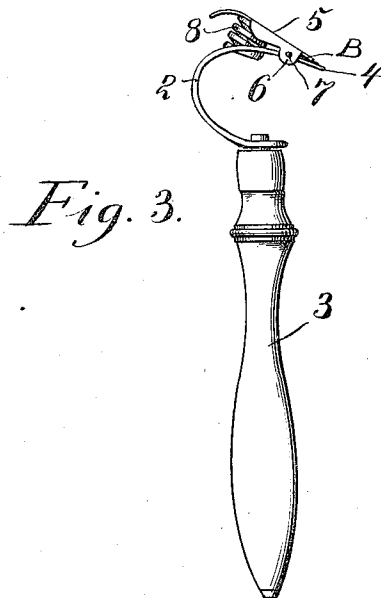
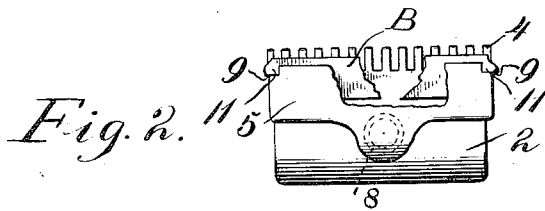
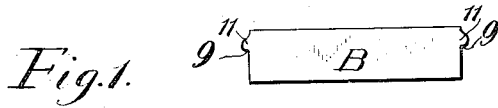


W. J. SMART.  
CUTTING BLADE FOR RAZORS.  
APPLICATION FILED MAY 23, 1905.

960,424.

Patented June 7, 1910.



Witnesses:  
James F. Duhamel,  
David Corbin.

Inventor,  
Walter J. Smart,  
By his Attorney,  
Percy L. Wells.

# UNITED STATES PATENT OFFICE.

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NEW YORK, N. Y.

## CUTTING-BLADE FOR RAZORS.

960,424.

Specification of Letters Patent.

Patented June 7, 1910.

Original application filed January 14, 1905, Serial No. 241,129. Divided and this application filed May 23, 1905. Serial No. 261,774.

*To all whom it may concern:*

Be it known that I, WALTER J. SMART, a citizen of the United States, residing in the borough of Brooklyn, in the city of New York and State of New York, have invented a new and useful Improvement in Cutting-Blades for Razors, of which the following is a specification.

This invention relates to safety razors of the type disclosed in my pending application, Serial No. 241,129, filed January 14, 1905, of which the present application is a division.

The objects of the invention are to improve and simplify the construction of the razor frame and blade; furthermore, to increase their efficiency in operation, and to decrease the expense attending their manufacture and use.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of the following claims without departing from the spirit of the invention.

In the accompanying drawing forming part of this specification, Figure 1 is a plan view of an improved form of blade adapted to be used in connection with my safety razor. Fig. 2 is a plan view of the razor, partly broken away, with the blade in position ready for use. Fig. 3 is a side elevation of the improved razor and blade.

Like reference characters indicate corresponding parts in the different figures of the drawing.

The improved blade which I prefer to use in connection with the razor of the present invention is designated by the reference letter B, and consists of a thin, flat, plate-like piece of steel or other suitable material, preferably of narrow width and having a sharpened cutting edge. As usually made, the blade is of substantially uniform thickness. The blade B preferably is provided with end projections or handles having forward surfaces 11-11 and rearward surfaces 9-9.

The razor construction which I prefer to employ comprises a curved razor frame 2 having a handle 3. The frame 2 is formed

at its forward free edge with a comb or guard 4. The means for retaining the blade B upon the razor frame and for supporting said blade along its cutting edge preferably comprises a retaining member or clamp 5 having a pivotal connection with the frame 2. The pivotal connection between the retaining member or clamp 5 and the frame 2 in the present instance consists of downwardly bent ears or lugs 6, which are pivotally connected with the frame 2 by means of pins 7 projecting from the side edges of said frame. The ears or lugs 6 form abutments connected with the guard 4 of the frame 2, adapted to be engaged by the rear shoulders 9 of the end projections of the blade B for limiting the rearward movement of the blade, which is fitted between the retaining member or clamp 5 and the guard 4, as shown in Fig. 2. The end projections of the blade B extend beyond the side edges of the frame 2 and guard 4 so as to form handles which can be grasped between the fingers in removing and replacing the blades. When a blade B is in position as illustrated in Fig. 2, the pivotal retaining member 5 contacts with and supports, the same along its cutting edge.

The means for holding the pivotal retaining member 5 securely against the blade B preferably consists of a coil-spring 8, which is interposed between the retaining member 5 and the frame 2 in rear of the pivotal connection between said retaining member and said frame. When it is desired to remove the blade B it is only necessary to press the rear end of the retaining member 5 toward the frame 2 and to grasp the blade B with the fingers by means of the end projections or handles on said blade.

The end projections of the blade B preferably are located close to the forward cutting edge thereof, whereby the pivotal points 7 of the retaining member 5 are located close to the cutting edge of the blade so as to enable the spring 8 to exert considerable leverage on the retaining member 5, and thus hold the cutting edge of the blade securely in position.

Having described my invention, I claim,

1. As a new article of manufacture, a thin, flexible, approximately-rectangular blade having a forward cutting edge and end

projections located close to said cutting edge, substantially as described.

2. A safety razor having a guard, a clamping member provided with downwardly bent lugs pivotally connected with said guard and a flat blade having end projections abutting against the lugs of said clamping member, substantially as described.

3. A safety razor having a guard, a clamping member provided adjacent the forward edge thereof with downwardly bent lugs pivotally connected with said guard, and a flat blade having end projections extending beyond the ends of said guard and resting against the lugs of said clamping member, said blade being fitted between said guard and said clamping member, substantially as described.

4. A safety razor having a guard, a clamping member having downwardly bent

lugs adjacent the forward edge thereof, said lugs being pivotally connected with said guard adjacent the guard teeth thereof, said clamping member having a rearwardly extending finger-piece, a coil spring interposed between said guard and the finger-piece of said clamping member, and a thin flat blade interposed between the clamping member and the guard and having end projections extending beyond the ends of the guard and engaging the downwardly bent lugs of the clamping member.

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

WALTER J. SMART.

Witnesses:

WILLIAM EIFLER,  
EDWARD L. T. GRAF.