April 29, 1924. 1,492,233

W. G. ADAMS

SAFETY RAZOR

Filed July 29, 1922

Fig. 1.

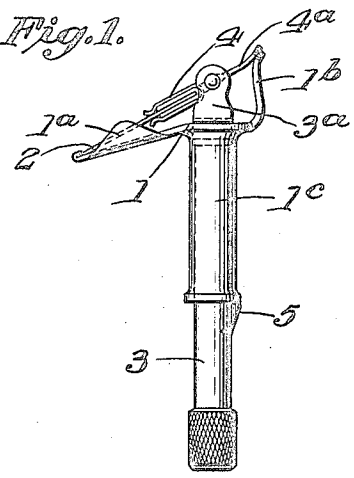


Fig. 3.

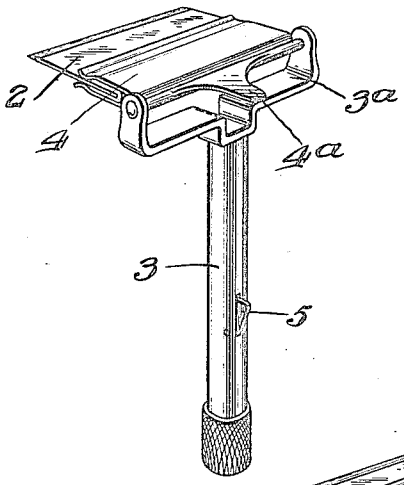
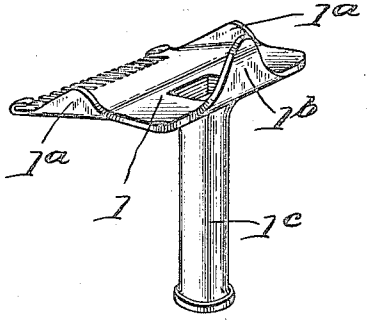


Fig. 2.



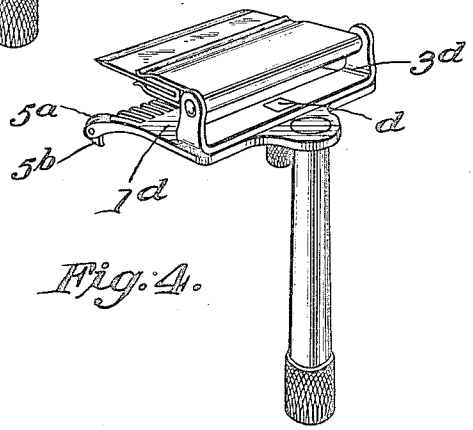


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM G. ADAMS, OF ROANOKE, VIRGINIA.

SAFETY RAZOR.

Application filed July 29, 1922. Serial No. 576,377.

To all whom it may concern:

Be it known that I, WILLIAM G. ADAMS, a citizen of the United States, and a resident of Roanoke, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Safety Razors, of which the following is a specification.

My present invention relates to improvements in safety razors and aims to provide a construction embodying a single guard in which the blade may be readily turned, without removal from its holder, so as to bring first one side of its cutting edge and then the other into contact with or juxtaposition to the face of the user, this turning or reversing of the blade improving the cutting action.

The invention aims further to provide a construction which will be economical to manufacture, and durable in use, and capable of being easily manipulated by the user.

With these and other objects in view, the invention includes the novel combination of parts, and features of construction hereinafter described in detail, the nature and scope of the said invention being defined and determined by the claims appended hereto.

Two embodiments of my invention are shown in the accompanying drawings, in which:—

Figure 1 is a side elevation of a safety razor constructed in accordance with my invention.

Fig. 2 is a view of the guard frame detached.

Fig. 3 is a view of the blade holder and handle member, and

Fig. 4 is a view of a modification.

Referring by reference characters to this drawing, the numeral 1 designates the guard member which may be of any approved shape and has end lips or flanges 1^a between which the blade 2 lies when the latter is in shaving position, as shown in Fig. 1. The guard member is provided at its rear side with an upstanding lug or projection 1^b which co-operates with the blade holder in the manner hereinafter set forth, and also with a tubular handle or sleeve member 1^c in which the main handle member 3 is slidably held.

Said handle member has a forked upper end 3^a constituting a carrier for the blade holder, between and on which is pivotally mounted the blade holder 4, which may be of any approved form, except as herein specifically provided.

Said blade holder is provided at its rear edge with a projecting leaf spring 4^a which is designed to co-act with the lug or projection 1^b and thereby rock the holder on its fulcrum and keep the edge of the blade pressed against the front edge of the guard while the razor is being used for shaving, as shown in Fig. 1.

Handle member 3 is provided with a spring latch 5 which is designed to bear against the lower end of the sleeve 1^c to hold the parts in the position shown in Fig. 1.

When it is desired to reverse the blade during the act of shaving, the razor is held by the sleeve 1^c in inverted position or with the blade end down and the catch 5 pressed in, which allows the handle member 3 to slide in the socket until carrier is moved sufficiently to cause the spring 4^a of the blade holder to clear the lug 1^b of the guard member, and drops or swings to a vertical position. The handle member 3 is then given a half turn in the socket or through an arc of 180° and the blade holder then allowed to swing back until the blade rests with its opposite face against the guard, whereafter the handle member 3 is drawn sufficiently far through the socket to apply tension to the spring 4^a and to allow catch 5 to re-engage the end of the socket. These movements are permitted by reason of the fact that the carrier is rotatable relative to the guard on an axis substantially perpendicular to the general plane of the guard, and the blade holder is pivoted on an axis substantially perpendicular to the aforesaid axis.

It may be found desirable to have the forked carrier separate from the main handle, in which case the former might be pivotally carried directly by the guard. Such a construction is illustrated in Fig. 4. In this form the guard 1^d would be provided with an aperture coincident with a like aperture in the base of the carrier fork 3^d through which a rivet member *d* extends, which constitutes a pivot for the carrier so that the latter can rotate on an axis substantially perpendicular to the plane of the guard.

In this form I provide the guard at its outer corners with means for engaging the blade and holding it pressed against the guard, in the shape of spring catches 5^a hav-

ing depending tails or portions 5^b which can be pressed by the fingers to disengage the catches from the blade. By disengaging these catches the blade carrier may be rocked on its axis (which is approximately parallel to the guard) to bring the blade clear of the guard, after which the carrier is given a half turn on its axis perpendicular to the guard, whereafter the blade is again swung into contact with the guard and secured thereto by the catches in reverse position.

It will be understood that various other changes in the construction could be made without departing from the spirit of my invention.

Having thus described my invention, what I claim is:—

1. In a safety razor the combination with a handle, of a guard member, a blade holder carrying a blade to cooperate with said guard, a carrier member for the blade holder mounted to rotate on an axis extending in the direction of the handle, said blade holder being pivotally supported by said carrier member on an axis perpendicular to said first named axis.

2. In a safety razor the combination with a handle, of a guard member, a blade holder carrying a blade to cooperate with said guard, a carrier member for the blade holder mounted to rotate on an axis extending in the direction of the handle, said blade holder being pivoted on an axis substantially parallel to the general plane of the guard and parallel to the length of said holder.

3. In a safety razor the combination with a handle, of a guard member, a blade holder carrying a blade to cooperate with said guard, a carrier member for the blade holder mounted to rotate on an axis extending in the direction of the handle, said blade holder being pivoted on an axis substantially parallel to the general plane of the guard and parallel to the length of said holder. and means for holding the blade in contact with the guard when the razor is in use for shaving.

4. In a safety razor the combination with a handle, of a guard member, a forked carrier member having its base rotatably mounted on the guard on an axis extending in the direction of the handle, a blade holder pivotally carried by the forks of said carrier member and movable to swing the blade towards and from the guard and parallel to the length of said holder, and spring actuated means for holding the blade normally in contact with the guard.

5. In a safety razor a guard having a tubular part, a handle member slidably and rotatably carried by said tubular part, a carrier on said handle member, and a blade holder pivotally carried by said carrier on an axial line parallel to the length of the holder.

6. In a safety razor a guard having a tubular part, a handle member slidably and rotatably carried by said tubular part, a carrier on said handle member, a blade holder pivotally carried by said carrier on an axial line parallel to the length of the holder, and means for releasably locking said handle member and tubular part together.

7. In a safety razor a guard having a tubular extension, a handle member slidably and rotatably mounted in said extension, a blade holder pivotally supported at the end of said handle member adjacent the guard, and a spring catch carried by said handle member and adapted to engage the end of said tubular extension.

8. In a safety razor a guard having a tubular portion, a handle member slidably and rotatably mounted in said tubular portion and having a forked end adjacent the guard, a blade holder pivotally carried by said forked end, said blade holder having a projection in rear of its pivot, and said guard member a co-acting extension, one of said extensions being resilient, and means for releasably locking said handle member and tubular portion together.

9. In a safety razor a guard having a tubular part, a handle member slidably and rotatably carried by said tubular part, and a blade holder pivotally carried by said handle member, said guard having projections adapted to abut against the ends of a blade carried by the holder.

10. In a safety razor, the combination with a handle, of a guard member, a blade holder carrying a blade to co-operate with said guard, a carrier member for the blade holder mounted to rotate on an axis which is coincident with the axis of the handle, said blade holder being pivotally supported by said carrier member on an axis transverse to said first named axis.

11. In a safety razor, the combination with a handle, of a guard member, a blade holder carrying a blade to co-operate with said guard, a carrier member for the blade holder mounted to rotate on an axis coincident with the axis of the handle, said blade holder being pivoted on an axis parallel to the general plane of the guard and parallel to said holder.

In testimony whereof I affix my signature.

WILLIAM G. ADAMS.