Oct. 14, 1958 W. H. BRASKAMP 2,855,939

STEAM HELMET

Filed Oct. 24, 1956

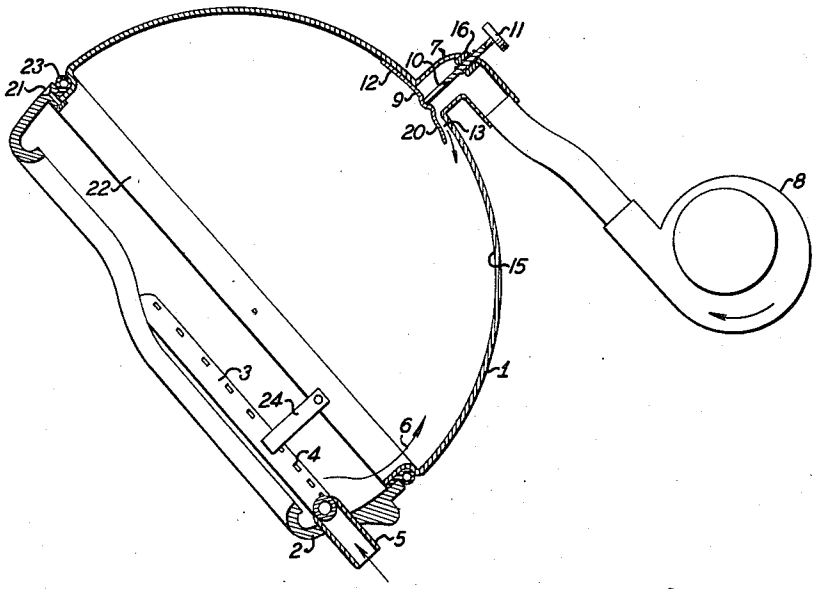


FIG. 1

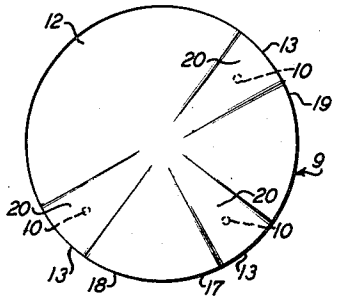


FIG. 2

United States Patent Office 2,855,939 Patented Oct. 14, 1958

2,855,939

STEAM HELMET

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Application October 24, 1956, Serial No. 618,088

Claims priority, application Netherlands August 6, 1956

5 Claims. (Cl. 132—9)

The invention relates to a steam helmet for the treatment of the hair in hair-dressing establishments, said helmet serving to soften the hair during a treatment such as perming and dyeing, and consisting of a bell-shaped body which near the lower rim comprises a bent and perforated pipe for steam supply. Steam helmets of this kind are generally known, but the results attained with them are not very satisfactory, and it has been found that this is due to the fact that the vapour of extremely fine droplets rising in the helmet does not penetrate into the hair of the person to be treated, but passes close along the wall of the helmet where it condenses. This results in that the vapour practically fails to penetrate into the hair all over the head's surface.

Attempts have been made to eliminate this drawback by means of partitions in the helmet, but the result was that the vapour condensed against the partitions, while beyond the partitions it diverged from the hair again and condensed against the helmet.

An object of the invention is the provision of a steam helmet in which this drawback has been obviated in a simple manner. According to the invention this end is attained by the provision in the helmet of one or more air supply openings, which are connected with a fan. This fan need have only a small capacity, since the air supplied to the helmet serves exclusively to cause a whirling motion of the vapour rising in it, so that this vapour is detached from the wall of the helmet and owing to the whirling motion penetrates into the hair all over the head's surface and softens the hair, which is necessary for the treatment to be applied.

Further such a steam helmet is preferably also characterized in that when the air enters the steam helmet, the air supply meets with a deflecting member, which deflects this air in a direction approximately parallel to the inner wall of the helmet. Thus the air is prevented from exercising an adverse secondary action on the hair, while this air will consequently have the greatest possible effect in causing the whirling motion of the vapour.

This deflecting member is adapted to cause the air to flow off in the helmet only in some of the possible directions if in a part of the helmet, on account of the general direction of flow of the vapour, no whirling air is needed.

The deflecting member preferably forms part of a movable valve, which may be flexible and along part of its circumference may be firmly secured to the helmet so as to prevent the passage of the air, while one or more other parts of the valve may be adjustable in position with a view to increasing or decreasing the local passage of the air. Thus the air supply can be controlled completely, while it is also possible to admit more air in one direction than in another. The construction is preferably such that more than one part of the valve can be independently adjusted.

According to the invention the air supply opening is further preferably provided in the upper part of the helmet, the deflecting member or the valve directing the

air exclusively along part of the rear wall and along part of the two side walls of the helmet. This small air supply is sufficient to bring about the desired whirling motion without obstructing the normal rising motion of the vapour, which vapour normally rises from the rear and the sides, and can escape near the front rim.

The invention will now be elucidated more in detail with reference to the drawing.

Fig. 1 is a diagrammatical cross-section through the steam helmet according to the invention.

Fig. 2 illustrates the valve with air openings.

The helmet **1** shown in Fig. 1 has a lower rim **2** constructed to serve as a collecting channel for condensed water, which contains a pipe **3** with perforations **4**, said pipe passing inside the rim along approximately half the circumference of the helmet's rim and being connected with a steam supply pipe **5**. Through the perforations the vapour rises, e. g. as indicated by the arrow **6**. In the upper part of the helmet, an air supply **7** has been provided, through which cold air is fed into the helmet by means of the fan **8**, preferably in a direction parallel to the inner wall **15** of the helmet. In the mouth of the air supply conduit is fitted a valve **9**, which can be adjusted by means of two screwthreaded rods **10** and accessory handwheels **11** each supported on air supply **7** by a supporting member **16**. This valve permanently shuts off the air supply in front at section **12** and, as appears from Fig. 2, at the rear section **17** and on the two side sections **18** and **19** has openings **13**, of which only the rearmost one is visible in Fig. 1. These openings are formed by recessed parts **20** in the valve body, which consists, for example, of a metal disc functioning as a deflecting member or adjustable plate. By the operation of the handwheels **11**, the size of the openings **13**, which admit air to the sides, is controlled, as desired: in the same or in opposite directions, and quite independently of each other. In this way it is possible, even during the treatment, to alter the flow of air in accordance with the shape of the hair (type of the hair or hairdress) and the stage of the treatment. When the side openings are adjusted, the rear opening **13** will be adjusted at the same time.

Fig. 2 is a diagrammatical illustration of the air openings of the valve **9**, through which therefore in three directions a current of air flows down along the inner wall of the helmet and imparts a whirling motion to the rising vapour. The location of the controlling rods **10** is clearly shown.

When the invention is applied with the air supply opening provided inside the top of the helmet, it is possible to fit the pipe **3** all round in the rim of the helmet. This presents the great advantage that the hair is treated more uniformly all over the head's surface.

As to the particular construction of the helmet itself, it is seen that rim **2** can be engaged by bolts **21** on a flange **22**, a gasket **23** being employed to provide a steam-tight fitting. Perforated pipe **3** is supported on flange **22** by a bracket **24**.

There will now be obvious to those skilled in the art many modifications and variations of the structure set forth. These modifications and variations will not, however, depart from the spirit of the invention as defined in the following claims.

What is claimed is:

1. A steam helmet for the treatment of hair comprising a bell-shaped body defining an opening for accommodating the head of the person to be treated, a rim portion on said body defining a channel at said opening, a perforated pipe operatively associated with said body adjacent said channel for the supply of steam, said body including a top portion defining an air supply opening, and a deflecting member operatively associated with said body

and overlying said air supply opening to deflect the air along the inner side of said bell-shaped body and to retard the flow of the air.

2. A helmet as claimed in claim 1 wherein said body comprises front, back and lateral portions and wherein said deflecting member is operatively associated with said body to restrict the flow of air to the back and lateral portions.

3. A helmet as claimed in claim 1 wherein said deflecting member is an adjustable plate.

4. A helmet as claimed in claim 1 wherein said deflecting member is a flexible plate comprising a portion

secured to said body and a plurality of portions adjustable in position for defining variable air passages.

5. A helmet as claimed in claim 4 comprising means for independently adjusting the portions which are adjustable.

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