

No. 682,010.

Patented Sept. 3, 1901.

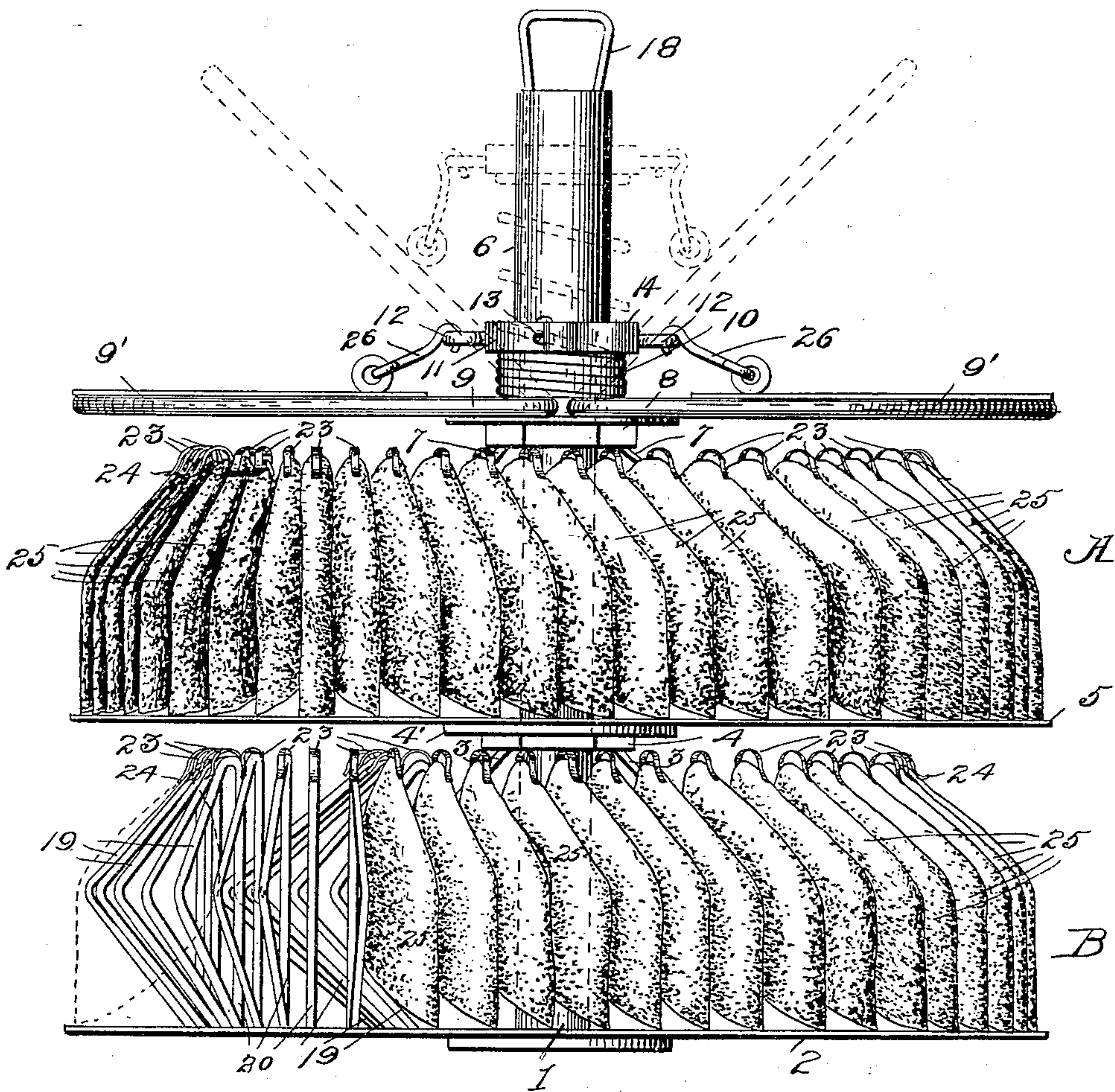
J. W. WIGNER.
APPARATUS FOR DYEING HATS.

(Application filed Jan. 7, 1901.)

(No Model.)

3 Sheets—Sheet 1.

Fig. 1.



Witnesses:

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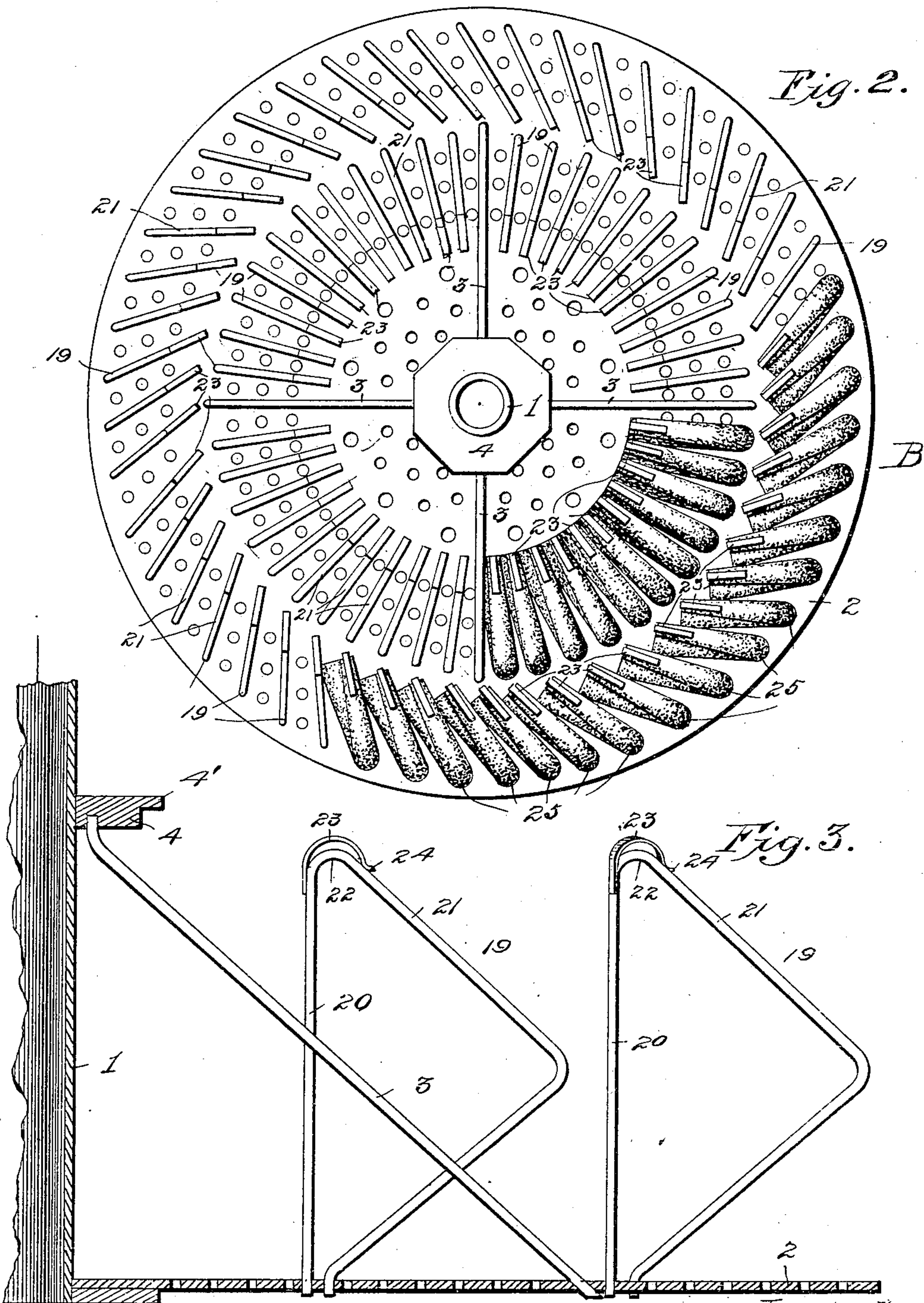
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3 Sheets—Sheet 2.



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3 Sheets—Sheet 3.

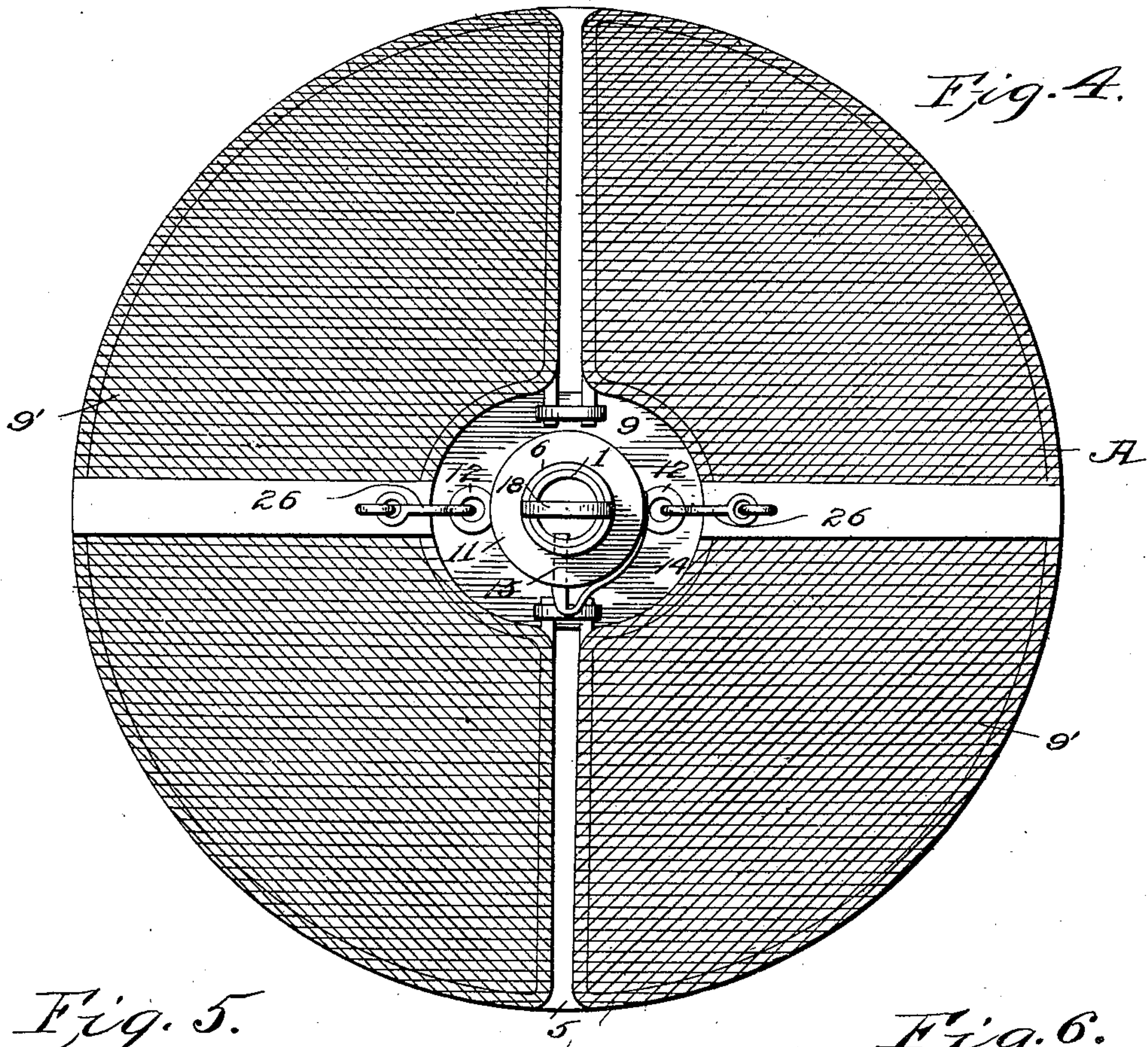


Fig. 5.

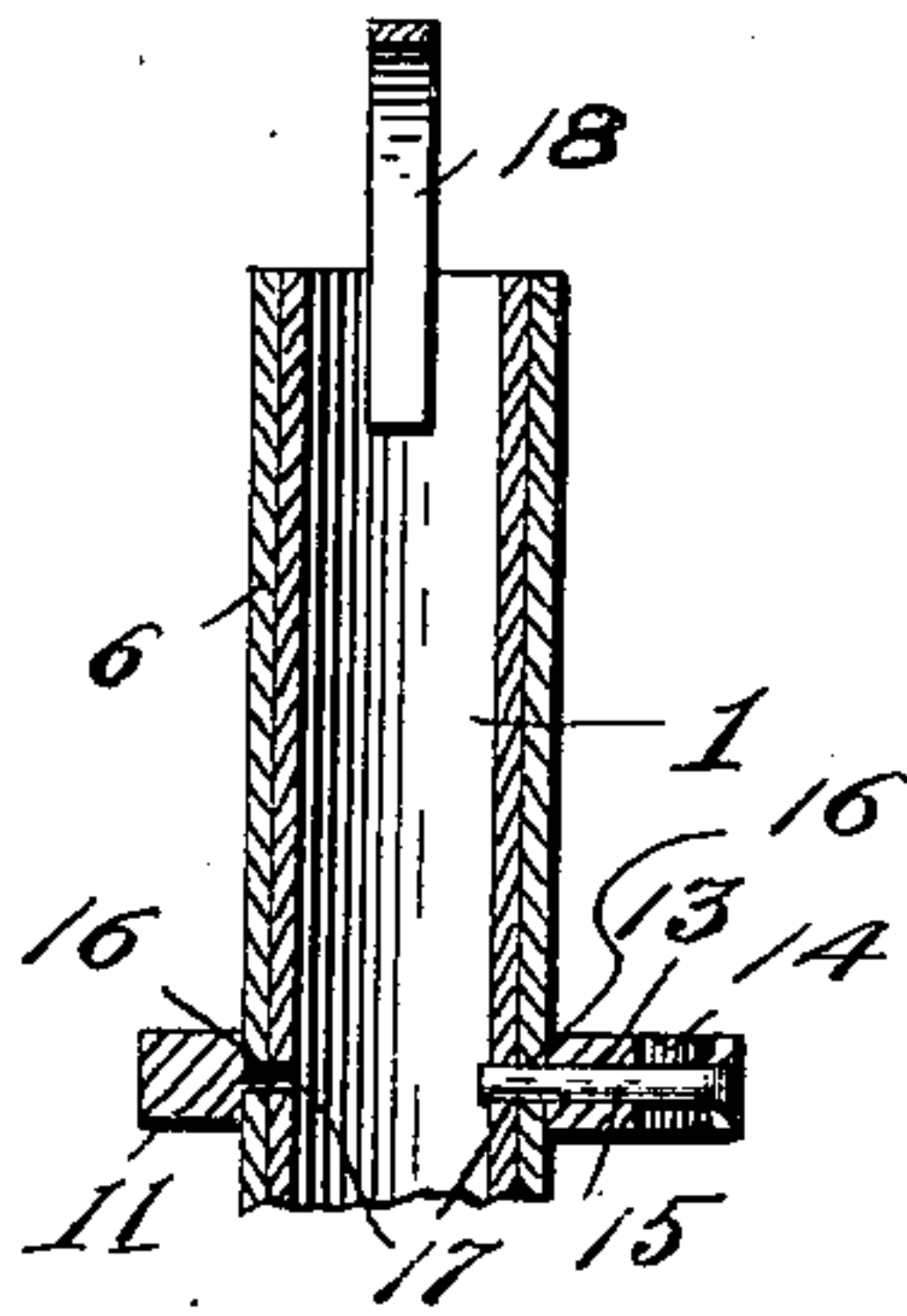
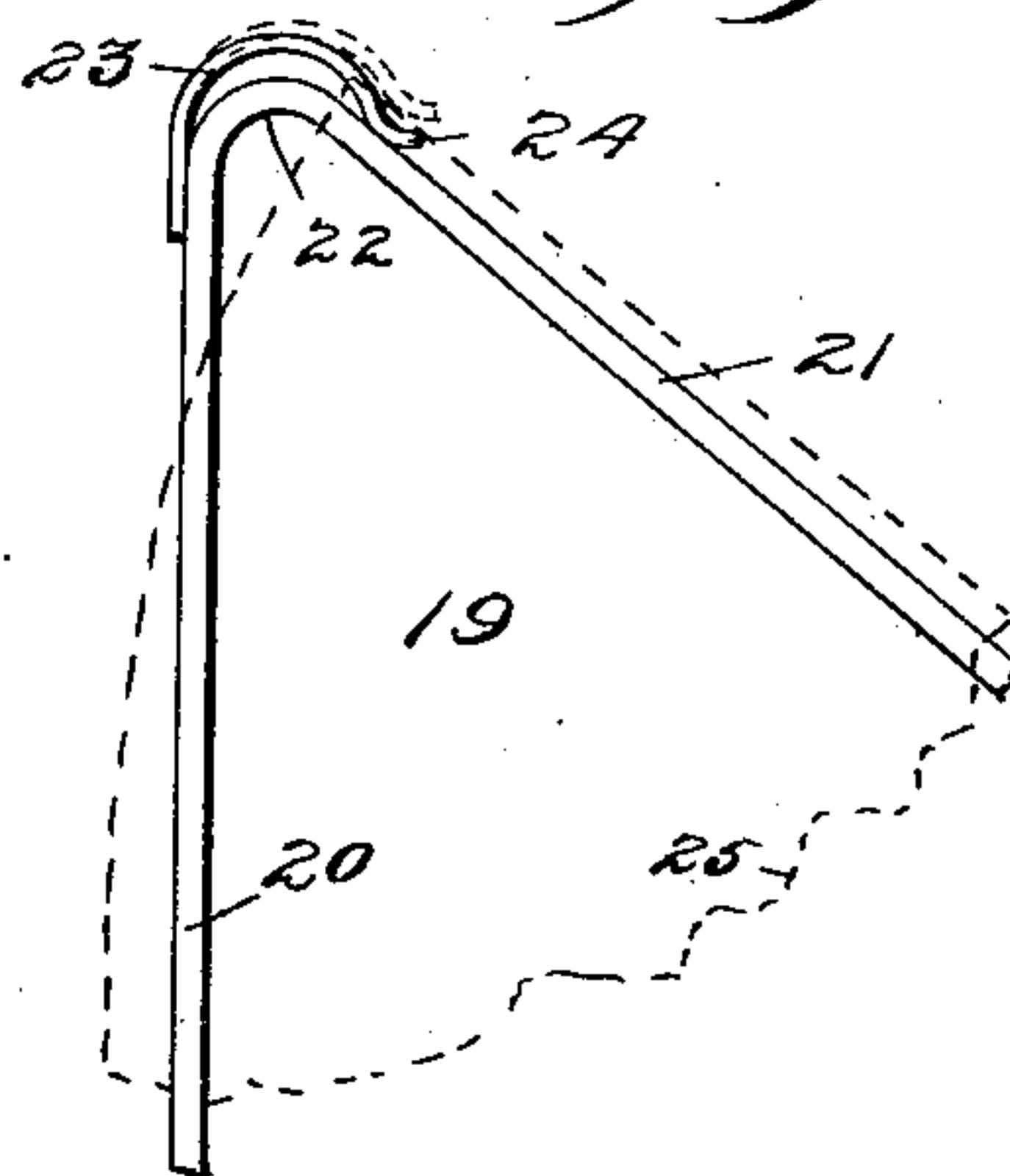


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOSEPH W. WIGNER, OF WABASH, INDIANA.

APPARATUS FOR DYEING HATS.

SPECIFICATION forming part of Letters Patent No. 682,010, dated September 3, 1901.

Application filed January 7, 1901. Serial No. 42,404. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. WIGNER, a citizen of the United States, residing at Wabash, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Apparatus for Dyeing Hats; 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.

My invention relates to hat-dyeing apparatus, and has for its object to provide a device for dyeing hats, &c., which is simple in its construction, easy of operation, and above all durable and efficient.

A further object of my invention is to provide a means for dyeing hats whereby the maximum number of hats may be dyed in the minimum quantity of dye without having the hats touch and thereby become spotted and unfit for use.

My invention also consists in other novel features of construction and combination of parts, the novelty of which will be hereinafter more particularly described and afterward more specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is an elevation of my invention in an operative position. Fig. 2 is a plan view of the bottom member. Fig. 3 shows my arrangement of the hat-forms and brace. Fig. 4 is a plan view of the upper member. Fig. 5 is a section through the hollow shafts. Fig. 6 is a detail view of hat-securing spring.

Like characters of reference indicate the same parts throughout the several figures, in which A is the upper and B the lower member of my invention.

1 is a hollow shaft secured to the lower perforated disk 2 in any suitable manner. 3 indicates braces secured to said perforated disk 2 and also to a collar 4, upon which is secured a seat 4', said seat being permanently secured to the shaft 1.

5 indicates the upper perforated disk, permanently secured to a hollow shaft 6, said shaft being of such diameter as to allow shaft 1 to readily enter shaft 6. 7 indicates the braces secured to said perforated disk 5 and to an annular collar or flange 8 on the shaft 6.

Secured to the top of said flange 8 is a small metal disk 9, upon which the two semicircular wire-gauze tops or lids 9 are pivoted. Secured to the small disk 9 is a spiral spring 10, upon which the collar 11 rests. Said collar 11 is provided on either side with lugs 12. Between said lugs 12 and in the periphery of said collar is a slot 13, extending inwardly to the base of said collar. To one of the lugs 12 is secured a spring 14 of the collar 11, said spring carrying a locking-pin 15 at its free end, said pin having a normal tendency to approach the shaft 6, said shaft being provided a short distance above the small disk 9 with small oppositely-located circular openings 16. On the shaft 1 and registering with said openings 16 are similar openings 17, the purpose of which will be hereinafter more fully described.

At the top of the hollow shaft 6 is a bail 18 for the purpose of suspending my invention within the dye-tank.

Located upon the upper and lower perforated disks are two series of forms 19, arranged circularly around the hollow shafts, the inner series of forms 19 being arranged on the radii of the circle described by the perforated disks. The outer series of forms 19 are placed at an angle of about one hundred and sixty degrees to the inner series, thus making them much more compact. Said forms 19 are constructed of single pieces of wire, which form vertical uprights 20. The wire is then bent back upon itself at an angle of about forty-five degrees, forming the top 21 of the form, the bend 22 being round. The wire is then bent inwardly toward the vertical uprights 20 at substantially right angles to the tops 21. The two ends are then carried through the perforated disk and permanently secured thereto. Near the top and in front of the vertical upright 20 is secured a small spring 23, and it extends over the bend 22 and a short distance down the top 21, said spring 23 having a small offset or lip 24 at its free end, so as to allow the hat 25 to pass readily under.

Secured to the top of the semicircular wire-gauze tops 9' are hooks 26 for the purpose of engaging the lugs 12 on the collar 11.

Having thus specifically described the several parts of my invention, its operation is as

follows: The hats 25 are mounted on the forms, as shown, and the edges of the rims are caught under the springs 23, thus being securely held in position. The upper member A is then placed over the lower member B, the hollow shaft 1 entering the hollow shaft 6 until the upper disk 5 rests upon the seat 4' on the hollow shaft 1. The annular collar 11, near the top of the hollow shaft 6, carrying the pin 15, is pressed down on the spiral spring 10 until said pin 15 enters the openings 16 and 17 in the two hollow shafts 1 and 6. This holds the two members securely together. The semicircular gauze lids 9' being connected with the collar 11 are dropped horizontally when the collar is pushed down, as described, thus covering the hats in the upper member, while the upper perforated disk 5 covers the hats in the lower member. The apparatus is then suspended in the dye-tank by means of the bail 18 or may be suspended by legs, if desired.

Having thus fully described the operation of my invention, I do not wish to be understood as limiting myself to the exact construction herein set forth, as various slight changes might be made therein by those skilled in the art without departing from the limit and scope of my invention, and I consider myself entitled to all such changes and modifications.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In an apparatus for dyeing hats, the combination with the perforated disks, of the two hollow shafts, a smaller disk, semicircular lids secured thereto, and means for securing the two hollow shafts together substantially as described.

2. In an apparatus for dyeing hats the com-

bination with the perforated disks, of the hollow shafts, the semicircular lids, the spiral spring, and the annular collar, carrying a spring and a locking-pin substantially as described.

3. In an apparatus for dyeing hats, the combination with the perforated disks, of the hollow shafts having circular openings therein, collars permanently secured thereto, a small metal disk, wire-gauze lids secured thereto, a spiral spring secured thereto, an annular collar above said spring, a spring, locking-pin and lugs, carried thereon, substantially as described.

4. In an apparatus for dyeing hats a form constructed of a single piece of wire carried vertically upward to form a vertical upright, then bent back upon itself at an angle of about forty-five degrees, then bent inwardly toward the vertical upright at substantially right angles, in combination with a retaining-spring, substantially as described.

5. In an apparatus for dyeing hats, the combination with the perforated disks forms secured thereto of the hollow shafts, gauze lids, spiral spring, an annular collar carrying a locking-pin, substantially as described.

6. In an apparatus for dyeing hats, the combination of two or more perforated disks one over the other, two or more series of forms, arranged circularly upon said disks, and wire-gauze lids covering said disks, substantially as described.

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

JOSEPH W. WIGNER.

Witnesses:

FANNIE MALLOCH,
JOHN H. DICKEN.