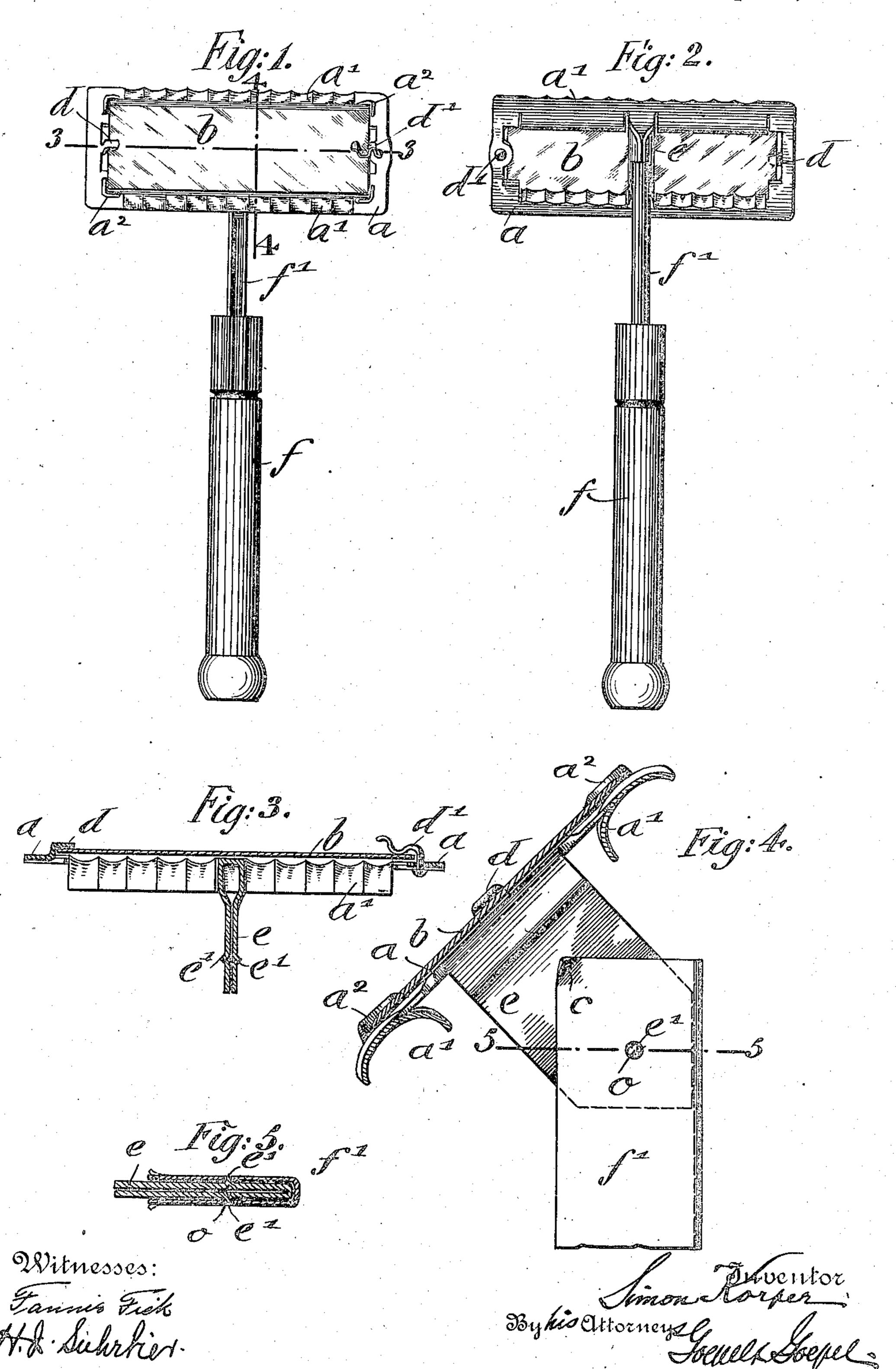
## S. KORPER. SAFETY RAZOR. APPLICATION FILED JULY 23, 1908.

919,888.

Patented Apr. 27, 1909.



## UNITED STATES PATENT OFFICE.

SIMON KORPER, OF NEW YORK, N. Y.

## SAFETY-RAZOR.

No. 919,888.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed July 23, 1908, Serial No. 444,884.

To all whom it may concern:

Be it known that I, SIMON KORPER, a citizen of the United States of America, residing at New York, in the borough of Manhattan, 5 county and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the follow-

ing is a specification.

This invention relates to an improved 10 safety-razor of that class in which the razorblade is sharpened at opposite edges and adapted to be used for shaving with either edge by reversing the frame, but without reversing the blade itself; and the invention 15 consists of a safety-razor the frame of which is provided with guard-teeth at opposite sides and at the ends with means for holding a blade sharpened at both side-edges in position on the frame, said frame being provided 20 with a short shank having locking pins that are introduced into the doubled-up shank of the holder, said shank being provided with perforations receiving the pins and with outwardly-bent ends for permitting the inser-25 tion of the shank of the razor-frame. The end of the shank of the razor-frame is made V-shaped so that either one or the other of the inclined edges fits against the back of the holder-shank, and reversibly holds the 30 frame in a predetermined inclined position so as to permit the use of either edge of the blade.

In the accompanying drawing, Figure 1 represents a front-elevation of my improved 35 safety-razor, Fig. 2 is a rear-elevation of the same, Fig. 3 is a longitudinal section on line 3, 3, Fig. 1, drawn on a larger scale, Fig. 4 is a transverse section on line 4, 4, Fig. 1, and Fig. 5 is a detail transverse section on line 5, 40 5, Fig. 4.

Similar letters of reference indicate cor-

responding parts.

Referring to the drawing, a represents the frame of my improved safety-razor. The 45 frame is provided at both sides with guardteeth a1 and at the four corners of the frame with raised corner-pieces a<sup>2</sup> that hold a blade b in position against pressure on the other edge. The blade b is provided with sharp-50 ened edges at both sides and is retained in position on the frame a by an overhanging  $\log d$  at one side of the frame and a swiveled lug or catch  $d^1$  at the opposite side, so that by turning the catch  $d^{\hat{i}}$  sidewise the blade

can be readily removed from the frame for 55 cleaning or resharpening. When the blade is placed in position again under the lug d and within the corner-pieces  $a^2$  the catch  $d^1$  is turned over the opposite edge of the blade so as to hold the blade firmly in position in the 60

frame for shaving.

The frame is provided with a shank e that extends at right angles to the body of the frame and is formed by doubling up the stock that is punched up from the body of 65 the frame and placing the shank - pieces alongside of each other. The end of the shank is made V-shaped, the angle formed by the V being rectangular, as shown in Fig. 3. The shank is provided at each side in 70 line with the apex of the angle with a short bent-up projection e<sup>1</sup> which can be readily inserted into the shank  $f^1$  of a holder f. The shank  $f^1$  is of U-shaped cross-section and open at the front and top edges, the upper front 75 corners being bent in outward direction so as to facilitate the insertion of the locking pins or projections between the opposite side-walls of the shank until the pins are engaged by holes o in the shank, as shown in 80 Fig. 3. In this position one inclined edge of the V-shaped shank of the frame a abuts against the back of the holder-shank  $f^1$  so as to hold the frame firmly in a predetermined inclined position in said shank and thus per- 85 mit shaving with the lower edge of the razor. When the edge becomes dull the blade is not removed for sharpening, but the frame removed from the holder by moving it in upward direction so as to permit the detaching 90 of the shank of the frame from the shank of the holder. The frame is then reversed and the shank of the frame inserted into the doubled-up shank of the holder until the locking pins are sprung into the holes of the shank. 95 The opposite inclined edge of the shank e abuts then against the back of the shank of the holder so as to again lock the razor-frame in rigid position. The opposite sharp edge of the blade is now at the lower end of the 100 frame and used for shaving until it has also become dull. The blade is then removed from the holder and sharpened and then reinserted, being then used first at one edge and then at the opposite edge as described. 105

By my invention a safety-razor of very simple and yet effective construction is obtained, in which the blade is not reversed for shaving with the opposite edge, but the frame of the same reversed, said frame being supported in either position of the blade by the interlocking connection of the shank of the frame with the shank of the holder.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent:

1. A safety-razor comprising a blade-holding frame, a shank on said frame, a holdershank of U-shaped cross-section open at the front and top edges, and means to rigidly but detachably secure the frame-shank within

the upper end of the holder shank.

2. In a safety-razor, a blade-holding frame having a shank, a holder-shank comprising opposite side-walls of sheet-metal between which the frame-shank is sprung into interlocked relation with said holder-shank, and means to hold the frame-shank rigidly in inclined position with respect to the holder-shank.

3. A safety-razor comprising a blade-hold-ing frame, a shank made of portions bent up from the frame and extending alongside each other, and a holder-shank of U-shaped cross-section within which said portions fit and

with which they detachably interlock.

4. A safety-razor comprising a blade-holding frame, a shank extending therefrom, and a holder-shank having opposite side-walls between which said first-named shank is placed and with which it is detachably interlocked in an inclined position, said holder-shank being of U-shaped cross-section and open at the front and top edges for the insertion of the

shank of the blade-holding frame.

5. In a safety-razor, the combination of a blade-holding frame, a shank on said frame composed of portions formed of spring metal extending alongside each other, and a holder-shank embodying opposite side-walls between which said portions of the frame-shank enter, and into interlocking relation with which said portions are sprung.

6. A safety-razor comprising a blade-holding frame having thereon a frame-shank having rear edges disposed at an angle to each other, a U-shaped holder-shank comprising resilient side-walls and a connecting 50 wall, and means carried by said frame-shank adapted to be vieldably held by said side-walls to hold said frame-shank between said side-walls and one of said rear-edges against said connecting wall.

7. A safety-razor comprising a blade-holding frame having thereon a frame-shank provided with oppositely extending projections and having rear edges disposed at an angle to each other, a holder-shank of U-60 shaped transverse section comprising a connecting wall and resilient side-walls having opposed holes, said projections being adapted to engage said holes and yieldably hold said frame-shank between said side-wall and any 65 one of said rear edges against said connecting wall.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

SIMON KORPER.

Witnesses:

PAUL GOEPEL, HENRY J. SUHRBIER.