T. C. DURHAM.

SAFETY RAZOR.

APPLICATION FILED JAN. 7, 1910.

953,989.

Patented Apr. 5, 1910.

Fig. 1

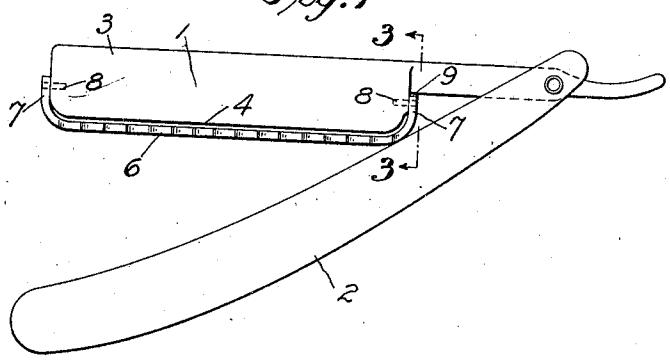


Fig. 2

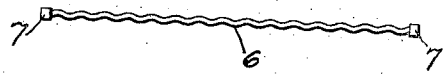
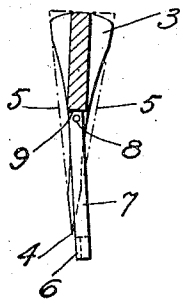


Fig. 3



Attest

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UNITED STATES PATENT OFFICE.

THOMAS C. DURHAM, OF NEW YORK, N. Y., ASSIGNOR TO DURHAM DUPLEX RAZOR COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

SAFETY-RAZOR.

953,989. Specification of Letters Patent. Patented Apr. 5, 1910.

Original application filed March 8, 1909, Serial No. 482,143. Divided and this application filed January 7, 1910. Serial No. 536,934.

To all whom it may concern:

Be it known that I, THOMAS C. DURHAM, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented a new and useful Improvement in Safety-Razors, of which the following is a specification.

This invention relates to an improvement in safety razors of the type disclosed in my co-pending application filed March 8, 1909, Serial No. 482,143, of which this application is a division, and one of the objects thereof is to provide a device of this character in which the guard will not interfere with the re-sharpening or stropping of the blade.

A further object is to provide a device simple and efficient and which may be used in the same manner as a razor of the ordinary type.

With these and other objects not specifically mentioned in view, the invention consists in certain constructions and combinations which will be hereinafter fully described and then specifically pointed out in the claims hereunto appended.

In the accompanying drawings, which form a part of this specification and in which like characters of reference indicate the same parts, Figure 1 illustrates a device constructed in accordance with the invention, Fig. 2 is a detail view of the safety guard used in connection with the structure shown in Fig. 1, and Fig. 3 is an enlarged sectional view on the line 3—3 in Fig. 1.

In carrying the invention into effect, there is provided a blade and a coöperating safety guard, both of which may vary within wide limits. In the device selected to illustrate the invention, there is provided a blade 1 mounted in a conventional handle 2 and having a thick back 3 and a cutting edge 4 both included within a prism the apex of which is the cutting edge and the base of which includes the back 3 of the blade, this prism being determined by the initial shaping or sharpening of the blade. This prism is indicated in Fig. 3 by the broken line 5.

It is well known in the trade that razor blades are ground so that what is termed the angular faces of the edge of the blade; that is to say, the sides of the blades adjacent the cutting edge the planes of which intersect at the line of the edge, form a very small included angle found in many years of experience to be the best for efficiency. In order to maintain the highest efficiency of the device, when it becomes necessary to re-sharpen the blade, it is important that the included angle of the faces, or the initial prismatic shape of the blade as a whole, be preserved, for if the blade is re-sharpened in such a manner that a wider angle is formed adjacent the cutting edge the edge will be blunter and less efficient, and if the blade is re-sharpened in such a manner as to make the thin edge of the blade still thinner the edge will lose its rigidity and become too flexible. In the present invention, the structure employed is of such a character that the blade may re-sharpened at its initial angle and without altering its initial prismatic shape upon which its efficiency depends.

There is provided a safety guard beyond the edge of the blade which coöperates with the blade. While in certain constructions this guard may be otherwise formed, in the best constructions and as shown, a corrugated guard 6 is employed, this guard having upturned ends 7 pivoted at 8 to the blade 1. One of the upturned ends of the guard is provided with a stop 9 limiting the swinging movement of the guard across the edge of the blade.

It will be readily understood that with the structure illustrated the blade may be stropped or otherwise re-sharpened in the usual manner without removing the guard, since the latter is free to swing from one side of the blade to the other across its edge, the swinging movement being limited by the stop 9, and that in applying the device to the face the guard will be automatically swung by contact with the face to its correct position with respect to the cutting edge of the blade, whichever side may be presented to the face.

Changes and variations may be made in the structure by means of which the invention is carried into effect. The invention, therefore, is not to be restricted to the precise details of the structure shown and described.

What is claimed is:

1. A safety razor comprising a blade having a thick back and a cutting edge both included within a prism the apex of which is the cutting edge and the base of which in-

cludes the back of the blade, this prism being determined by the initial shaping of the blade, and a guard beyond the cutting edge of the blade and pivotally connected with the blade, whereby the blade may be sharpened at its initial angle with the guard in position, substantially as described.

2. A safety razor comprising a blade having a thick back and a cutting edge both included within a prism the apex of which is the cutting edge and the base of which includes the back of the blade, this prism being determined by the initial shaping of the blade, and a guard beyond the cutting edge of the blade and having upturned ends pivoted to the blade, whereby the blade may be sharpened at its initial angle with the guard in position, substantially as described.

3. A safety razor comprising a blade having a thick back and a cutting edge both included within a prism the apex of which is the cutting edge and the base of which includes the back of the blade, this prism being determined by the initial shaping of the blade, and a corrugated guard beyond the cutting edge of the blade and having upturned ends pivoted to the blade, whereby the blade may be sharpened at its initial angle with the guard in position, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS C. DURHAM.

Witnesses:
G. P. STACY,
SYDNEY I. PRESCOTT.