

No. 860,078.

PATENTED JULY 16, 1907.

J. BINKS.

APPARATUS FOR APPLYING LIQUIDS TO SURFACES.

APPLICATION FILED DEC. 13, 1905.

Fig. 1.

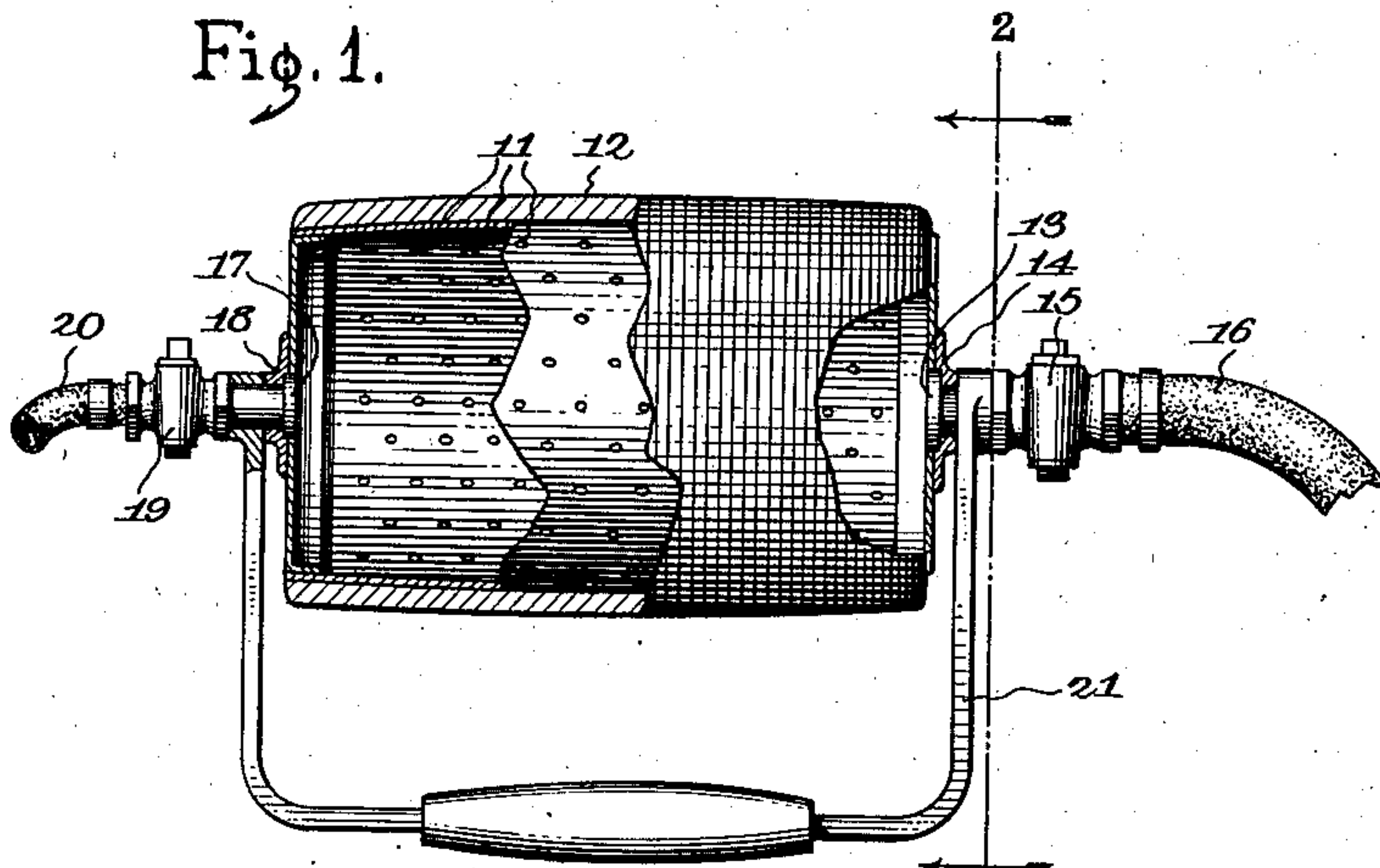


Fig. 2.

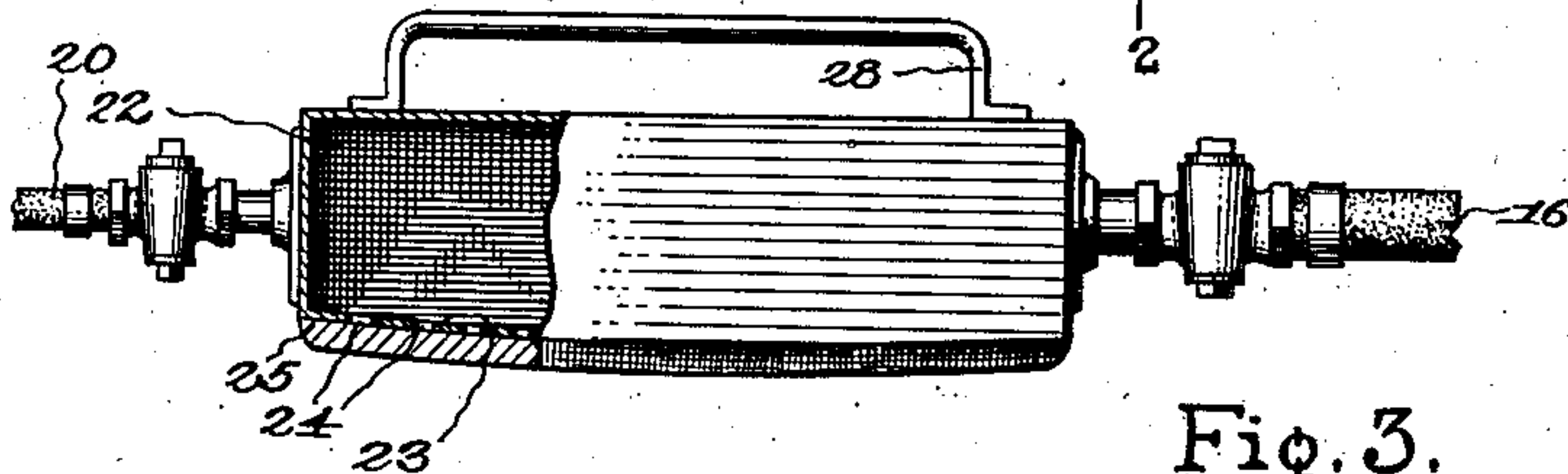
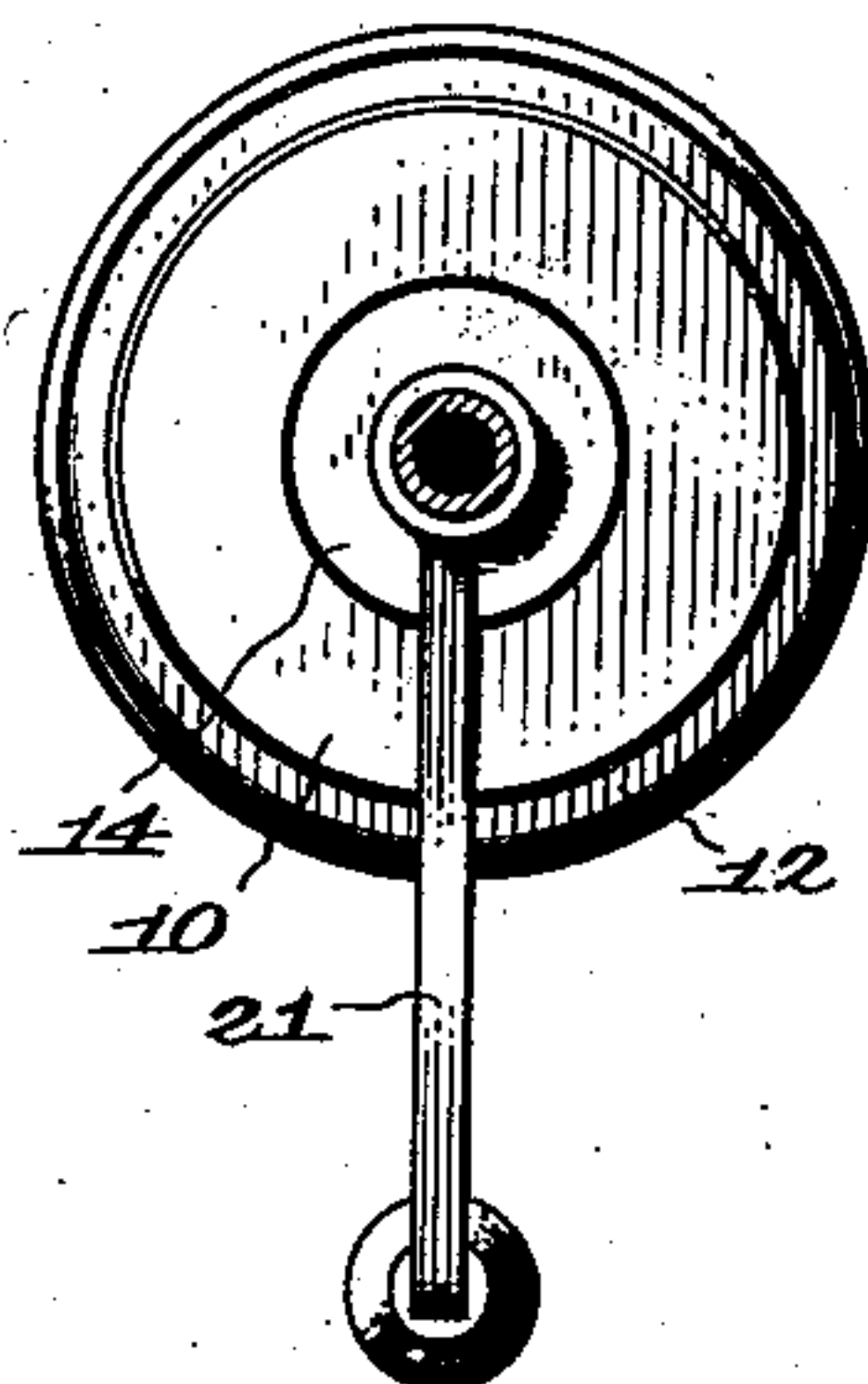


Fig. 3.

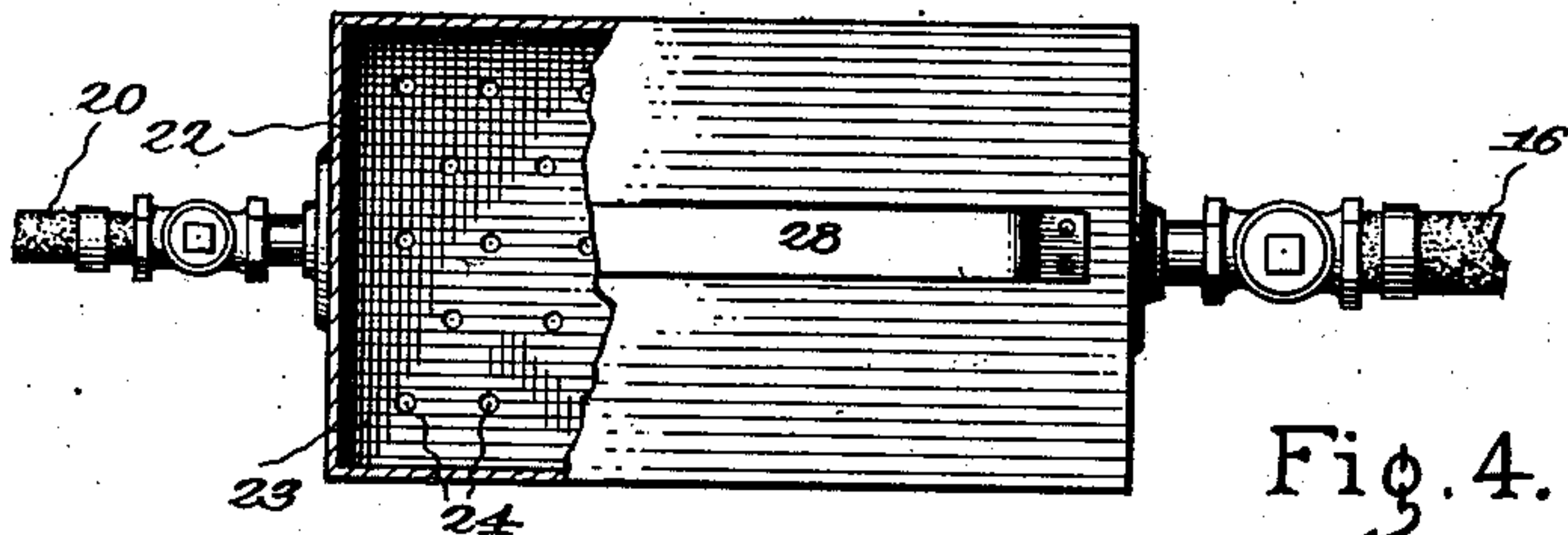


Fig. 4.

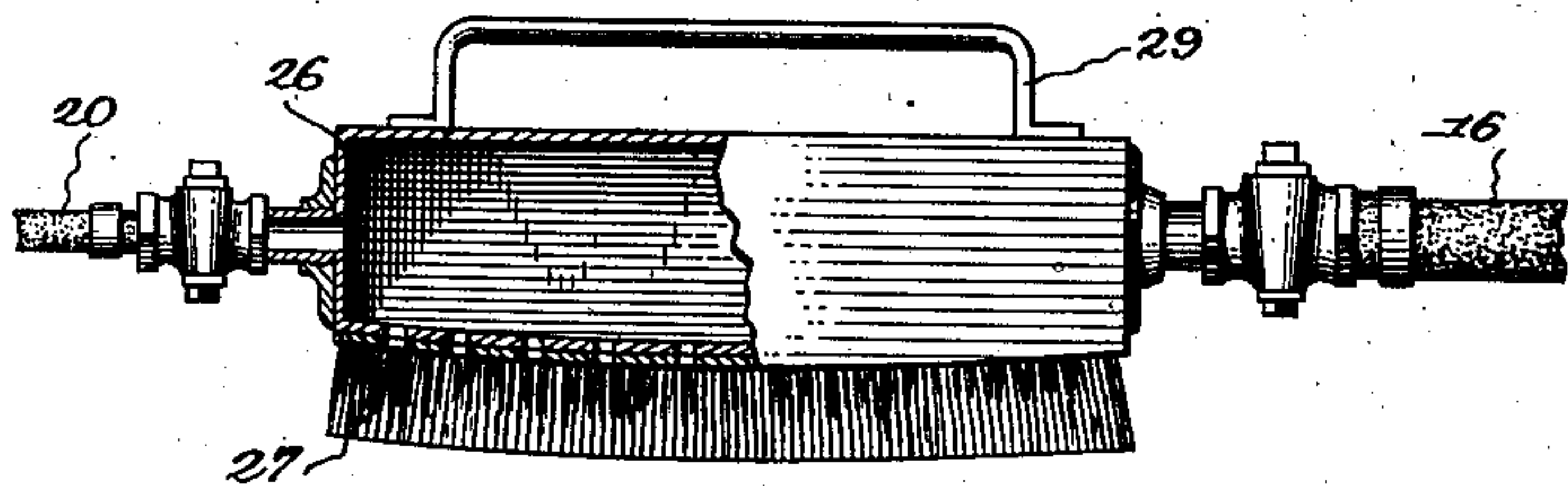
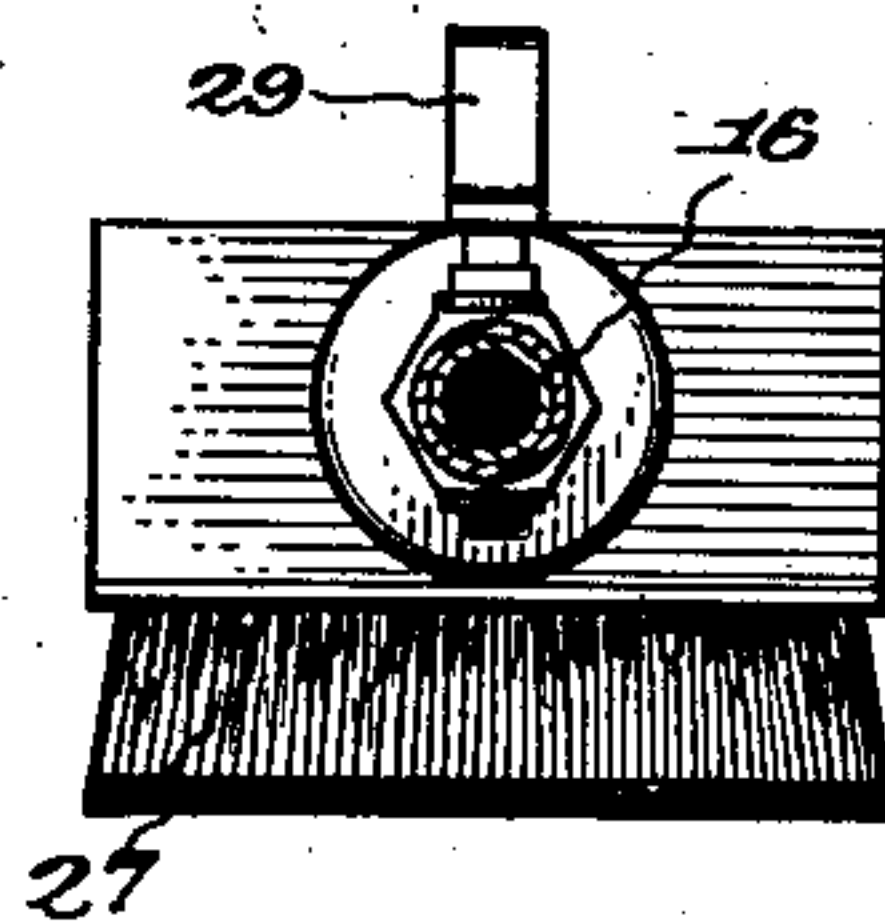


Fig. 5.

Fig. 6.



Witnesses:

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APPARATUS FOR APPLYING LIQUIDS TO SURFACES.

No. 860,078.

Specification of Letters Patent.

Patented July 16, 1907.

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To all whom it may concern:

Be it known that I, JOSEPH BINKS, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Apparatus for Applying Liquids to Surfaces, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

This invention relates to an apparatus for applying liquids, especially when heated, to surfaces; and it consists of a box having an apertured face which is covered by a fibrous material, such as a fabric or a brush, the box being provided with an induction port for the delivery to its chamber of a liquid, and it may also be provided with an eduction port in order that there may be a continuous circulation of liquid for the purpose of maintaining its temperature.

The invention consists in further details of construction as hereinafter described and as shown in the accompanying drawings illustrating the invention, in which

Figure 1 is a detail elevation of one form of the device, some parts being in elevation, some parts being broken away and some parts in longitudinal section; Fig. 2 is an end elevation, partly in section, on the line 2—2 of Fig. 1; Figs. 3 and 4 are views, partly in elevation and partly in section, of a modified form of the device; and Figs. 5 and 6 are views, one of a side elevation, partly in longitudinal section, and the other an end view of a further modification.

The device is especially adapted for the application of heated liquids, such as molten paraffin, to the interior surfaces of beer tanks, and is adapted to carry out the method of treating such tanks which forms the subject of my concurrently filed application for Letters Patent on my improvement in method of and apparatus for treating wood with paraffin.

In treating the interiors of beer tanks with paraffin, it is desirable that the liquid be applied in such quantities only that it will be instantly absorbed by the wood, and to this end, as described in my aforesaid application, the wood is preferably heated and the paraffin is applied hot.

In the preferred form of device for which protection is now sought, there is employed a cylindrical box 10, the peripheral walls of which are perforated, preferably by a large number of small holes, as shown at 11, this perforated surface being covered with a fibrous material, preferably a plurality of layers of cotton cloth, as represented at 12. At the center of one end of the box or cylinder 10, there is an induction port 13, inclosed

by an outwardly projecting nipple 14, to the outer end of which is applied a valve-casing 15, to which is attached a flexible pipe 16, which leads from any suitable source of supply. At the center of the opposite end of the box is an eduction port 17, surrounded by an outstanding nipple 18, to which is preferably applied a valve-casing 19, a flexible pipe 20 leading from this valve casing to any suitable receptacle for the surplus liquid fed to the device.

The nipples 14 and 18 form trunnions to which is applied a handle, shown in the drawings as a simple bail 21, and preferably each has a swiveled engagement with the box wall.

In use the liquid is fed to the box 10 through the tube 16, preferably under pressure, and is forced out through the perforations 11 into the fibrous covering 12 and exudes therefrom. The operator grasps the handle 21 and rolls the cylindrical box over the surface to be treated with sufficient rapidity to apply the liquid in the desired quantity. The supply may also be regulated by means of a valve in the casing 15 or the valve in the casing 19. The eduction port 17 may, if desired, be omitted, or the valve controlling it may be entirely closed, the supply of liquid to the apparatus being at such rate only as will be required to properly treat the wood. When, however, it is desired to maintain the temperature of the liquid at a high degree, a continuous circulation should be maintained by allowing such discharge through the tube 20 as may be necessary.

In place of the cylinder there may be used a box 22, having a flat face 23 freely perforated, as shown at 24, and covered with a fibrous material, preferably cotton cloth, as shown at 25; or there may be used a similar box 26, having its perforated face covered by a brush 27, so that the liquid may enter the back of the brush and follow its bristles. In both of these forms of construction there is present the feed pipe 16 and preferably the discharge pipe 20, and each is provided with a suitable handle such as 28, 29.

In the use of either of the modified forms the fibrous facing is rubbed over the surface to be treated with such speed as to deposit thereon the requisite quantity of liquid.

I claim as my invention—

1. In combination, a box having a perforated face, a fibrous covering for such face, a feed passage entering the box, and an eduction passage leading therefrom.

2. In combination, a box having a perforated face, a fibrous covering for such face, a feed passage entering the box, and a valve-controlled eduction passage leading therefrom.

3. In combination, a cylindrical box having its peripheral walls perforated, a fibrous covering for the perforated walls, hollow trunnions at the ends of the box, flexible tubes connected with the trunnions, and a handle swiveled
5 on the trunnions.

4. In combination, a cylindrical box having its peripheral walls perforated, a fibrous covering for the perforated walls, a nipple at each end of the box and coaxial therewith, one of the nipples being hollow and having a

swiveled engagement with the box wall, a feed tube leading to the hollow nipple, and a handle journaled on the nipples. 10

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Witnesses:

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