

Dec. 14, 1937.

W. E. BURNETT

2,102,142

SAFETY RAZOR

Filed Oct. 22, 1936

2 Sheets-Sheet 1

FIG. 2

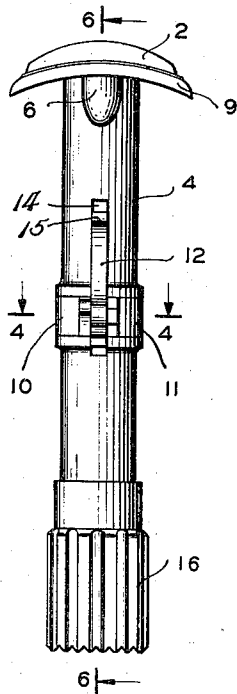


FIG. 1

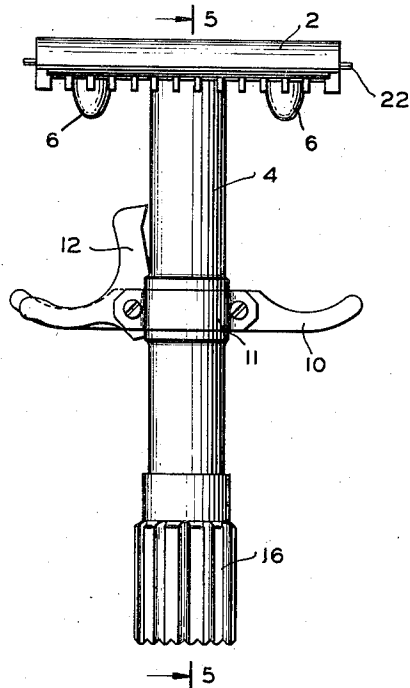


FIG. 3

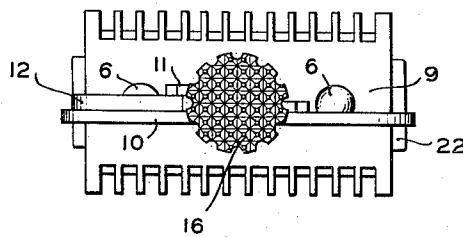
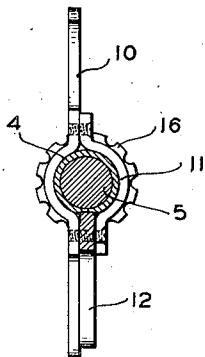


FIG. 4



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FIG. 5

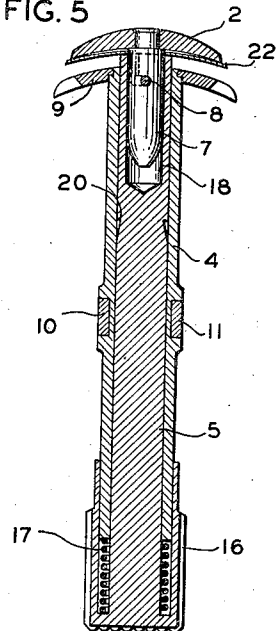


FIG. 7

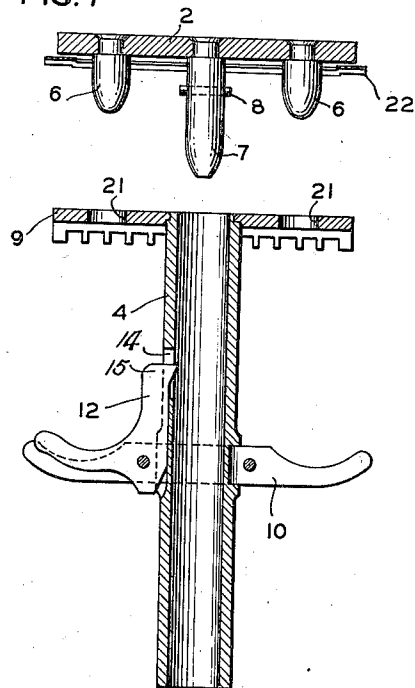
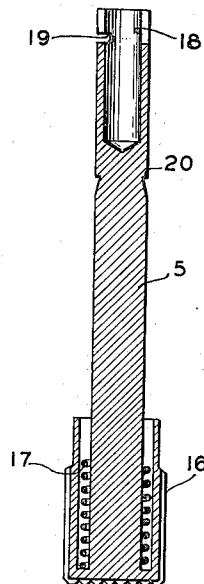
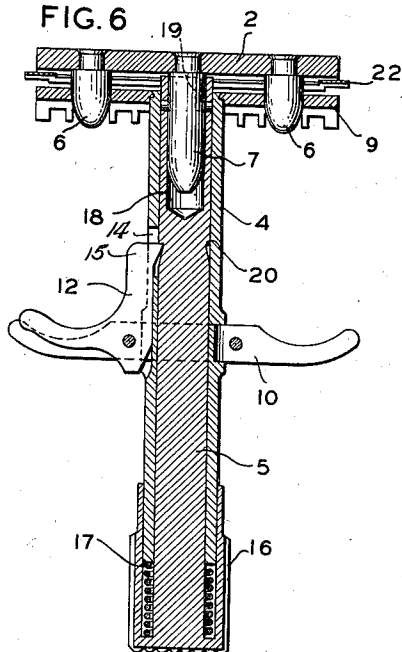


FIG. 6



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2,102,142

SAFETY RAZOR

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Application October 22, 1936, Serial No. 106,966

6 Claims. (Cl. 30—41)

This invention relates to safety razors and more particularly to certain improvements in construction and operation.

Heretofore razors of this type known as the "Gillette" type have been hard to clean due to the fact that they had to be taken apart in order to remove the soap from between the guard and blade. Also due to the fact that the handle is in most cases screwed into the blade carrier, the assembling and taking down of the razor took considerable time.

It is therefore, the principal object of my invention to provide a safety razor in which the blade and blade holder may be separated from the guard to permit cleansing, without removing the blade.

Another object of the invention is to provide a razor in which the blade may be quickly and securely fastened in the blade holder.

Another object of the invention is to provide a razor having a minimum number of parts which may be quickly and easily assembled and taken down.

In the form of invention illustrated the razor comprises three separate parts: (1) the blade holder or clamping plate, (2) the handle which carries a means for maintaining the blade away from the guard to permit cleaning and (3) a plunger member which is used to lock the blade to the clamping plate.

A more clear conception of the further objects, construction and operation of the invention may be had from the following specification taken in conjunction with the accompanying drawings in which:—

Fig. 1 shows the razor in front elevation;

Fig. 2 is a side elevation of Fig. 1;

Fig. 3 is a view taken from the bottom of Fig. 1;

Fig. 4 is a detailed cross section thru 4—4 of Fig. 2 showing the construction of the finger piece;

Fig. 5 is a cross section taken on the line 5—5 of Fig. 1;

Fig. 6 is a cross section taken on line 6—6 of Fig. 2;

Fig. 7 is an exploded cross section of the invention.

As mentioned above the razor comprises three separate parts—the clamping plate 2, the handle 4, and the plunger 5. The clamping plate 2 is arcuate as shown, having two positioning studs 6 and a locking stud 7, secured thereto by any well known means such as riveting. The locking

stud 7 is provided with a pin 8 positioned parallel to the plate 2.

The handle 4 comprises a sleeve to the top of which is secured a guard plate 9 which is arcuate in shape. The guard plate 9 may be secured to the sleeve 4 by any well known means such as a swaging the metal of the sleeve over to form the handle and guard into a unitary structure.

Midway of the handle is a groove formed to accommodate a finger piece 10 which is formed as shown and positioned parallel to the guard plate. The finger piece is secured to the handle by a clamp member 11. One arm of the clamp member is secured directly to the finger piece while the other carries between it and the finger piece a latch member 12. The handle 4 is provided with a slot 14 in which the head 15 of the latch is positioned.

The plunger 5 is formed as shown in Fig. 7 having a cup 16 formed on the end thereof in which is positioned a coil spring 17. The cup is knurled on the bottom and fluted on the sides to provide a finger grip, as shown in Fig. 3. The opposite end or top of the plunger 5, Fig. 7, is formed with a hole 18 to accommodate the locking stud 7, and is also provided with a bayonet slot 19 which cooperates with the pin 8 to form a lock or compressor for the blade, the end of the plunger being larger than the diameter of the center hole of the blade. An angular circumferential groove 20 is provided in the shank of the plunger 5 for cooperation with the latch 12. This groove is cut at such a distance from the upper end of the plunger 5 that when the head 15 of latch member 12 is in contact therewith, the blade carrier 2 is clear of the guard member 9.

In assembling the razor for use a blade 22 of the three hole type is placed on the studs 6 and 7 and the plate 2 is then assembled with the handle by positioning the studs 6 in the holes 21 provided in the guard plate 9 and the stud 7 in the sleeve 4 of the handle. The plunger is then introduced into the handle and forced down until the pin 8 is in alignment with the horizontal portion of the bayonet slot 19. The plunger 5 is then given a twist in a clockwise direction (Fig. 3), thereby locking the blade to the blade holder 2. The spring 17 maintains the blade 22, its associated blade holder 2 and the guard 9 in operative relation.

If it is now desired to clean the blade of the razor without taking it apart, the cup 16 is rested in the palm of the hand and pressure is exerted

by one finger on the right hand finger piece (Fig. 6), thereby compressing the spring 17 and forcing plunger 5 upward until the latch 12 engages groove 20. The blade and its associated holder
 5 are now held away from the guard plate thereby permitting the soap and other matter to be washed from the blade. To restore the razor to its operative condition, the latch 12 is tripped thereby permitting the spring 17 to exert pressure to force the handle 4 with its associated
 10 guard plate against the blade 22 and blade holder 2.

It is of course apparent that a razor of this type may be of any number of other designs,
 15 therefore the invention is not limited to the particular design shown.

What I claim is;—

1. A safety razor comprising a handle having a guard secured thereon, a blade holder, a blade
 20 clamped between said blade holder and a member extending through said handle, said member having means thereon for cooperation with a latch member on said handle and means for resiliently holding said blade and blade holder in contact
 25 with said guard.

2. A safety razor comprising a blade holder having a stud thereon, a pin secured in said stud at right angles thereto, a blade having an opening for receiving said stud, a blade compressor
 30 having a slot therein, said slot cooperating with said pin to force the head of said compressor against the portion of the blade surrounding said stud, a handle member having a guard secured thereto movable along said compressor and
 35 means for holding said guard against said blade substantially as set forth.

3. A safety razor comprising a blade holder having a stud thereon, said stud having a pin secured therein and extending at right angles
 40 thereto, a blade having an opening for receiving said stud, a blade compressor having a bayonet slot therein for cooperation with said pin and bearing against the portion of said blade surrounding said stud, a handle member having a

guard thereon, a finger piece secured at right angles to said handle for enabling the movement of said handle member along said compressor and resilient means for holding said guard against
 5 said blade substantially as set forth.

4. A safety razor comprising a handle having a guard secured thereon, a blade holder, a blade clamped between said blade holder and a member extending through said handle, means for
 10 resiliently holding said blade and blade holder in contact with said guard, a latch member on said handle and means on said member for cooperation with said latch for holding said blade holder and guard in spaced relation.

5. A safety razor comprising a blade holder
 15 having a stud thereon, a pin secured in said stud at right angles thereto, a blade having an opening for receiving said stud, a blade compressor having a bayonet slot therein for cooperation with said pin and bearing against the
 20 portion of said blade surrounding said stud, a handle member having a guard thereon, a finger piece secured at right angles to said handle member for enabling the movement of said handle and guard along said compressor, resilient means
 25 for holding said guard against said blade, and a latch for cooperation with means on said compressor for holding said guard and blade in spaced relation.

6. A safety razor substantially as herein described comprising a blade holder having end studs and a central stud, said central stud having a pin therein, a blade having openings there-
 30 in for positioning on said studs, a blade compressor consisting of a plunger having a bayonet
 35 slot therein for cooperation with said pin, said plunger having a groove cut therein and a safety guard having a handle secured thereto, said handle having a latch secured thereon for co-
 40 operation with said groove to hold the blade holder and its associated blade in spaced relation from said guard.

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