

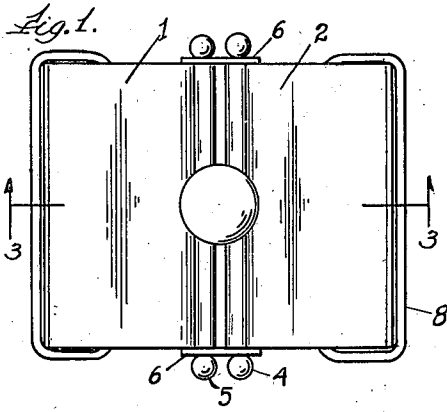
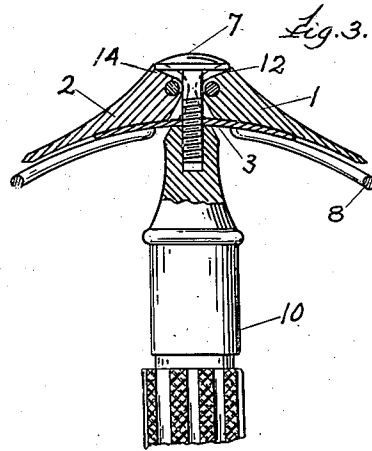
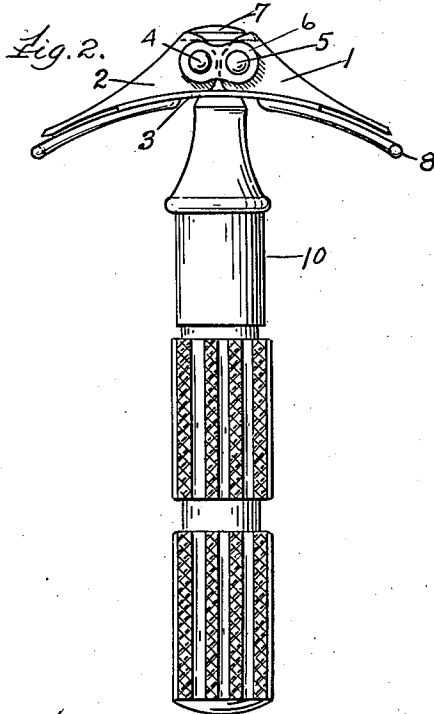
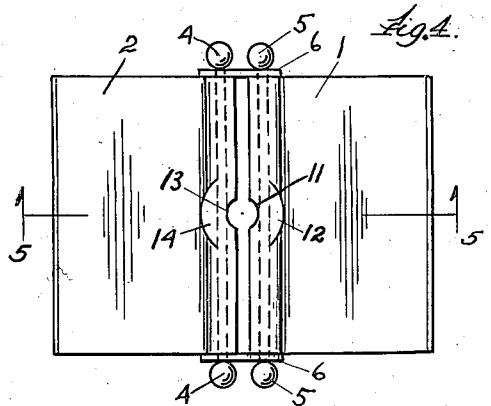
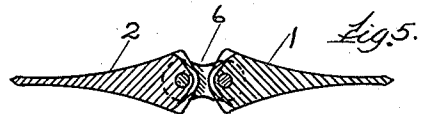
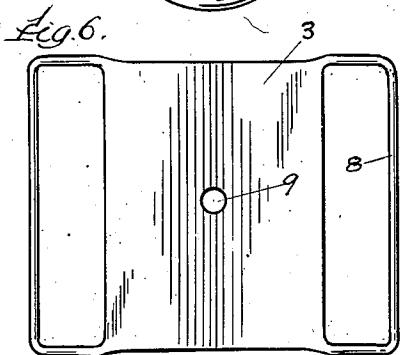
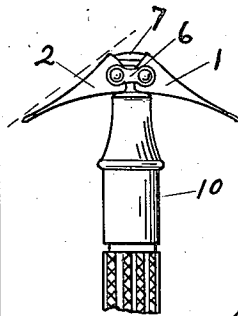
Jan. 15, 1946.

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2,392,887

SAFETY RAZOR

Filed May 20, 1943



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UNITED STATES PATENT OFFICE

2,392,887

SAFETY RAZOR

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Application May 20, 1943, Serial No. 487,755

5 Claims. (Cl. 30—50)

My invention relates to safety razors in which the so-called old style form of blade is used. The blade of the old style form possesses a firm, rigid cutting edge that will stand up to any beard no matter how hard and tough it may be for there is practically no springing or bending back of its cutting edge; the thin flexible blades now generally used in safety razors are too pliant and do not, cannot give the cutting edge that firm, rigid support and backing that the old style form of blade affords, the cutting edge of the thin flexible blades is necessarily somewhat flexible also.

Briefly, the old style form of blade is about three sixteenths of an inch thick at its back edge and is from there tapered, on both sides, by what is called hollow grinding, to a keen edge at opposite side; the cutting edge thus has fairly heavy, strong metal backing which holds the cutting edge firm, rigid and straight; this is extremely desirable when the cutting edge is called upon to cut stiff, hard beard, or is honed, or stropped.

The object of my invention is to provide a safety razor wherein the safety cheek guard member will co-operate with the blade above described to hold this blade firmly and at such angle with respect to the handle that a comfortable, easy and most efficient shaving results.

To carry out my invention I provide a safety cheek guard member and two blades of the old style form, of about the same length as the flexible blades now in use; my blades are link hinged together back to back close together; the backs of these blades are suitably notched and countersunk spotted, a clamping screw adapted to pass through the said notches and the cheek guard plate and engage the countersunk surfaces in the blade backs, and a handle adapted to engage the threads of the clamping screw to clamp and hold firmly the blade assembly on the guard plate.

Other features and details are more fully described and pointed out in the specification following and in the drawing, in which:

Fig. 1 is top plan view of my improved razor;
Fig. 2 is a side elevation of the assembled razor;
Fig. 3 is a detail sectional view on line 3—3 in Fig. 1;

Fig. 4 is a plan view of the blade unit assembly;

Fig. 5 is a detail sectional view of blade assembly unit on line 5—5 in Fig. 4;

Fig. 6 is a bottom view of the cheek safety guard;

Fig. 7 is a side elevation of the clamping screw; and

Fig. 8 is a side view of the razor assembled without the safety guard plate.

In the drawing, 1 indicates one blade of the hinged blade unit assembly and 2 indicates the other blade; 4 is the hinge pin of blade 2, and 5 is the hinge pin of blade 1; 6 are the hinge links one at each end of the two blade assembly; 11 is a semi-circular centrally located notch in the back of blade 1 for permitting the clamping screw 7 to pass through the assembly; 12 is what is generally called "spot," a sort of a countersink, on which the head of the clamping screw 7 engages the blade; 13 and 14 on blade 2 correspond to 11 and 12, respectively, on blade 1; the functioning of the above details are depicted in Fig. 3. While I have shown the hinge pins 4 and 5 as passing through holes drilled the length of the blades it is obvious that suitable screws fitting into relatively short holes that are counterbored and threaded, one hole at each end of the blade, may be substituted; such screws would not be threaded up to the head, the unthreaded portion fitting into the counterbore; also, the hinge pivot screws could be of the shouldered kind the shoulder being made of proper dimension for the thickness of the link 6.

Numerals 3 designates the cheek guard plate suitably shaped to give the desired angle to the blades with respect to the handle 10; the plate proper is provided with the cheek contacting extensions 8 and a central hole 9 for the clamping screw 7; the width of the plate is made equal to the length of the blade to serve as guide for properly aligning the blade assembly on the safety guard plate; if desired, in order to make the aligning of the blade assembly on the guard plate fool proof, short upwardly extending projections may be provided at each of the four corners of the plate proper in between which the blades would fit when in proper position on the guard plate.

To assemble the safety razor for shaving operation, the linked blade assembly, Fig. 4, is placed over the top of the safety guard plate with the notch opening, 11—13, registering with the hole 9 of the guard plate, the clamping screw 7 is put through these and the handle 10 screwed on, resulting in an assembly illustrated in Fig. 2.

The razor may also be assembled and used without the safety guard plate 3 if preferred for shaving closer to the ear contour, etc.; however, the user would then have to necessarily be more expert and careful, about the same as if using the old style razor, now reverentially, sometime, referred to as the "old battle axe." Also the cut-

ting edges of the blades may be stropped on a strap, or honed, as depicted by the broken line in Fig. 8.

I do not limit myself to the specific construction and arrangement of parts herein illustrated, many minor changes in detail of construction may be made without departing from the spirit of the invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a safety razor, a cheek guard plate, two blades each having one cutting edge and relatively thick back edge opposite and being link-hinged together at the ends of said back edges, a semi-circular notch and countersinks adjacent said notch centrally located in each said back, a clamping screw adapted to pass through said notches and central aperture in said plate, a handle adapted to engage said screw and clamp the blade assembly firmly on the cheek guard plate.

2. In a safety razor, a cheek guard plate, an assembly of two blades link-hinged together at their ends near the back edges of the blades said assembly being adapted to be supported on said guard plate and means to clamp and firmly hold said assembly and guard plate together.

3. In a safety razor, a cheek guard plate provided with cheek guard extensions at its sides and a centrally located aperture, a blade assembly comprising two blades each having a cutting edge and a relatively thick edge opposite, a centrally located notch in each said thick edge, countersinks adjacent said notches, a link pivotally secured to the ends of said blades near the thick edges for holding hingedly these edges close to each other, a clamping screw adapted to pass

through said notches and the aperture in the guard plate, and a handle for engaging the clamping screw and hold the blade assembly on the guard plate.

4. In a razor, a blade assembly comprising two blades each having one cutting edge and a relatively thick edge opposite and having notches intermediate the ends and countersunk depressions adjacent the notches, hinge links pivotally attached to the ends of the blades to hold hingedly the thick edges close to each other, a clamping screw adapted to pass through said notches and engage a handle to firmly clamp and hold said assembly on the handle.

5. A safety-razor blade comprising two components of the solid hollow-ground type; each of said components having a cutting edge, a back, and two hollow ground faces which extend from the cutting edge to the back in increasingly diverging relation to each other; said components being arranged back to back, and being provided with means for connecting them together at their backs for hinge-like movement in either direction; each of said components being provided in the center of the back of the same with an outwardly opening recess which is complementary to the confronting recess in the center of the back of the other component and cooperates with the same to provide an opening between the backs for the passage of a blade attaching member; said connecting means being formed in two sections, which sections are separated from each other in a direction longitudinally of the backs of the components and are located at opposite sides of the opening between the backs.

FRITZ P. STEINHAUER.