(No Model.)

H. J. WHYATT.

MACHINE FOR VELURING FELT OR SILK HATS.

No. 568,391. Patented Sept. 29, 1896.

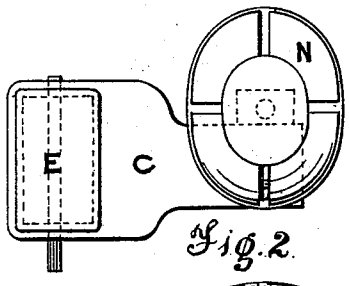

Fig. 2.

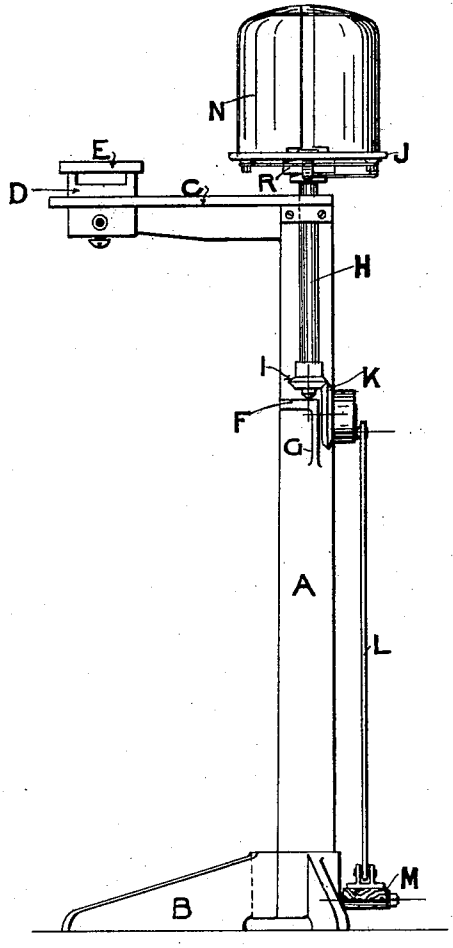

Fig. 1.

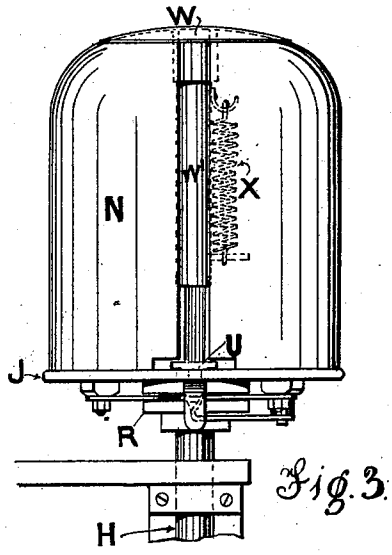

Fig. 3.

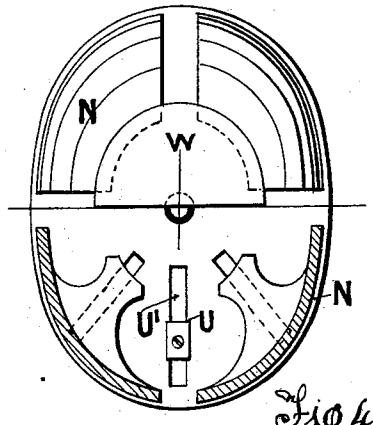

Fig. 4.

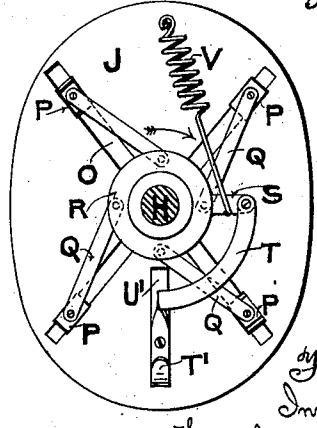

Fig. 5.

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UNITED STATES PATENT OFFICE.

HENRY JOHN WHYATT, OF BRISTOL, ENGLAND, ASSIGNOR TO HENRY HERBERT TURNER, ALBERT TURNER, AND ARNOLD TURNER, OF DANBURY, CONNECTICUT.

MACHINE FOR VELURING FELT OR SILK HATS.

SPECIFICATION forming part of Letters Patent No. 568,391, dated September 29, 1896.

Application filed May 21, 1895. Serial No. 550,032. (No model.) Patented in England December 8, 1893, No. 23,632.

To all whom it may concern:

Be it known that I, HENRY JOHN WHYATT, a subject of the Queen of Great Britain and Ireland, and a resident of Union Street, Bristol, England, have invented a new or Improved Machine for Veluring Felt or Silk Hats, (for which I have obtained a patent in Great Britain, No. 23,632, bearing date December 8, 1893,) of which the following is a specification.

My invention relates to a new or improved machine for use in veluring felt or silk hats, and particularly for use by retail hatters, such machine consisting, essentially, of a hat-block made in sections and so mounted as to automatically adjust itself to suit and hold varying sizes of hats, and being connected with a rotating plate and shaft for revolving such hats while the veluring-pad is held against them; and in order that my said invention shall be the more readily understood and carried into practical effect I have hereunto annexed a sheet of drawings and will now proceed to describe the same with the assistance of the various letters of reference marked thereon.

Figure 1 is a front elevation of my improved felt or silk hat veluring machine in its complete form. Fig. 2 is a plan. Fig. 3 is a front elevation of the hat-block on an enlarged scale; and Fig. 4 is a top plan, partly in section. Fig. 5 is an inverted plan.

In accordance with my invention, A is a supporting pillar or column resting on radial ribs or feet B and carrying a platform C. Upon this platform C is a heating appliance, consisting of a heating-chamber D, in which a gas or other burner may be placed, and a hot plate E, on which the veluring-pads may be warmed before using. Resting on a foot-step-bearing F, and supported vertically by a bracket G, is a shaft H, fitted with bevel-pinion I and carrying at its upper extremity a plate or table J. The aforesaid bevel-pinion I gears with a corresponding bevel-wheel K, also supported by the bracket G and connected by a link or rod L to a foot-treadle M, pivoted to the base of the column A. Motion being imparted to the treadle and to the bevel-wheels I and K, continuous revolving motion will be imparted to the shaft H and to the plate J. Upon this plate is mounted the sections N of my improved hat-block, each, by preference, of equal size, and when drawn together forming a complete and regular-shaped block upon which the hats to be velured may be mounted.

In the plate J are radiating slots O, one for each of the block-sections N, and a square boss on the under side of each section takes into such slots, and as the sections slide to and from each other they are prevented altering their positions, and consequently turn with the plate. Each boss is connected with a slide-block P, and to each block is connected a link Q, connected in turn to a pin on a collar R on the shaft H. Branching from the collar R is the lever-arm S, and to the free extremity of this arm a curved draw-bar T is attached, sustained by and connected to a slide-block U in the radial slot U'. Under the pull of a spiral spring V the normal position of the arm S is as shown in Fig. 5. Hence the blocks P, through the medium of the links Q, are caused to lie more or less at the extreme ends of their slots, and consequently the sections of the hat-block lie as far apart as possible and the block assumes its largest size.

To draw the block-sections together and to make a smaller block, the draw-bar T is provided with a draw-hook T', which on being caught by the finger and being pulled forward (being guided by the slide U) draws back the arm S and rotates the collar R in the direction of the arrow, so causing the links Q to draw the block-sections together, as desired. On releasing the hook T' the block-sections, under the pull of the spring V, fly apart and resume their normal positions.

It will now be seen that the aforesaid construction of machine and hat-block affords a convenient and ready means of holding and rotating a felt or silk hat for the purpose of veluring.

In applying the hat to the block the sections are drawn together as aforesaid until the hat will fit over them, when the sections are released and separating radially come against the interior of the hat and hold it

centrally over the shaft end or center of rotation. Motion being imparted to the shaft H the hat-block and hat are whirled round and the centrifugal action of the block-sections helps to retain the hat in position while the veluring-pad is held against the exterior surface of the hat. The veluring operation having been completed the hook T' is drawn forward again, so contracting the block and enabling the hat to be removed and a fresh hat substituted.

The operation of mounting, veluring, and removing the hat will thus be done with great expedition, the hat-block suiting an infinite variety of different sizes of hats.

To fill the gap at the top of the hat-block, I employ a crown-plate W, secured to a tube W' and fitting onto an extension of the shaft H, being constantly held down in contact with the block-sections by the spiral spring X. In this way all the parts of a hat will be supported against the pressure of the veluring-pad.

It will be observed that while the block suits various sizes of hats it can only suit one particular outline or shape of hat, and therefore to adapt my machine for other shapes it will be necessary to substitute block-sections corresponding to such other shapes, which may be readily done by unscrewing the sections from the slide-blocks P.

By providing a screw or lever alongside the spring V and acting on the lever-arm of the collar R the block may be used for stretching felt and silk hats as well as for veluring.

Having thus particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I wish it to be understood that I am aware that sectional blocks are used in the manufacture of felt hats, and therefore I lay no claim, broadly, thereto, the object of my invention being to provide a machine specially adapted for use by retail hatters, so that when a hat has become dull from exposure in a window or from other causes it may be readily freshened up by veluring.

What I claim, and desire to secure by Letters Patent, is—

1. In combination, the sectional hat-block with means for normally moving the sections apart, means for moving the sections toward each other, said sections being arranged to hold the hat on the outside thereof, a plate upon which the sections of the block are mounted, a standard carrying the plate, a treadle and connections from the treadle to the plate for rotating the same with the sections.

2. In a machine for veluring felt or silk hats, the combination of hat-block sections N, with a plate J having radial slots O, slide-blocks P, links Q, collar R, lever-arm S and spring Y, draw-bar T and hook T', mounted and operating substantially as set forth and illustrated.

3. In combination, the sectional hat-block with means for moving the sections toward each other to fit the interior of the hat, the plate J, the standard, the shaft H carrying the plate, the treadle, the rod L and the gearing between the rod and shaft.

4. In combination, the block composed of sections to hold the hat on the outside thereof, the slotted plate, means for moving the sections toward each other to fit the interior of the hat, said means extending through the slots, and the spring for moving the sections outwardly, substantially as described.

5. In combination the sectional block with means for moving the same, the crown-plate W having a tube W' the shaft H extended into the block and receiving the tube W' and the spring for holding the crown-plate down in position, substantially as described.

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