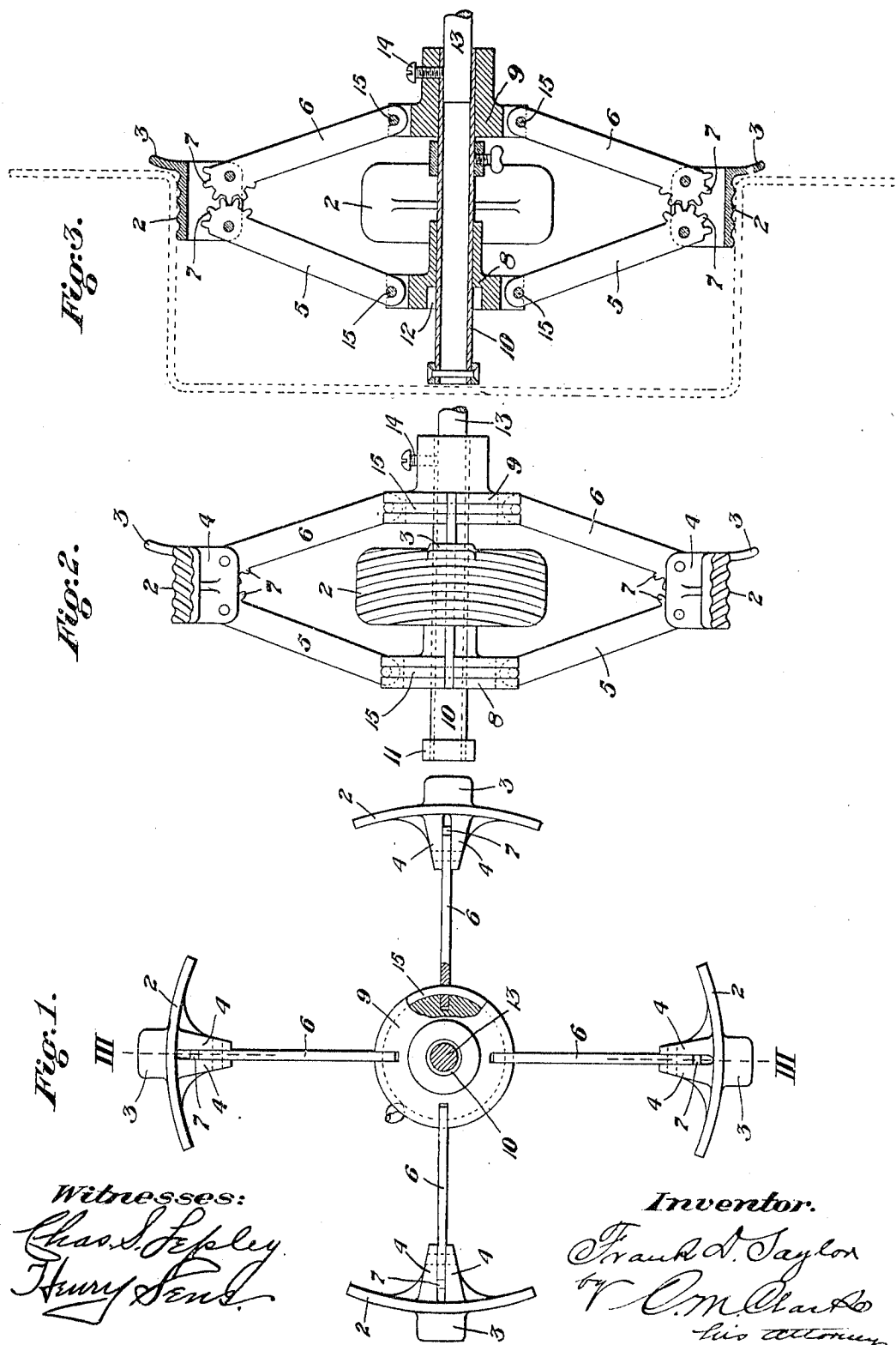


F. D. SAYLOR.
 DEVICE FOR HOLDING AND ROTATING HATS.
 APPLICATION FILED APR. 26, 1909.

950,406.

Patented Feb. 22, 1910.



UNITED STATES PATENT OFFICE.

FRANK D. SAYLOR, OF WEST VIEW, PENNSYLVANIA.

DEVICE FOR HOLDING AND ROTATING HATS.

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Specification of Letters Patent.

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Application filed April 26, 1909. Serial No. 492,197.

To all whom it may concern:

Be it known that I, FRANK D. SAYLOR, a citizen of the United States, residing at West View, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Holding and Rotating Hats, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention consists of a device for holding and rotating hats during the cleaning or drying thereof, and has for its object to provide an automatically operative mechanism arranged to grip outwardly against the interior periphery of the hat and to rotate it, constructed and operating in the manner hereinafter described.

Referring to the drawings:—Figure 1 is a front view of the device in elevation. Fig. 2 is a side view. Fig. 3 is a central vertical sectional view on the line III. III. of Fig. 1, indicating the hat in position in dotted lines.

The device consists generally of a plurality, preferably 4, of supporting shoes 2 the outer faces of which may be corrugated as shown or otherwise formed to insure non-slipping engagement with the interior of the hat or sweat band. These shoes 2 are provided at their outer edges with limiting flanges 3 for engagement against the rim of the hat as indicated, and are mounted by lugs 4 on the end of links 5, 6.

The lugs 4 are preferably made integral with the shoe 2 and are provided with fillets or brackets at each side as shown, for strengthening purposes. The outer ends of said links are pivotally mounted between the lugs 4 and have segmental series of teeth 7 intermeshing with each other and are pivoted at their inner ends to the periphery of hubs 8 and 9 respectively. Hub 8 is slidably mounted on a tubular shaft extension 10 and is adapted to be limited as to its outward travel thereon by a terminal flange, collar or abutment 11, the face of the hub being preferably under-cut as indicated at 12, for the purpose of utilizing as short a length of tubular shaft 10 as possible for the desired outward travel of hub 8.

Tubular shaft 10 is secured to and forms an extension of a motor or driven shaft 13 by which the device is rotated, hub 9 being fixedly secured to both of said shafts by a

set screw 14, by which both of said shafts and the fixed hub 9 are rigidly connected together.

The inner ends of links 5 and 6 may be pivoted to the periphery of hubs 6 and 9 in any suitable or convenient manner, the drawing showing the peripheries of the hubs each as provided with an annular groove and an encircling wire 15 passing through holes in the link terminals, which terminals engage the corresponding radial slots in the hubs, whereby they are mounted for pivotal movement.

In operation, the hubs 8 and 9 are separated by moving hub 8 slidably outward upon shaft extension 10, thereby withdrawing shoes 2 inwardly for application of the hat thereon. The hub 8 may then be drawn toward hub 9, distending the shoes into engaging contact in the manner of toggle mechanism, whereupon the device may be rotated by its shaft and motor, the shoes becoming distended by centrifugal force and into engaging contact with the hat, and rotating it, thereby accomplishing the objects of the invention. The hat may however, be merely placed loosely over the shoes and the same rotated, whereupon they will automatically engage the hat by centrifugal action and continue to rotate it as long as the shaft is rotated. It will be observed that the shoes are arranged in oval formation as to their position, corresponding generally to the outline of the hat band, the pairs of links 5, 6, being of alternately varying lengths for such purpose. The faces of the shoes are correspondingly curved, and will rigidly engage and hold the hat as described. The flanges 3 limit its position thereon, and it will be seen that the device is easily adapted to various sizes and shapes of hats due to the automatic adjustment of the shoe.

The device avoids the necessity of hand adjustment, it is simple in construction and operation and is capable of performing its functions in a successful and satisfactory manner.

Having described my invention, what I claim is:—

1. A device for holding and rotating hats consisting of a rotatable shaft, a plurality of laterally adjustable shoes, pairs of carrying arms therefor pivoted to the shoes and having interengaging means for maintaining the shoes in erect operative position, and

means connecting said arms with the shaft providing for automatic distention of the shoes by centrifugal force when the shaft is rotated.

- 5 2. A device for holding and rotating hats consisting of a rotatable shaft, a plurality of laterally adjustable shoes, pairs of carrying arms therefor pivoted to the shoes and having interengaging means for maintaining the shoes in erect operative position, and a hub in rotative engagement with the shaft and a hub in sliding engagement therewith pivotally connected with said arms.
- 10 3. A device for holding and rotating hats consisting of a rotatable shaft, a plurality of laterally adjustable shoes, pairs of carrying arms therefor pivoted to the shoes and having interengaging means for maintaining the shoes in erect operative position, a hub in rotative engagement with the shaft and a hub in sliding engagement therewith pivotally connected with said arms, and means for limiting sliding movement of said last named hub, substantially as set forth.
- 15 4. A device for holding and rotating hats consisting of a supporting shaft having a fixed and a sliding hub, arms pivoted thereto having intermeshing teeth, and clamping shoes pivoted to the arms, substantially as set forth.
- 20 5. A device for holding and rotating hats consisting of a supporting shaft having a fixed and a sliding hub, arms pivoted thereto, and clamping shoes pivoted to the arms having uneven contacting faces, substantially as set forth.
- 25 6. In a device for holding and rotating hats, the combination with a driving shaft, of a fixed and a loose hub thereon, pairs of links pivoted in the peripheries of said hubs and having terminal intermeshing teeth, and bearing shoes pivotally mounted at their outer ends, substantially as set forth.
- 30 7. In a device for holding and rotating hats, the combination with a rotatable driving shaft, of a fixed and a loose hub thereon, pairs of links pivoted in the peripheries of

said hubs and having bearing shoes mounted at their outer ends, with means for limiting the outward travel of the sliding hub and an adjustable device for limiting the inward travel thereof, substantially as set forth. 50

8. In a device for holding and rotating hats, the combination of a rotating shaft having a tubular extension provided with a terminal abutment, a hub fixedly secured to said shaft, a hub slidably mounted in the terminal extension thereof, pairs of radially arranged links pivotally mounted in the peripheries of said hubs and having terminal segmental intermeshing teeth, and holding shoes pivoted to the terminals of said links, substantially as set forth. 55

9. In a device for holding and rotating hats, the combination of a rotating shaft having a tubular extension provided with a terminal abutment, a hub fixedly secured to said shaft, a hub slidably mounted in the terminal extension thereof, pairs of radially arranged links pivotally mounted in the peripheries of said hubs and having terminal segmental intermeshing teeth, and holding shoes pivoted to the terminals of said links provided with limiting flanges, substantially as set forth. 60

10. In a device for holding and rotating hats, the combination of a rotating shaft having a tubular extension provided with a terminal abutment, a hub fixedly secured to said shaft, a hub slidably mounted in the terminal extension thereof, pairs of radially arranged links pivotally mounted in the peripheries of said hubs and having terminal segmental intermeshing teeth, and holding shoes pivoted to the terminals of said links provided with corrugated faces, substantially as set forth. 65

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

FRANK D. SAYLOR.

Witnesses:

C. M. CLARKE,
HARRY M. WILLIS.