Dec. 24, 1957 J. BONJOKIAN 2,817,466

HAT STEAMING AND BLOCKING MACHINE

Filed Aug. 30, 1956 5 Sheets-Sheet 1

FIG. 1

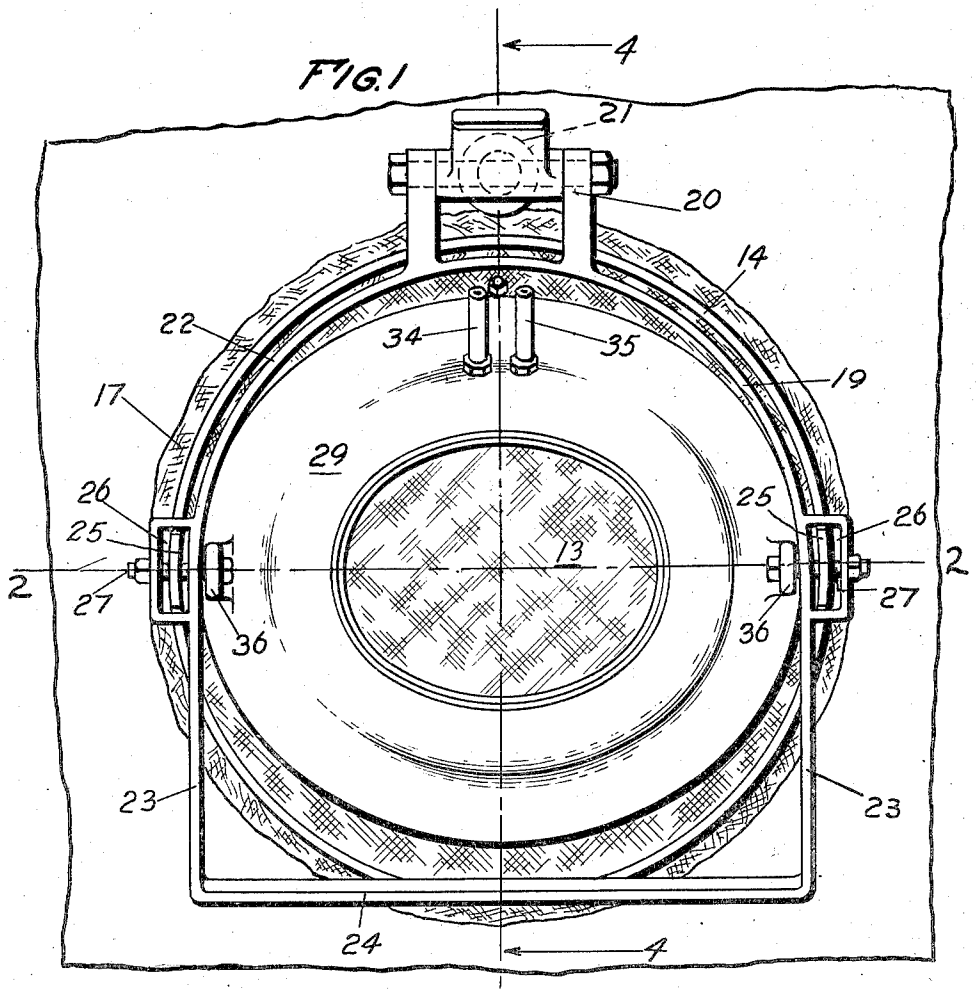



FIG. 6

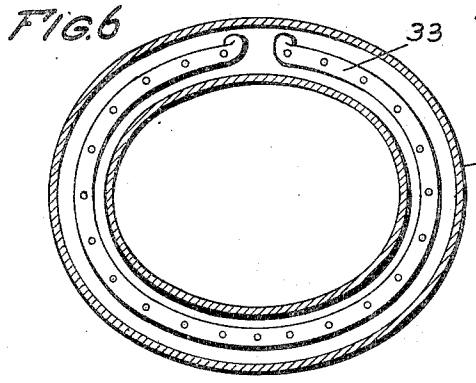
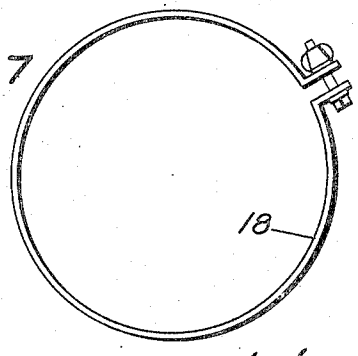



FIG. 7




INVENTOR
JOSEPH BONJOKIAN
BY Louis C. Smith
ATTORNEY

Dec. 24, 1957 J. BONJOKIAN 2,817,466

HAT STEAMING AND BLOCKING MACHINE

Filed Aug. 30, 1956 5 Sheets-Sheet 2

FIG. 2

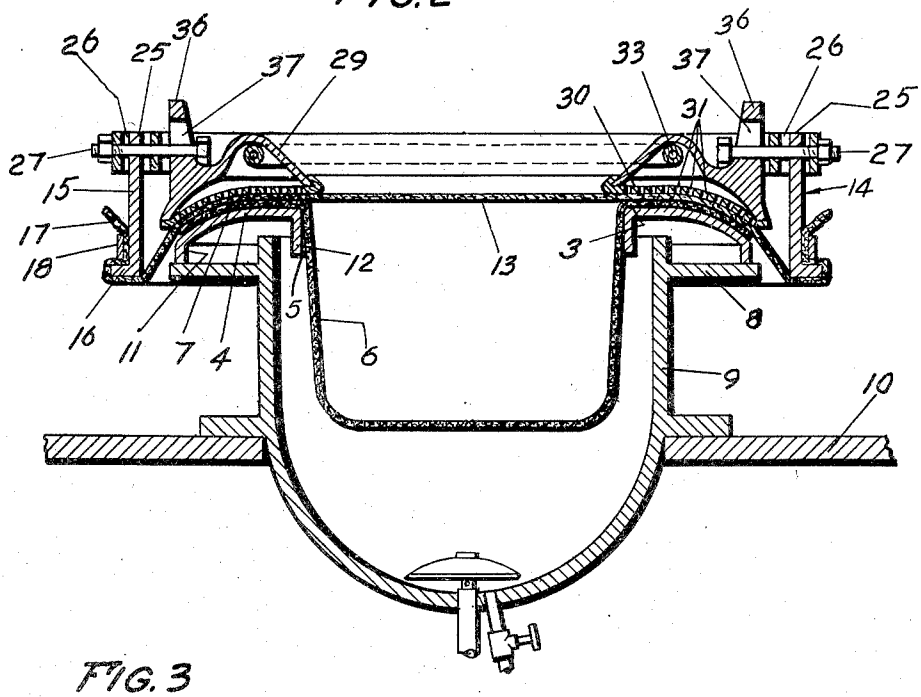
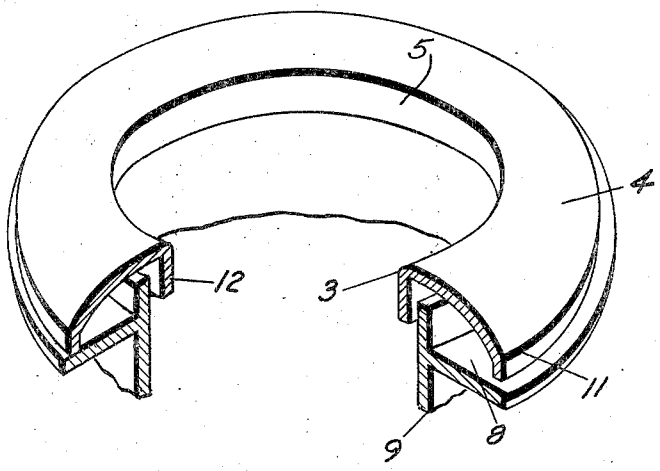



FIG. 3




INVENTOR
JOSEPH BONJOKIAN
BY Louis C. Smith
ATTORNEY

Dec. 24, 1957 J. BONJOKIAN 2,817,466

HAT STEAMING AND BLOCKING MACHINE

Filed Aug. 30, 1956 5 Sheets-Sheet 3

FIG. 4

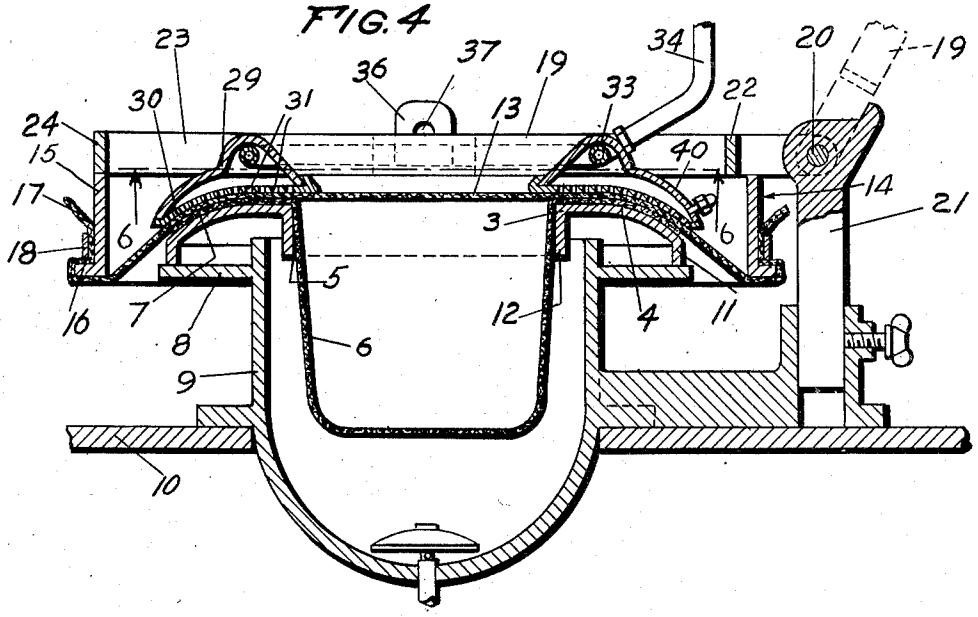
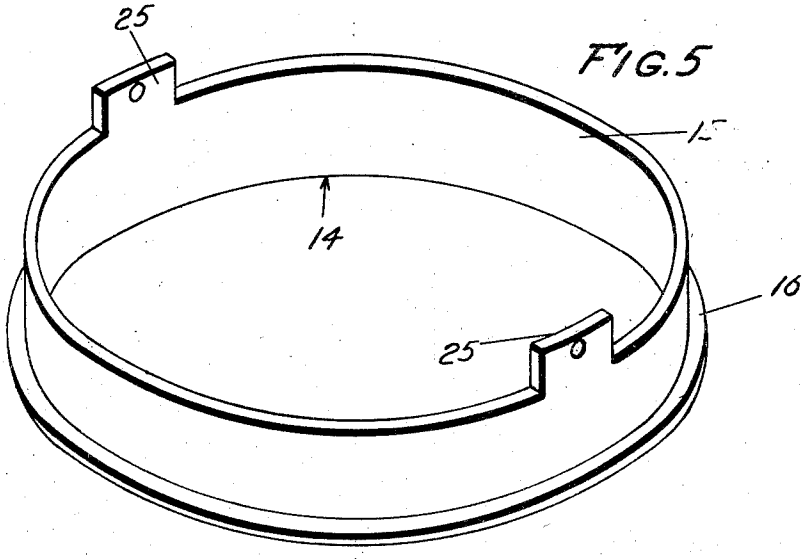



FIG. 5




INVENTOR
JOSEPH BONJOKIAN

BY Louis C. Smith
ATTORNEY

Dec. 24, 1957 J. BONJOKIAN 2,817,466

HAT STEAMING AND BLOCKING MACHINE

Filed Aug. 30, 1956 5 Sheets-Sheet 4

FIG. 8

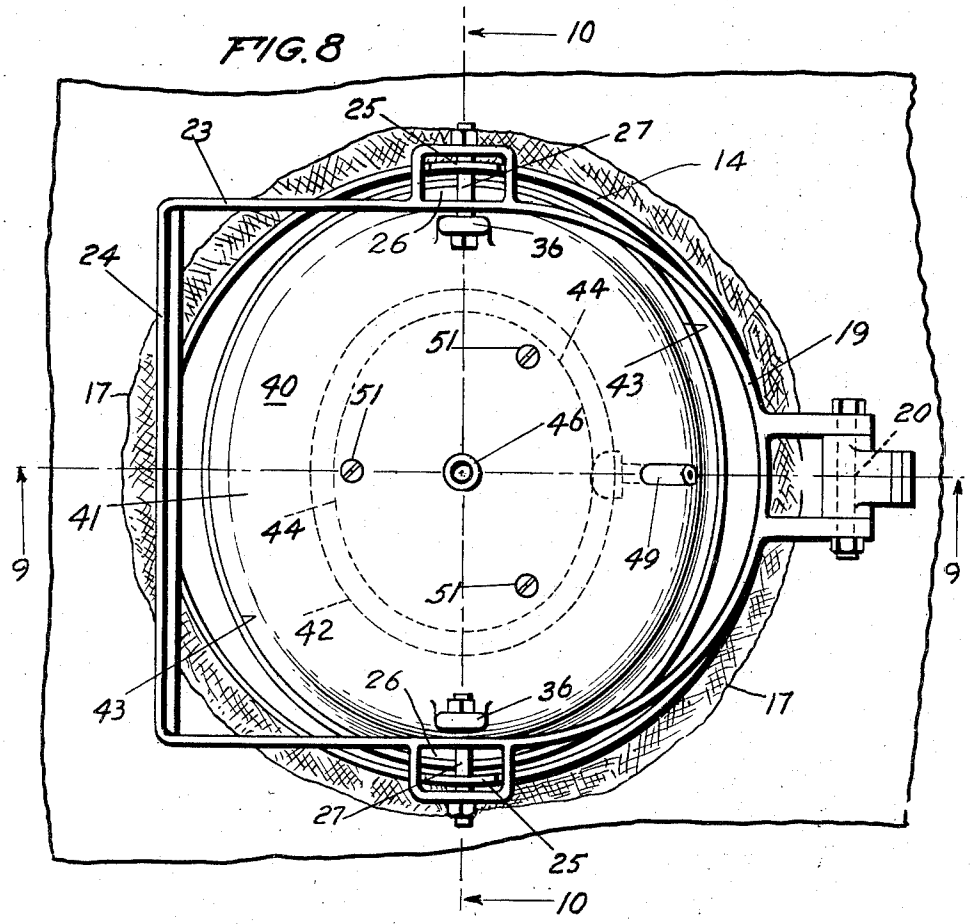
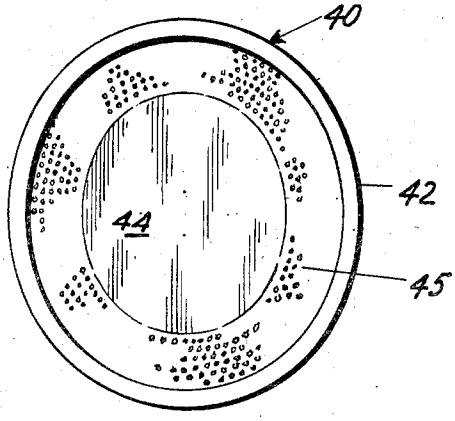



FIG. 11




INVENTOR
JOSEPH BONJOKIAN
BY Louis C. Smith
ATTORNEY

Dec. 24, 1957 J. BONJOKIAN 2,817,466

HAT STEAMING AND BLOCKING MACHINE

Filed Aug. 30, 1956 5 Sheets-Sheet 5

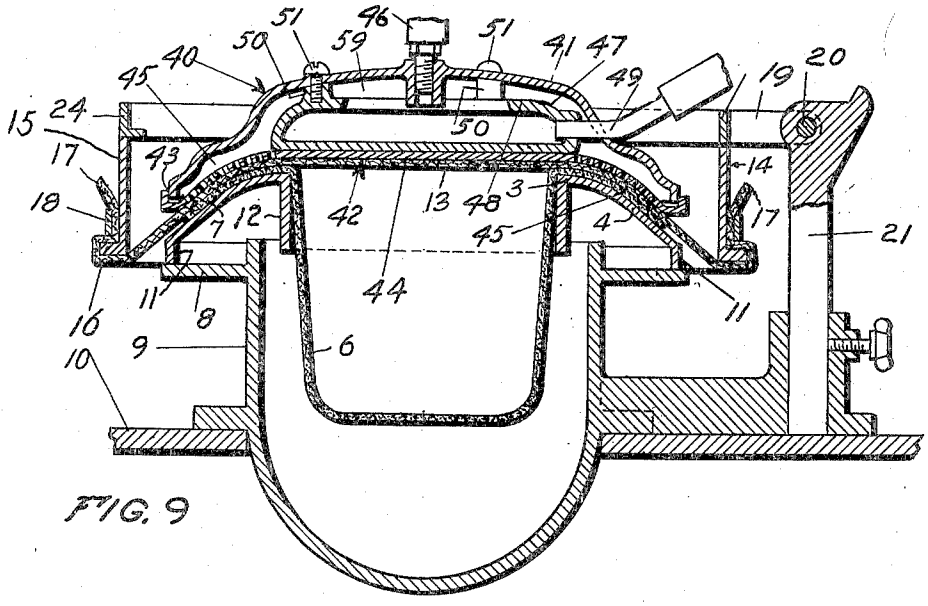



FIG. 9

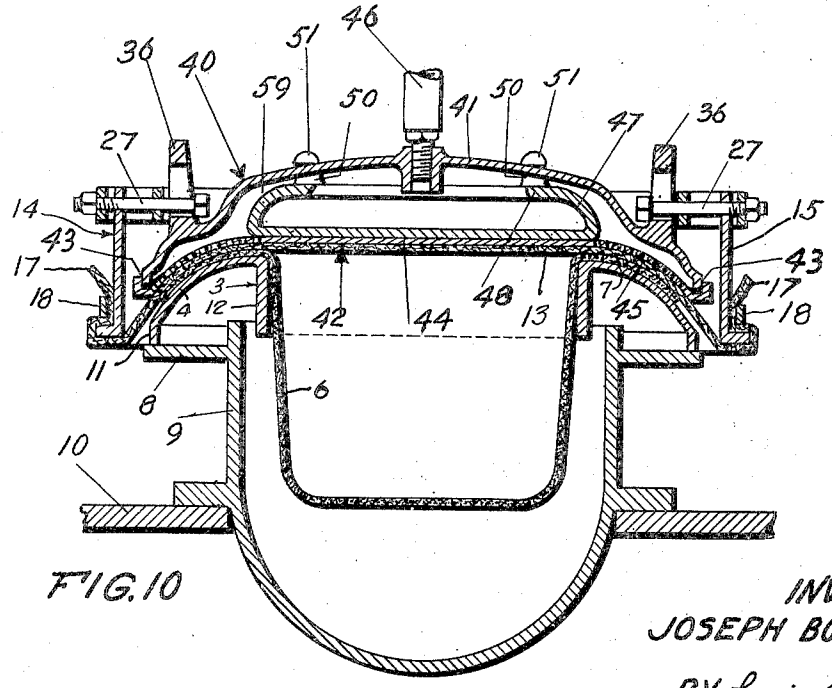



FIG. 10

INVENTOR
JOSEPH BONJOKIAN

BY Louis C. Smith
ATTORNEY

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2,817,466

# HAT STEAMING AND BLOCKING MACHINE

Joseph Bonjokian, Whitman, Mass.

Application August 30, 1956, Serial No. 607,158

5 Claims. (Cl. 223—14)

This invention relates to a machine for steaming and blocking hats, and especially to a machine designed to steam and shape the brim portion of a hat.

One type of hat blocking machine is constructed with a hat-supporting element presenting an annular brim-supporting portion which is of a size to support the brim of a hat and is of a shape to properly shape said brim, such machine also having a brim-pressing member of flexible material and means to bring said brim-pressing member into engagement with the brim of a hat supported by the hat-supporting member and press said brim against the annular shaped portion of the hat-supporting member. Such a machine also may have a means for steaming the brim while it is being thus shaped and pressed.

One object of the present invention is to provide a novel hat-pressing machine of this type in which the steaming of the brim is provided for by means of a steam chamber situated above the hat-pressing member and having an annular portion of its bottom face shaped to conform to the brim-supporting member, said portion of the bottom face of the steam chamber being perforated to provide for the steaming of the brim through the flexible brim-pressing member.

In order to give an understanding of my invention I have illustrated some embodiments thereof in the accompanying drawings, in which:

Fig. 1 is a plan view of a machine embodying my invention;

Fig. 2 is a section on the line 2—2, Fig. 1;

Fig. 3 is a perspective view with parts broken out illustrating the hat brim-supporting member;

Fig. 4 is a section on the line 4—4, Fig. 1;

Fig. 5 is a perspective view of the annular frame for supporting the flexible brim-pressing member;

Fig. 6 is a section on the line 6—6, Fig. 4; and

Fig. 7 is a view of the clamping ring by which the flexible brim-pressing member is clamped in position;

Fig. 8 is a view similar to Fig. 1 but showing a different form of the invention;

Fig. 9 is a section on the line 9—9, Fig. 8;

Fig. 10 is a section on the line 10—10, Fig. 8; and

Fig. 11 is a view showing the under side of the steam chamber.

In the drawings, the hat-supporting member is indicated at 3 and is shown as in the form of an annular member having the brim-supporting portion 4 which is of a size to form a support for the brim of a hat and which has a shape corresponding to that desired for the hat brim. This hat support 3 is shown as having a central opening 5 to receive the crown 6 of a hat when the brim 7 thereof is being supported by the portion 4 of the hat-supporting member.

The hat-supporting member may be mounted in any suitable way and as herein shown it is supported on an annular flange 8 extending outwardly from a cup shaped element 9 which in turn may be mounted on any suitable support or table 10. The hat-supporting member 3 is shown as having a depending rim portion 11 which rests



on the flange 8 and also a depending flange 12 which bounds the opening 5.

The device also includes a brim-pressing member 13 which is made of flexible material, preferably canvas, and by which the brim 7 of the hat is pressed against the portion 4 of the hat-supporting member. This brim-pressing member 13 is shown as being carried by an annular supporting frame 14, best seen in Fig. 5, said frame having an upright wall 15 that is provided at its lower end with an outwardly extending flange 16. The brim-pressing member 13 spans the opening of the supporting frame 14 and the edge portion 17 of said flexible member 13 is folded around the flange 16 and is clamped to the outside of the wall 15 by means of a clamping ring 18 which is shown in Fig. 7.

The annular supporting frame 14 with its brim-pressing member 13 is secured to a carrier frame 19 which is pivotally mounted at 20 to a post 21 rising from the table 10. The carrier frame 19 has the curved back portion 22 which merges into the straight side portions 23 and the latter are connected at the front by a front-bar or member 24 which also constitutes a handle by which the carrier frame may be swung about its pivot 20 to bring the brim-pressing member 13 downwardly against the brim of a hat supported by the hat-supporting member or upwardly into an inoperative position removed from said brim.

As herein shown, the annular supporting frame 14 is provided with two ears 25 which are received in openings 26 with which the carrier frame 19 is provided, said ears being connected to the carrier frame by means of bolts 27.

Associated with the brim-pressing element 13 is a steam chamber by means of which steam is delivered to the brim while it is being pressed against the brim-supporting portion 4 of the hat support 3.

One form of steam chamber is shown in Figs. 1–4, said steam chamber being indicated at 29 and having an annular shape, the bottom 30 of the steam chamber having a shape corresponding to that of the brim-supporting portion 4 of the hat-supporting member 3 and being perforated, as shown at 31.

This steam chamber is shown as connected to the carrier frame 19 so that it, as well as the brim-supporting member 13 may be moved from a raised inoperative position into a lowered operative position by a downward swinging movement of said frame.

In the construction shown in Figs. 1–4 the steam chamber is equipped with a perforated steam pipe 33, one end of which is connected to a steam supply pipe 34 and the other end of which is connected to a steam exhaust pipe 35.

The means for connecting the steam chamber to the carrier frame 19 includes a pair of ears 36 rising from the steam chamber, each ear having a slot 37 to receive the bolt 27 by which the annular frame 14 is secured to said carrier frame.

In the operation of the device, the carrier frame will be swung upwardly into an inoperative position as shown by dotted lines in Fig. 4 and the hat to be treated is then placed on the hat-supporting member 4 with the crown of the hat extending through the opening 5 and the brim resting on the portion 4. The carrier frame is then swung downwardly thereby to bring the flexible brim-pressing element 3 against the brim to press the brim against the portion 4 of the hat-supporting member, and this downwardly swinging movement of the carrier frame also brings the steam chamber downwardly into a position in which the perforated portion of the bottom thereof rests against the portion of the brim-pressing member 3 that engages the brim of the hat, as shown in Figs. 2 and 4.

Steam is then admitted to the steam chamber by means

of a suitable valve (not shown) and the steam passes through the perforations **31** and the brim pressing member **13**, thereby steaming the brim of the hat.

The connection between the steam chamber and the carrier frame is such that when the brim-pressing member **13** is being pressed against the brim of the hat the bolts **27** will be engaging the bottom of the slots **37**, as shown in Fig. 2, and thereby the perforated portion of the steam chamber is being pressed against the portion of the brim-pressing member that is engaging the brim of the hat.

The hat-supporting member is removably mounted on its support and will be made with openings **5** of various sizes to receive hats of different sizes. In using the device the particular size of hat-supporting member will be chosen to fit the particular hat which is to be treated.

In Figures 8–10 I have shown a steam chamber which is somewhat different from that shown in Figs. 2 and 4. In Figs. 8–10 the steam chamber is designated by the reference numeral **40** and it is formed with the solid top section **41** and the bottom section **42**, said sections being secured together at their peripheries as at **43**, and forming between them a chamber into which steam is admitted. The bottom section has a non-perforated central portion **44**, and the outer annular marginal portion **45** which overlies the brim of the hat is perforated. Steam is admitted to the steam chamber through a steam supply pipe **46**, a suitable valve (not shown) being employed to control the steam supply.

Located within the steam chamber is a baffle element **47** in the form of a dish or receptacle into which the steam from the supply pipe **46** is delivered and which serves to separate from the steam any water entrained therein. The sides of said baffle element curve inwardly at the top as indicated at **48** and said element is provided with a drain pipe **49** by which any water collected therein may be drained out.

The baffle element is mounted on the top section **41** in such a way as to provide a clearance space **59** between said element and the top section through which steam passes from said element into the space above the perforated portion **45** of the bottom section **42**. Any suitable means may be employed for thus mounting the baffle element. As herein shown said baffle element is provided with a plurality of upstanding projections or lugs **50** which are attached to the top portion **41** by screws **51**. These lugs are of sufficient vertical dimension to provide the clearance space **59**.

The steam chamber **40** is mounted on the supporting frame **14** in the same way as that shown in Figs. 1 and 2 for mounting the steam chamber **29**.

I claim:

1. An apparatus for steaming the brim of a hat, said apparatus comprising a hat support having an annular hat brim-supporting and shaping portion which surrounds an opening adapted to receive the crown of a hat when the brim is resting on the hat brim-supporting portion, an annular supporting frame having an inside diameter greater than that of said hat brim-supporting portion, a brim-pressing member in the form of a sheet of textile fabric spanning said annular supporting frame and having its peripheral edge secured thereto, a steam chamber situated above the brim-pressing member, the bottom of which steam chamber presents an annular perforated portion corresponding in shape to the annular hat brim-supporting portion of the hat-supporting member, means to move the brim-pressing member and the steam chamber from an elevated inoperative position to a lowered operative position in which the hat brim-pressing member engages the brim of a hat supported by the hat-supporting member and the steam chamber rests on the portion of the hat-pressing member which engages the brim of the hat, and means to admit steam to the steam chamber.

2. An apparatus for steaming the brim of a hat, said apparatus comprising a hat support having an annular hat brim-supporting and shaping portion which surrounds an opening adapted to receive the crown of a hat when the brim is resting on the hat brim-supporting portion, an annular supporting frame having its inside diameter larger than that of the said brim-supporting portion, a brim-pressing member of flexible textile material spanning said supporting frame and having its peripheral edge portion secured thereto, a steam chamber separate from the brim-pressing member and situated above the latter, the bottom of which steam chamber presents an annular perforated portion corresponding in shape to the annular hat brim-supporting portion of the hat-supporting member, a pivotally mounted carrier frame, means mounting both the annular supporting frame and the steam chamber separately on said carrier frame, whereby swinging movement of the carrier frame carries the hat brim-pressing member and the steam chamber from a raised inoperative position to a lowered operative position in which the brim-pressing member engages the brim of a hat supported by the hat-supporting member and the perforated portion of the steam chamber rests against the portion of the hat brim-pressing member that is in engagement with the hat brim, and means to admit steam to said steam chamber.

3. An apparatus for steaming the brim of a hat, said apparatus comprising a hat support having an annular hat brim-supporting and shaping portion which surrounds an opening adapted to receive the crown of a hat when the brim is resting on the hat brim-supporting portion, a brim-pressing member of flexible material, a steam chamber situated above the brim-pressing member and presenting a dome shaped top section and a bottom section, the peripheral portion of which corresponds in shape to the annular hat brim-supporting portion of the hat-supporting member, and is perforated, the central portion of the bottom section being non-perforated, means to move the brim-pressing member and the steam chamber from an elevated inoperative position to a lowered operative position in which the hat brim-pressing member engages the brim of a hat supported by the hat-supporting member and the perforated portion of the bottom section of the steam chamber rests on the portion of the hat-pressing member which engages the brim of the hat, a steam inlet pipe extending through the top section of the steam chamber, a dish shaped baffle element situated within the steam chamber beneath the steam delivery pipe and which is operative to collect any water which may be entrained in the steam as it is delivered into the steam chamber, and a drain pipe connected to the baffle element by which it may be drained.

4. An apparatus for steaming the brim of a hat as defined in claim 3 in which the dish shaped baffle element is secured to the top section of the steam chamber.

5. An apparatus for steaming the brim of a hat as defined in claim 3 in which the baffle element has a plurality of upstanding lugs on its upper side and is secured to the top section of the steam chamber by means of attaching screws passing through said top section into said lugs.

**References Cited** in the file of this patent

UNITED STATES PATENTS

| | | |
|---|---|---|
| 1,625,889 | Heartfield | Apr. 26, 1927 |
| 1,695,646 | Flicker | Dec. 11, 1928 |