DRY-SHAVING APPARATUS PROVIDED WITH A HAIR CHAMBER WITH FLAP

INVENTOR
JAN DE HAAN
ALBERTUS J.B. SCHIPHORST

BY
Frank R. Inger
AGENT
DRIY-SHAVING APPARATUS PROVIDED WITH A HAIR CHAMBER WITH FLAP


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5 Claims. (Cl. 30—41.6)

The invention relates to a dry-shaving apparatus provided with a removable shaving head mounted to the housing in a resilient manner, which head rests on the upper edge of a hair chamber located below the shaving head, the side walls of which comprises one or more pivots for spring action, the locking edge of which in the locked position grips the edge of the shaving head.

It is known, in dry-shaving apparatus of the above type, to make hair chambers flaps rotatable and slidably downwards, so that they can be opened by sliding until the locking edge is disengaged from the edge of the shaving head which is flanged downwards.

The principal object of the invention is to provide a manually operated lifting device for the shaving head which lifts the shaving head through a distance which is sufficient to cause the locking edge of the hair chamber flaps to be disengaged from the adjacent bottom edge of the shaving head.

In this manner a locking for the flap is formed in a simple manner, in which the flap cannot fall open as a result of an involuntary touch thereof during the use of the shaving apparatus. From a manufacturing point of view and in connection with the shape it is of advantage that the outside of the flaps need not be provided with ribs or the like in order to facilitate the grip. In addition, the present device incorporates an embodiment which is characterized in that in the lifting device a friction member is used which can be moved inwards against spring action and which is provided in the wall of the housing, the movement of said member in a vertical direction being transmitted to the lower stop edge of the shaving head.

A favourable embodiment of the invention is further characterized in that the lifting device is located laterally of the hair chamber flaps and the locking edge of each flap extends at an angle from a highest point substantially parallel to the lower edge of the shaving head in its position elevated by the lifting device.

As a result of this it is achieved that if the shaving head is lifted on one side, the flap or flaps are easily released from the edge of the shaving head, as a result of which it becomes possible to operate two side flaps by means of one lifting device located at the circumference of the shaving head between said flaps.

In order that the invention may readily be carried into effect, one embodiment thereof will now be described more fully, by way of example, with reference to a few figures.

FIGURE 1 shows a shaving apparatus, showing an important part thereof in cross section. FIGURE 2 is a plan view of the housing shown in FIGURE 1, in which the shaving head is removed from said housing.

FIGURE 3 is a partial cross section taken along the line III—III of FIGURE 1.

A dry-shaving apparatus 1 is provided with a shaving head mount 2 having two shear plates 3, below which a hair chamber 4 is located. The walls 5 of this hair chamber comprise flaps 6 which may be opened for removing the cut hair from the hair chamber 4.

The flaps are connected to the lower side of the bottom 8 of the hair chamber 4 of the housing of the apparatus by means of a resilient piece of wire 7, for which purpose a loop 12 formed in the center of each wire 7 is connected below the nut 9 of a screw, the head 25 of which is located on the other side of the bottom 8 of the hair chamber.

The ends of wires 7 are passed through abutment members 11 of the flap 6.

When raising the flap 6 it first impacts against the edge 27 of the bottom member 8 and then forms a lever rotating around the edge which, when the movement is continued, pulls the ends 10 of the resilient wire 7 outwards, as a result of which the wire is tensioned. Finally the upper edge 24 of the flap 6 snaps below the edge 23 of the shaving head mount 2 as will be described below.

The shaving head mount 2 is provided with two pins 13 which at their free ends comprise a lateral notch 14 (FIGURE 3).

Only of the pin located on the left-hand side in the figure is the notch visible, of the other pin the notch is located on the other side. Below each of the screw heads 25 is mounted one of two wire spring 15 which, in the mounted condition of the shaving head mount 2, are each located with their free end in one of the notches 14, as a result of which the shaving head mount engages the upper edge 16 of the hair chamber in a resilient manner.

In the hair chamber wall 5 a pin 17 is provided which with one end 18 extends in the upper edge 16 of the wall of the hair chamber. The other end 19 is bent through an angle exceeding 90°. This bent end 19 cooperates with an inclined end face 20 of a friction member 21 which may be depressed by means of a push-button 22 according to the horn principle in a direction at right angles to the pin 17. As a result of this the pin 17 is pushed upwards and the shaving head 2 is lifted on one side. As a result of the action of the wire springs 15, the pin 17 is again pushed downwards and the push-button 22 is moved outwards when the push-button 22 is released.

In the closed condition, the rabbeted edge 24 of the flap 6 grips behind the edge 23 of the shaving head mount 2 which is flanged downwards. If the flap 6 is raised from the position shown in FIGURE 2 into that shown in FIGURE 3, the round edge 26 and the joining inclined face extends along the edge 23 of the shaving head mount 2 and pushes it upwards, after which the rabbeted edge 24 falls behind the edge 23 and the shaving head mount 2 is returned to the initial position on the edge 16 by the springs 15. As a result of the resilience of the wire 17 the flap may also move downwards. The rabbeted edge 24 which grips behind the edge 23 is constructed so that it is highest in the center of the flap 6 and that its height decreases towards both sides. So the flaps are symmetrical and consequently easy to manufacture. If the shaving head is lifted by depressing the push-button 22 the flap is set free from the edge 23 and will open under the influence of the tensioned spring 7.

What is claimed is:

1. A release mechanism for side flaps of a hair chamber located in the housing of a dry shaving apparatus engaged and closed by the bottom edge of the shaving head mount comprising means pivoting said flaps to said hair chamber, each of said flaps having a locking edge that engages said bottom edge of the shaving head mount, said release mechanism comprising lifting means which lifts said shaving head mount a distance sufficient to cause the locking edge of said flaps to be released from
engagement with said shaving head mount thereby permitting said flaps to move to an outward and open position, and a spring-biased friction member engaging said lifting means and movable against spring pressure to lift said lifting means.

2. A release mechanism for side flaps of a hair chamber located in the housing of a dry shaving apparatus engaged and closed by the bottom edge of the shaving head mount comprising means pivoting said flaps to said hair chamber, each of said flaps having a locking edge that engages said bottom edge of the shaving head mount, said release mechanism comprising an elongated member in the housing of said dry shaving apparatus, a spring-biased friction member movable in said housing and engaging said elongated member whereby force is transmitted through said elongated member to lift said shaving head mount a distance sufficient to cause the locking edge of said flaps to be released from engagement with said shaving head mount thereby permitting said flaps to move to an outward and open position.

3. A release mechanism as claimed in claim 2 wherein said elongated member is a pin having one end engaged with said shaving head mount, the other end being bent through an angle of approximately 90°, a push-button substantially in the plane of said other end and movable in a direction substantially at right angles to said one end of the pin to thereby move said one end vertically to lift said shaving head mount.

4. A release mechanism for side flaps of a hair chamber located in the housing of a dry shaving apparatus engaged and closed by the bottom edge of the shaving head mount comprising means pivoting said flaps to said hair chamber, each of said flaps having a locking edge that engages said bottom edge of the shaving head mount, said release mechanism comprising means which lifts said shaving head mount a distance sufficient to cause the locking edge of said flaps to be released from engagement with said shaving head mount thereby permitting said flaps to move to an outward and open position, said release mechanism being located laterally of said hair chamber and the locking edge of each of said flaps being slightly angular relative to the bottom edge of said shaving head mount, the highest point of said locking edge being closest to said release mechanism.

5. A release mechanism as claimed in claim 1 wherein said release mechanism is located in the top of said housing in a plane between said side flaps.

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WILLIAM FELDMAN, Primary Examiner.
MILTON S. MEHR, Examiner.