July 16, 1935. W. I. OHMER 2,008,590

SAFETY RAZOR

Filed Nov. 7, 1933

Fig. 1.

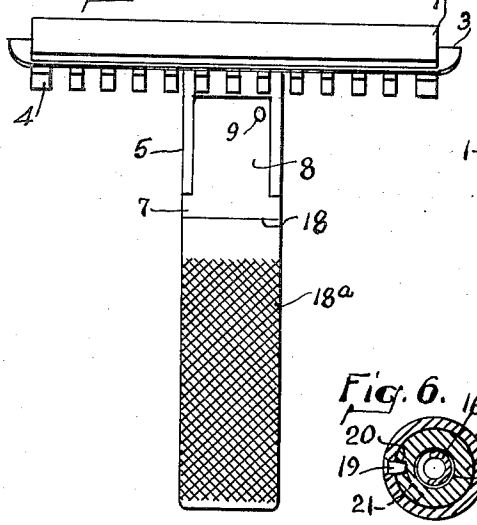


Fig. 2.

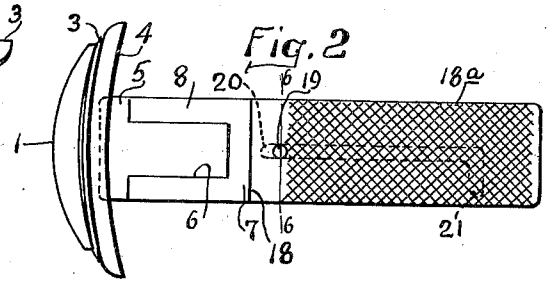


Fig. 5.

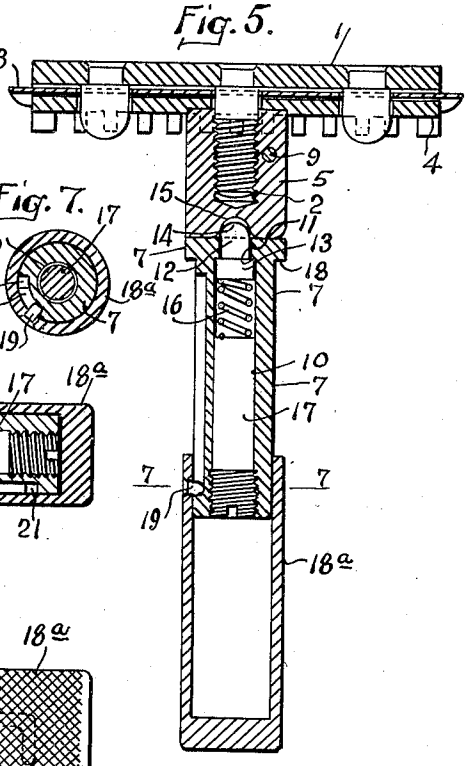


Fig. 6.

Fig. 7.

Fig. 3.

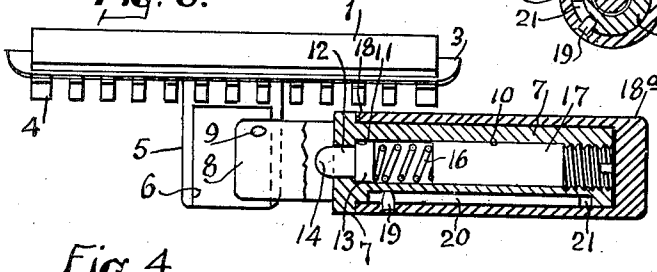


Fig. 4.

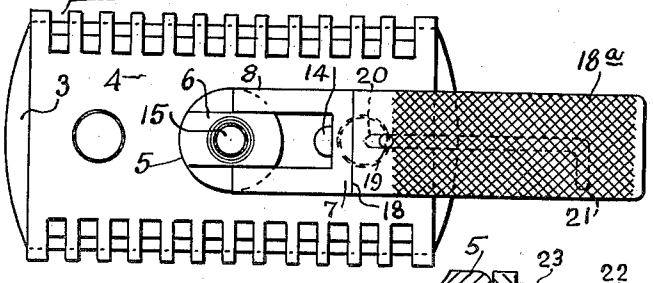


Fig. 9.

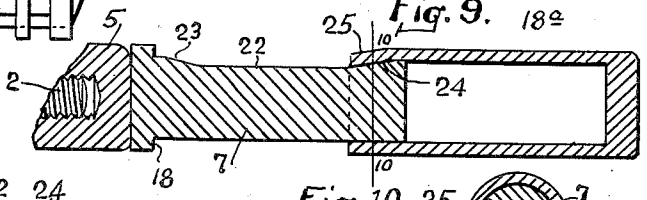


Fig. 8.

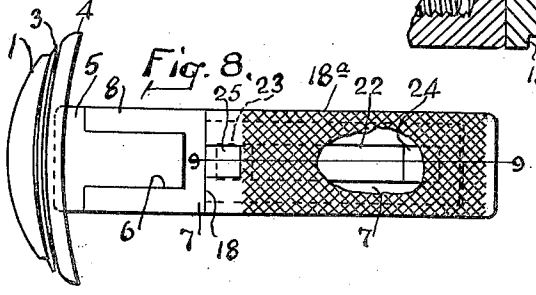
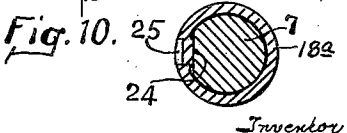


Fig. 10.



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SAFETY RAZOR

Wilfred I. Ohmer, Dayton, Ohio

Application November 7, 1933, Serial No. 697,015

6 Claims. (Cl. 30—12)

This invention relates to improvements in safety razors, and more particularly to a safety razor in which the handle is pivotally supported so that it may be folded over on the head for convenience.

It is an object of this invention to provide, in connection with a pivoted handle, snap means for holding the handle in alignment with the sleeve to which it is pivoted.

It is an object of the invention to provide, in connection with a handle that is pivotally attached to a sleeve, a spring-pressed plunger for holding the handle in alignment with the sleeve.

It is also an object to provide an extensible handle so that the longitudinal extent of the razor may be shortened for packing purposes, and the handle may be lengthened for shaving purposes.

It is also an object to provide, in connection with a pivoted handle, an extension therefor adapted to fold against the head or to be held at right angles to the head.

It is a further object to provide, in connection with a handle having an extension thereon, means for holding the extension against movement.

These and other objects will appear from the following description taken in connection with the drawing.

Referring to the drawing:

Figure 1 is a side elevation of applicant's razor.

Figure 2 is an elevation taken at right angles to Figure 1.

Figure 3 is a view showing a pivoted handle folded for packaging purposes and in section to show the internal mechanism of the handle.

Figure 4 is a view at right angles to Figure 3 but with the handle not in section.

Figure 5 is a longitudinal, sectional view through the razor and its handle, with the handle in extended position.

Figure 6 is a section on the line 6—6 of Figure 2.

Figure 7 is a section on the line 7—7 in Figure 5.

Figure 8 is a view showing a slightly modified form of handle, with a part of the handle broken away to show the interior construction thereof.

Figure 9 is a longitudinal section on the line 9—9 of Figure 8, but with the handle extended.

Figure 10 is a section on the line 10—10 of Figure 9.

This invention relates to a safety razor which has the usual parts. There is a head 1, which has extending therefrom a threaded stem 2. This head is adapted to receive the usual blade 3 and guard 4. In the present instance the blade has two edges, and the guard and head are formed to adapt themselves to such a blade.

For the purpose of holding the guard and the blade properly positioned and clamped on the head there is provided a threaded sleeve 5, which is threaded on the stem for engagement with the guard to clamp the blade. This sleeve is cylindrical in shape, with the exception of its outer end 6 which is flat, to form a part to which a handle 7 is pivoted. One end of the handle is bifurcated to form two jaws 8, one on each side of the part 6 of the sleeve and pivoted thereto by means of a rivet or some suitable pivot means 9. This pivot is located to one side of the sleeve for convenience in operating the handle.

Extending longitudinally through the handle is a hole 10, the lower end of which is reduced to form a shoulder 11. In this hole is a plunger 12, which has a head 13 adapted to rest upon the shoulder 11 with the main part of the plunger projecting out at the lower end of the hole. This lower or projecting end of the plunger is round, as indicated by the numeral 14, and is adapted to rest in a seat 15 provided in the end of the sleeve remote from the guard. The edges of the seat 15 are round so that the plunger will slide easily into and out of the seat. The outer edge of the sleeve is also rounded to provide a cam surface over which the plunger will ride when the handle moves to and from aligned position with respect to the sleeve. The plunger is separate from the handle and movable independently thereof.

The end of the handle remote from the sleeve has in the hole a plug 17. In the present instance this plug is threaded into the handle but may be attached to the handle by any suitable means. Between this plug and the head of the plunger is a spring 16, which tends to hold the plunger in such a position that its rounded head projects from the hole so that it may engage in the seat 15. The handle for a greater part of its length is reduced in diameter and provides a shoulder 18 against which an extension member, such as the thimble 18a, will engage. This extension or thimble member is for the purpose of extending the length of the handle so that the part 7, constituting the main handle member, may be materially shorter than is necessary for use, its deficiency in length being taken care of by the thimble or extension member.

In the form shown in Figure 3 the reduced part of the handle has a bayonet slot therein,

consisting of a longitudinal groove 20 and a transverse groove 21 in which a projection 19 fits. This projection may be in the form of a pin, such as shown in Figure 3, or it may be a part of the thimble member pressed down into the groove. As shown in Figure 3 the handle is in its shortened condition. If the thimble or extension member is moved longitudinally of the handle the projection 19 will travel in the groove 20 until it reaches the outer end thereof. By rotating the thimble member on the handle the projection 19 is moved into the groove 21 so that the extension or thimble member cannot be moved longitudinally of the handle without again reversing the rotation of the thimble member so that the projection can again move in line with the groove 20.

In Figures 8, 9 and 10 a slightly modified form of handle extension is provided. In this form the handle, which is circular, has one side cut away to provide a longitudinally extending depression 22, which has at one end a cam surface 23 and at its other end a cam surface 24. This form of handle has the same thimble or extension member 18*a*, which slips over and moves longitudinally of the handle. In this form there is provided a part 25, similar in purpose to the projection 19, but instead of moving in a bayonet slot this part 25 moves through the depression 22 and is adapted to engage at each end of its range of movement a cam surface 23 or 24. It engages the cam surface 23 for holding the thimble member in a restricted position, whereas it engages the cam surface 24 for holding the thimble member in its extended position so there is provided a long handle.

Figure 9 shows the full length handle, while Figure 8 shows the handle in its shortest condition. In this form there are no projections, such as the projection 19, but the open end of the thimble member is crimped or pressed in, as indicated by the numeral 25, so that the crimped part will engage over the cam surface 23 or the cam surface 24 for limiting the movement of the thimble member on the handle, and also for causing a frictional engagement whereby the thimble member is held against free movement of the handle.

It will be understood that I desire to comprehend within my invention such modifications as come within the scope of my claims and my invention.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a safety razor, a head, a handle on the head, said handle having therein a depression ending in cam surfaces, a thimble member mounted on the handle for movement through a definite range, and means on the thimble to engage the surfaces to hold the thimble member stationary on the handle at each end of the range of its movement.

2. In a safety razor, a head, a handle on the head, said handle having therein a longitudinally disposed depression terminating in cam surfaces, and a thimble member fitting over the handle for movement longitudinally thereof, said thimble member having thereon a member extending into the depression and adapted to engage the cam surfaces to hold the thimble member in different positions on the handle.

3. In a safety razor, a head, a handle on the head, said handle having therein a longitudinally disposed depression terminating in cam surfaces, a thimble member mounted on the handle for movement longitudinally thereof, and means in the thimble member and integral therewith to engage the cam surfaces to hold the thimble member in different positions.

4. In a safety razor, a head, a handle on the head, said handle having therein a longitudinally disposed depression terminating in cam surfaces, and a thimble member on the handle for movement longitudinally thereof, a part of the edge of the thimble member being pressed in to move in the depression and engage the cam surfaces at the ends thereof.

5. In a safety razor, a blade, means for clamping the blade, said means comprising a sleeve, a handle pivoted to the sleeve, and snap means located between the handle and the sleeve comprising a spring-pressed plunger and a recess to receive the end of said plunger, one of these elements being in the sleeve and the other in the handle, to hold the handle in alinement with the sleeve.

6. In a safety razor, a blade, means including a sleeve for clamping the blade, a handle normally located at one end of the sleeve and pivoted thereto, and a spring-operated plunger in the handle and adapted to enter a recess in the sleeve.

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