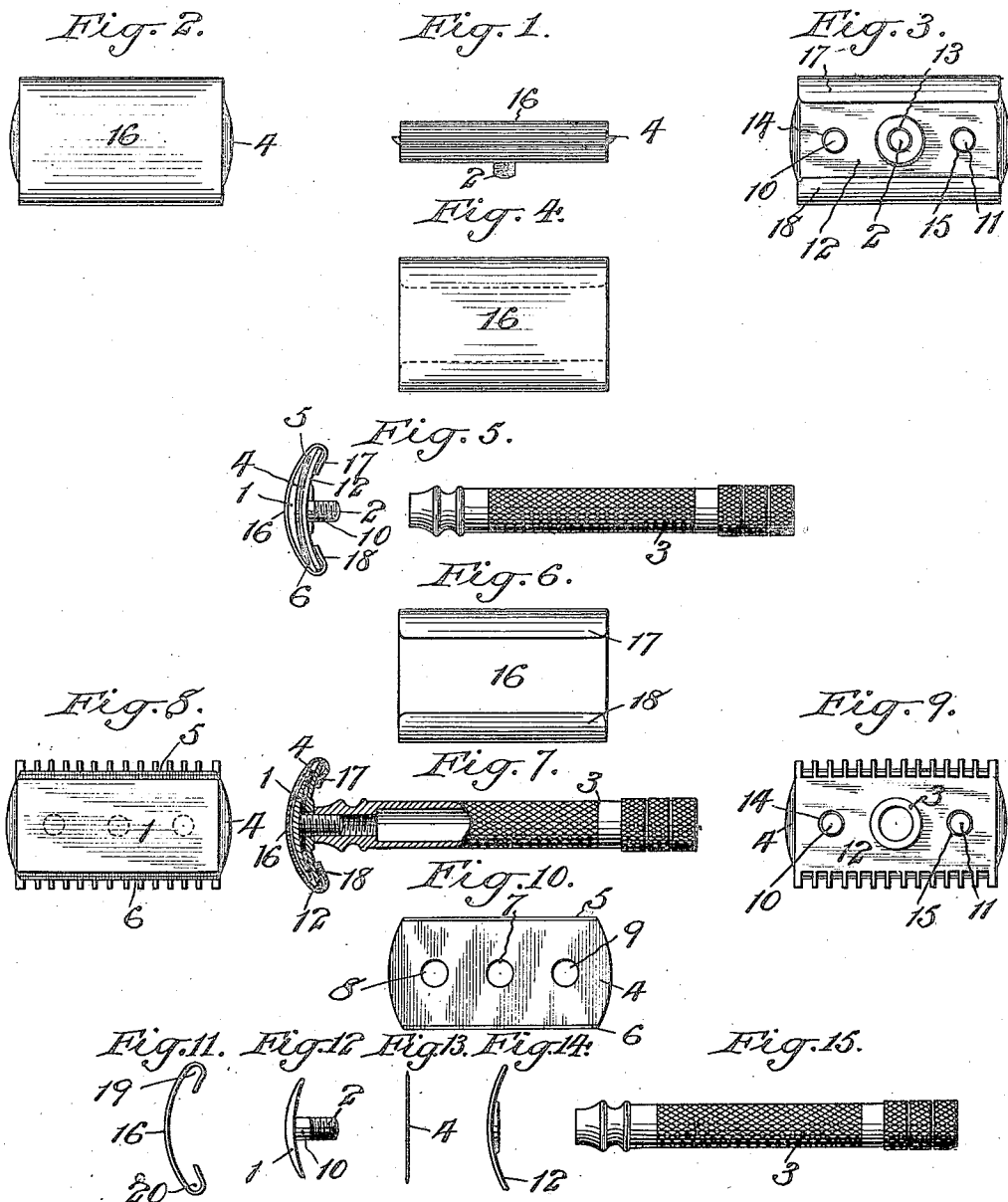


No. 875,274.

PATENTED DEC. 31, 1907.

F. B. KING.
PROTECTOR FOR SAFETY RAZOR BLADES.
APPLICATION FILED MAY 8, 1907.



Witnesses:
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Henry Thieme.

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UNITED STATES PATENT OFFICE.

FREDERICK BUNNELL KING, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GILLETTE SAFETY RAZOR COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MAINE.

PROTECTOR FOR SAFETY-RAZOR BLADES.

No. 875,274.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed May 8, 1907. Serial No. 372,462.

To all whom it may concern:

Be it known that I, FREDERICK BUNNELL KING, a citizen of the United States, and resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new and useful Improvement in Protectors for Safety-Razor Blades, of which the following is a specification.

This invention consists in a protector for the blade of a safety razor and is particularly designed for use in protecting the blade of a safety razor of the well known Gillette type where the tendency of the blade is to return to its normal position when the parts are loosened, the protector being arranged to be frictionally held in its protective position by the separation of the back plate and guard of the razor due to the said tendency of the blade to return to its normal position.

This protector also serves to hold the back plate, the blade and the guard in assembled adjustment when they are detached from the handle of the razor.

A practical embodiment of the invention is represented in the accompanying drawings, in which

Figure 1 is a side view of the parts inclosed by the protector shield when detached from the handle of the safety razor, Fig. 2 is a top plan view of the same, Fig. 3 is a bottom plan view, Fig. 4 is a top plan view of the protector, Fig. 5 is an end view of the back plate, the blade and the guard inclosed in the protector and a side view of the detached handle, Fig. 6 is a bottom plan view of the protector, Fig. 7 is a view of the razor with the parts assembled, the view being partially in longitudinal central section and partially in side elevation, the protector being shown as released from its frictional engagement with the back plate and guard to permit its ready removal therefrom. Fig. 8 is a top plan view of the razor with the protector removed, Fig. 9 is a bottom plan view of the same, Fig. 10 is a detail plan view of the blade, and Figs. 11, 12, 13, 14 and 15 are detail views of the protector, the back plate, the blade, the guard and the handle, respectively.

The back plate of the safety razor in connection with which my protector is shown, is denoted by 1 and it has a screw-threaded bolt 2 uprising therefrom. The handle of the razor is denoted by 3 and it has a screw-

threaded engagement with the bolt 2 of the back plate for removably securing the handle thereto. The blade is denoted by 4 and it is herein shown as being provided with two opposite cutting edges 5, 6 and with a hole 7 for the passage of the screw bolt 2 of the back plate therethrough. This blade is also provided with holes 8 and 9 for receiving short studs 10, 11, which uprise from the back plate 1 upon opposite sides of the screw bolt 2. This blade is made of some flexible material, such, for instance, as sheet steel.

The guard is denoted by 12 and is provided with a central hole 13 for the passage of the screw bolt 2 of the back plate therethrough and also with holes 14, 15, for receiving the studs 10 and 11 of the back plate. The surfaces of the back plate and guard adjacent to the opposite faces of the blade 4, are curved transversely so that as the back plate and guard are drawn together by the screwing of the handle on to the bolt 2, the blade will be forced out of its normal position. As the handle is unscrewed from the bolt 2, the tendency of the blade to return to its normal position will force the back plate and guard away from each other.

The protector for the cutting edge or edges of the blade comprises a shield 16 having its side edges 17, 18, bent over to form pockets 19, 20, for inclosing the cutting edges 5, 6 of the blade when the shield is inserted over the back plate, the blade and the guard. This shield is transversely curved as shown and is of such shape that when the parts are drawn into position for use, the shield may be readily slid into and out of its protective position. When it is desired to frictionally hold the shield in its protective position, the handle is unscrewed from the back plate, thus permitting the back plate and guard to be forced apart by the tendency of the blade to resume its normal position, thereby cramping the parts within the shield. The handle may then be entirely removed and the remaining parts of the razor will be held and thoroughly protected by the shield.

It will be seen that the protector herein described serves not only as an absolute protection for the cutting edges of the blade but also serves to hold the back plate, the blade and the guard in assembled adjustment even when released from the handle, thus permit-

ting the parts to be packed into a very small compass when not desired for use.

It is evident that various changes might be resorted to in the construction, form and arrangement of the several parts without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the form herein shown, but

What I claim is:

10 1. In a safety razor, a handle, a back plate, a flexible blade, a guard and a protector comprising a removable shield for frictionally retaining the back plate, the blade and the guard in assembled adjustment by
15 the spreading apart of the back plate and guard owing to the tendency of the blade to return to its normal position when the parts are released from the handle.

20 2. In a razor, a back plate, a flexible blade having a cutting edge, a guard and a removable shield for inclosing the cutting edge of the blade, engaged and frictionally held in position by the back plate and guard.

25 3. In a razor, a back plate, a flexible blade having two opposite cutting edges, a guard and a removable shield for inclosing the cutting edges of the blade, engaged and frictionally held in position by the back plate and guard.

30 4. In a razor, a back plate, a flexible blade having a cutting edge, a guard and a removable shield for inclosing the cutting edge of the blade, arranged to be frictionally held in position by the spreading apart of the back
35 plate and guard by the tendency of the blade to return to its normal position.

40 5. In a razor, a back plate, a flexible blade having two opposite cutting edges, a guard and a removable shield for inclosing the cutting edges of the blade arranged to be frictionally held in position by the spreading apart of the back plate and guard by the tend-

ency of the blade to return to its normal position.

6. In a razor, a handle, a back plate, a flexible blade having a cutting edge, a guard and a removable shield for the cutting edge of the blade arranged to be frictionally held and released as the back plate and guard are moved away from or toward each other. 50

7. In a razor, a handle, a back plate, a flexible blade having two opposite cutting edges, a guard and a removable shield for the cutting edges of the blade arranged to be frictionally held and released as the back
55 plate and guard are moved away from or toward each other.

8. In a razor, a back plate, a handle having a screw-threaded engagement therewith, a guard, a flexible blade interposed between
60 the back plate and guard and a removable shield for the cutting edge of the blade arranged to be frictionally held and released as the back plate and guard are moved away from or toward each other as the handle is
65 turned.

9. In a razor, a back plate, a handle having a screw-threaded engagement therewith, a guard, a flexible blade interposed between
70 the back plate and guard and a removable shield for the cutting edges of the blade arranged to be frictionally held and released as the back plate and guard are moved away from or toward each other as the handle is
75 turned.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this sixth day of May, 1907.

FREDERICK BUNNELL KING.

Witnesses:

HENRY GREENSTEIN,
J. A. PEASE.