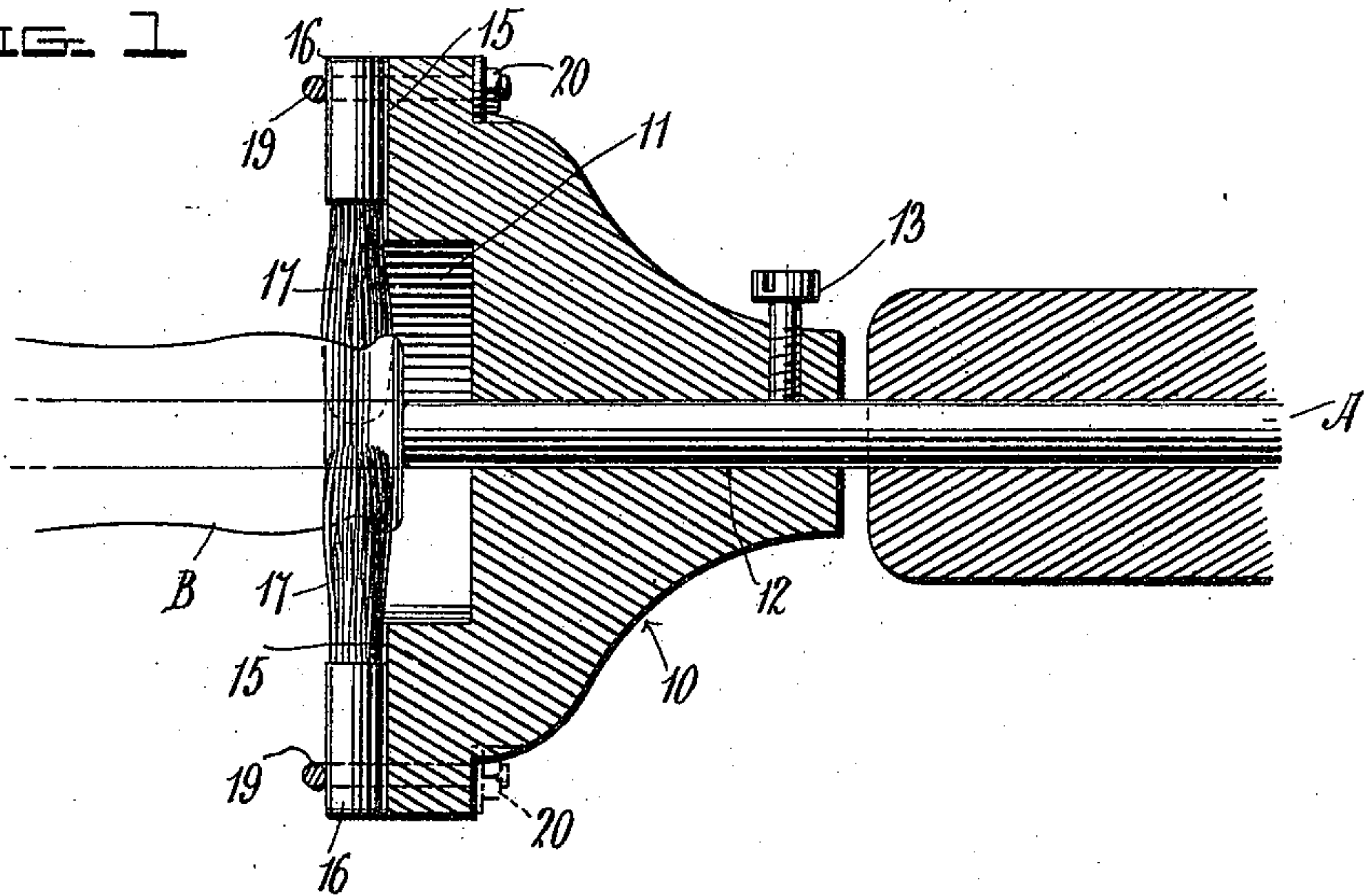


FIG. 2

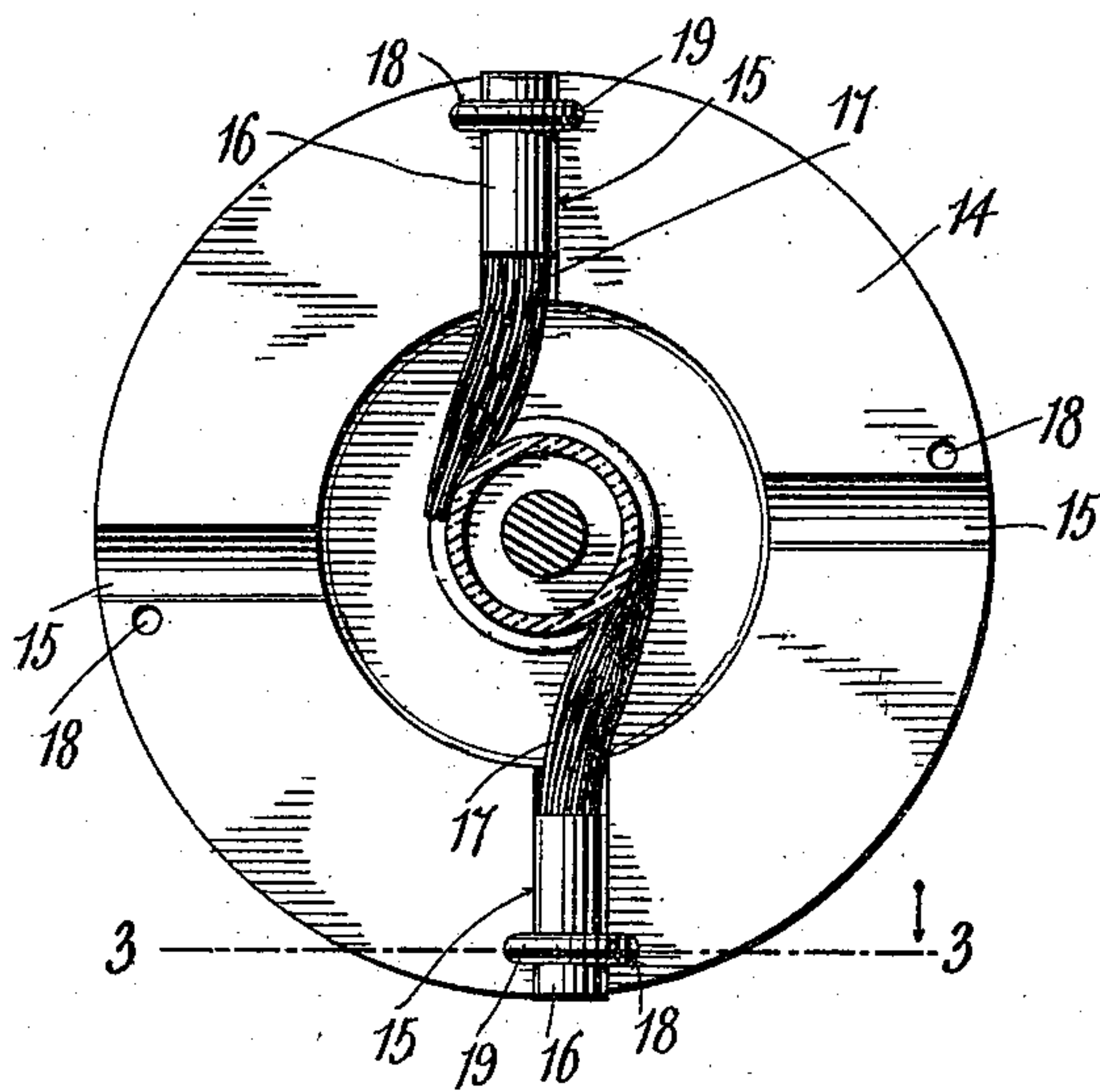
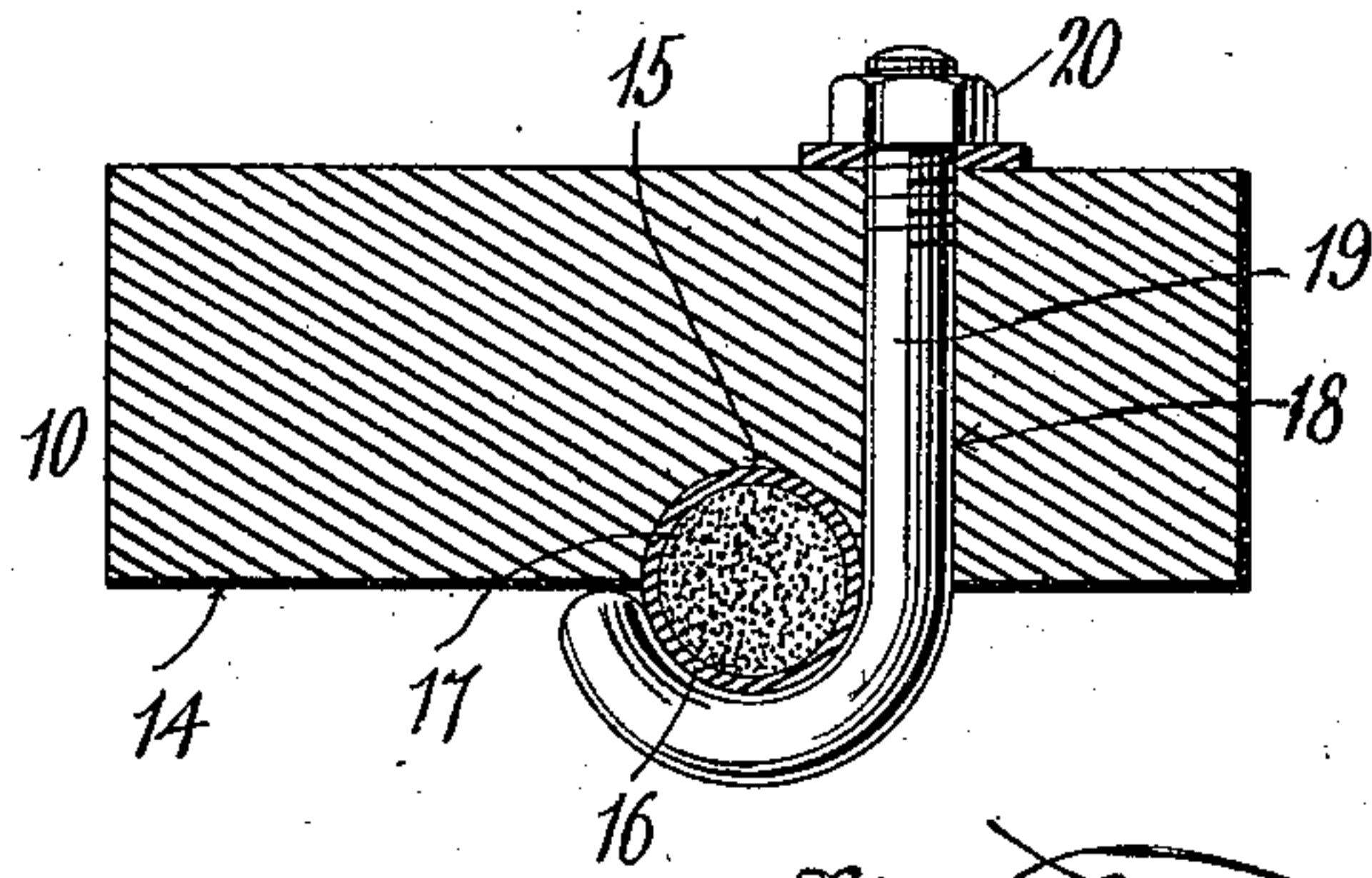


FIG. 3



Witnesses  
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# UNITED STATES PATENT OFFICE.

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NECK-CLEANING DEVICE FOR BOTTLE-WASHERS.

975,066.

Specification of Letters Patent.

Patented Nov. 8, 1910.

Application filed August 4, 1910. Serial No. 575,474.

*To all whom it may concern:*

Be it known that I, WILLIAM PENMAN, a citizen of the United States, residing at Denison, in the county of Grayson, State of Texas, have invented certain new and useful Improvements in Neck-Cleaning Devices for Bottle-Washers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of devices which are used for cleansing bottles such as have contained beer, soda and the like and which are provided with a closure in the form of a metallic cap having a portion fitted into a groove adjacent the mouth of the bottle.

It is a well known fact that bottles of this class are commonly packed neck down and that the contents or water from the outside rusts the caps so that a deposit of rust is formed in the groove which is used to hold the cap in position. This deposit of rust is extremely difficult of removal and the object of the present invention is to provide a simple and efficient device adapted to be used in connection with the ordinary washing machine of this class for the purpose of removing this rust-ring from the bottle neck.

With the above and other objects in view as will be hereinafter apparent the invention consists in general in a neck cleaning head for bottle washers comprising a body provided with a recess in one end and carrying adjustable brushes all of novel and improved construction.

The invention further consists of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically set forth in the claims.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and: Figure 1 is a longitudinal section through a portion of a bottle washing machine showing the improved neck cleaning head in position thereon; Fig. 2 is a face view of such a head; Fig. 3 is an enlarged detail section on the line 3—3 of Fig. 2.

The invention is arranged to be applied to the spindle of a bottle washer which is here indicated at A. The neck cleaning head comprises a body 10 provided with a recess 11 in the face end and having an

opening 12 extending through the body for the reception of the spindle A. This head is fixed upon the spindle by set screws 13. The recess 11 is surrounded by a wall 14 and this wall is provided with a plurality of grooves 15 which extend transversely of the wall and are so arranged that their axes are tangential to a circle surrounding the axis of the head. Furthermore, these grooves are arranged in oppositely disposed pairs so arranged that the axis of one of the grooves of each pair is parallel to but spaced from the axis of the other groove of said pair.

Mounted in the grooves 15 are brushes provided with bodies 16 and metallic bristles 17, preferably made of spring metal. These bodies 16 are slidable longitudinally of the grooves and in order to hold them in adjusted position the wall 14 has a series of openings 18 made therethrough and extending longitudinally of the body. Through these openings pass the shanks of J-shaped clamps 19 provided with nuts 20. The curved portion of each clamp extends over the respective groove 15 and engages around the body of the brush held in such groove. By this means the brushes may be adjusted inwardly or outwardly of said head and the ends thus brought closer together or moved farther apart so as to allow both for wear and for the size of the bottle neck to be cleaned.

In the operation of the device the bottle is slipped over the spindle A in the usual manner until the neck takes the position shown in Fig. 1 at B. The brushes will then be in such position as to operate upon the groove of the neck and as the spindle A is rotated the head will rotate therewith and the neck be quickly cleaned of the rust deposit. There has thus been provided a simple and efficient device of the character described and for the purpose specified.

An important feature of its operation is the fact that no extra labor is required in its use, as the neck cleaning is done while the operator is washing the bottle, as the washing process brings the bottle neck into position and the work is done without the slightest additional effort.

Having thus described the invention what is claimed as new is:

1. A neck cleaning device for bottle washers comprising a body provided with a recess in one end surrounded by a wall having grooves extending transversely of the

edge of the wall, brushes having body portions mounted in the respective grooves, and clamps extending through said wall longitudinally of the head and engaging over the  
5 brush bodies.

2. A neck cleaning head for bottle washers comprising a body provided with a recess in one end surrounded by a wall having grooves extending transversely of the edge of the  
10 wall, said grooves having their axes tangential to a circle surrounding the axis of the

head, brushes having body portions mounted in respective grooves, and clamps extending through the wall longitudinally of the head and engaging over the brush bodies. 15

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM PENMAN.

Witnesses:

B. F. BRIGHAM,  
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