Aug. 25, 1925. 1,551,388

J. GROSS

FOUNTAIN SAFETY RAZOR

Filed Oct. 14, 1924

Fig. 1.

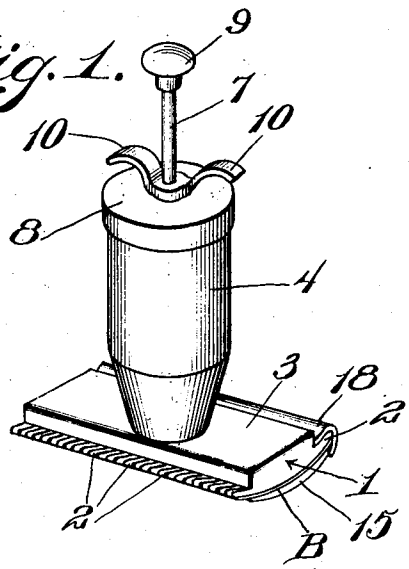


Fig. 2.

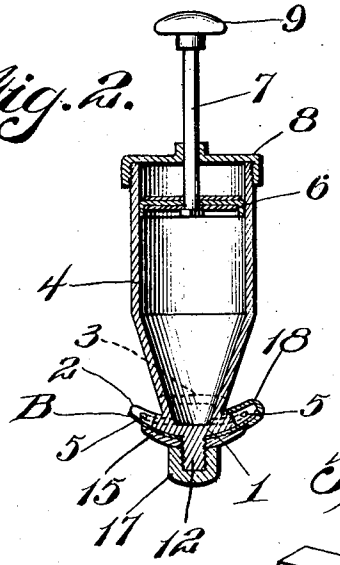


Fig. 5.

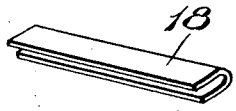


Fig. 6.

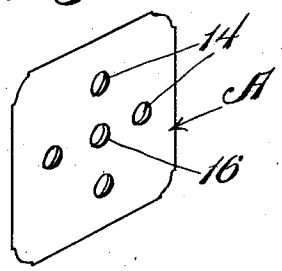


Fig. 4.

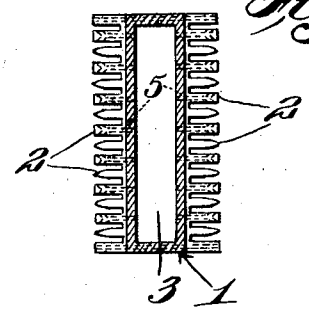
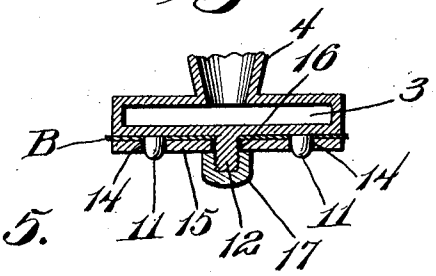


Fig. 3.



Inventor

Joseph Gross

By Watson E. Coleman

Attorney

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UNITED STATES PATENT OFFICE.

JOSEPH GROSS, OF NEW YORK, N. Y.

FOUNTAIN SAFETY RAZOR.

Application filed October 14, 1924. Serial No. 743,569.

To all whom it may concern:

Be it known that I, JOSEPH GROSS, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Fountain Safety Razors, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in fountain safety razors and it is an object of the invention to provide a device of this general character with novel and improved means whereby an emollient may be applied to the face during a shaving operation and in advance of the cutting blade whereby requisite softening of the hair will be effected.

Another object of the invention is to provide a novel and improved device of this general character comprising a guard plate provided with a reservoir to contain an emollient together with means for ejecting said emollient in advance of the blade during a shaving operation.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved razor whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:—

Figure 1 is a view in perspective illustrating a razor constructed in accordance with an embodiment of my invention;

Figure 2 is a vertical transverse sectional view taken through the central portion of the device as illustrated in Figure 1;

Figure 3 is a fragmentary sectional view taken longitudinally of the guard plate;

Figure 4 is a view partly in top plan and partly in section of the guard plate;

Figure 5 is a view in perspective of a closure member unapplied;

Figure 6 is a view in perspective illustrating a modified form of blade which may be employed in connection with my invention.

As disclosed in the accompanying drawings, 1 denotes a guard plate provided along its longitudinal margins with the outstanding teeth 2. The plate 1 proper is of increased thickness and constitutes a distributing chamber 3.

Fixed to the central portion of the back wall of the plate 1 is a hollow handle member 4 in communication with the chamber 3.

As herein disclosed alternate teeth 2 of each set has disposed therethrough a passageway or opening 5 in communication with the chamber 3 and discharging adjacent the outer end of said tooth. In practice, the chamber 3 together with the hollow handle 4 is adapted to be filled with a suitable emollient, and more especially a shaving cream, and upon pressure being exerted upon the contents of the hollow handle 4 such cream will be forced out through the openings or passageways 5 upon the face in advance of the cutting blade B. As herein disclosed, the requisite pressure is created by the piston 6 which is adapted to have requisite movement within the hollow handle 4. This piston 6 is provided with an outstanding rod 7 slidably disposed through the cap 8, said cap 8 being adapted to close the outer end of the handle 4.

The outer end portion of the rod 7 carries a button 9 to facilitate the desired inward movement of the piston 6.

In practice, it is preferred, when it is desired to force the piston 6 inwardly of the handle 4, that a thumb be engaged with the button 9 and with the index and fore fingers engaged with the diametrically opposed outstanding clips 10 carried by the cap 8.

The outer face of the guard plate 1 is provided at spaced points therealong and at its transverse center with the outstanding members 11 and 12. The outer members 11 being adapted to pass through suitably positioned openings 14 in the blade B and the holding or clamping plate 15 while the central member 12 is also directed through similarly positioned openings 16 in the blade B and member 15. The member 12 outwardly of the plate 15 has threaded thereon the holding nut 17 whereby the guard plate 1 and blade B together with the plate 15 are effectively maintained in desired assembled relation yet are capable of ready separation as the requirements of practice may necessitate.

The handle 4 may be readily refilled as required by removal of the cap 8, said cap

being herein disclosed as in threaded engagement with the handle 4. It is to be noted that the piston 6 is also removed with the cap 8. This is of advantage as it assures no hindrance or obstruction being offered by the piston 6 when the hollow handle 4 is being refilled.

In practice, the flow of the emollient or cream is adapted to be discharged only through those teeth of the guard plate adjacent the working or cutting edge of the blade and in order to close or shut off flow through the other teeth, I provide as herein disclosed, a closure member 18 which is herein disclosed as substantially U-shaped in cross section and which is engaged over the idle teeth and in a manner to effectively stop discharge through such teeth. This closure member 18 is shown in applied position in Figure 1 of the accompanying drawings.

While under certain conditions it may not be necessary, it is to be noted that in the accompanying drawings I disclose the outer or discharge end of each of the openings or passageways 5 constituting branches opening through the side faces of the fingers. This arrangement is employed in order to effect a greater spreading of the emollient or cream in advance of the blade B.

While as hereinbefore described, the blade B is of a type now generally in use, it is to be understood that my invention can be employed with equal facility in connection with a blade of the type illustrated in Figure 6 wherein such blade A is substantially diamond form with each of its marginal portions constituting a cutting edge. While the blade in this Figure 6 is shown as diamond shape I do not wish to be understood as limiting myself in this respect as the idea resides in having the blade formed with more than two cutting edges as is now generally done.

From the foregoing description it is thought to be obvious that a razor constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:—

1. A razor comprising, in combination, a guard plate provided with outstanding fingers, said plate being hollow to provide a compartment, openings extending through said fingers and in communication with the compartment, and means for forcing material within the compartment out through said openings of the fingers.

2. A razor comprising, in combination, a guard plate provided with outstanding fingers, said plate being hollow to provide a compartment, openings extending through said fingers and in communication with the compartment, means for forcing material within the compartment out through said openings of the fingers, and means for closing said openings.

3. A razor comprising, in combination, a guard plate provided with outstanding fingers, said plate being hollow to provide a compartment, openings extending through said fingers and in communication with the compartment, means for forcing material within the compartment out through said openings of the fingers, and a closure member substantially U-shaped in cross section adapted to be engaged over the fingers for closing the openings.

4. In combination with a razor comprising a guard plate, said plate being provided with a chamber adapted to contain a supply of emollient, said plate being also provided with a discharge opening in communication with the chamber, a hollow member carried by the guard plate and in communication with the chamber, said hollow member being also adapted to contain a supply of emollient, a piston within the hollow member, a rod carried by the piston and slidably disposed through a wall of the hollow member, said rod being adapted to be forced inwardly of the digit of a hand grasping the hollow member for exerting pressure on the emollient within the chamber.

5. In combination with a razor comprising a guard plate, said plate being provided with a chamber adapted to contain a supply of emollient, said plate being also provided with a discharge opening in communication with the chamber, a hollow member carried by the guard plate and in communication with the chamber, said hollow member being also adapted to contain a supply of emollient, a piston within the hollow member, a rod carried by the piston and slidably disposed through a wall of the hollow member, said rod being adapted to be forced inwardly of the digit of a hand grasping the hollow member for exerting pressure on the emollient within the chamber, said wall of the hollow member being provided with outstanding members adapted to be engaged by other digits of the hand.

6. In combination with a razor and a guard plate for the cutting edge of said razor provided with outstanding fingers, said guard plate being hollow to provide a compartment, said fingers having openings extending therethrough and in communication with the compartment, the outer end

portions of the openings being continued by the passageways opening through opposite faces of the fingers, and means for forcing material within the compartment out through said openings in the fingers.

7. A razor comprising, in combination, a guard plate provided with outstanding fingers, said fingers being provided with openings extending therethrough, and means carried by the razor for forcing material out through said openings in the fingers.

In testimony whereof I hereunto affix my signature.

JOSEPH GROSS.