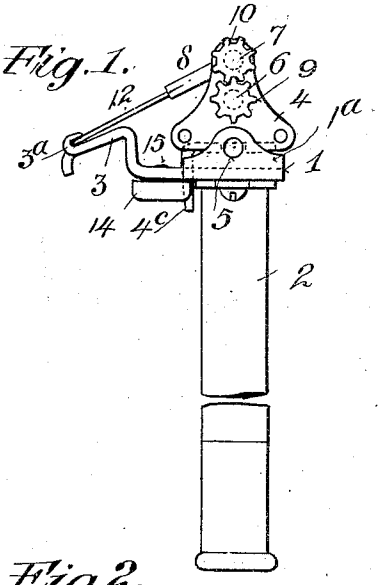
F. A. FULLER.

SAFETY RAZOR.

APPLICATION FILED JUNE 18, 1910.

1,147,229. Patented July 20, 1915.

Fig. 1.



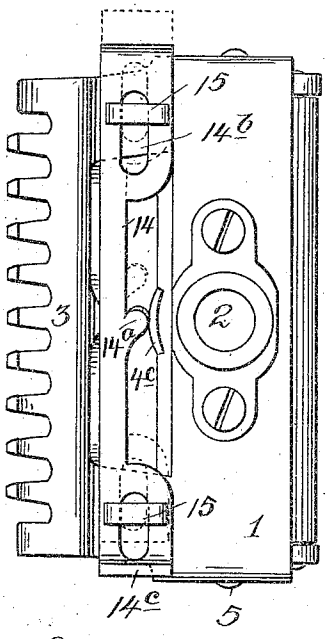
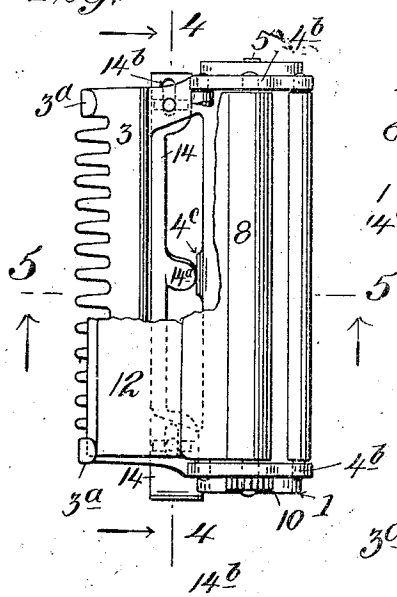


Fig. 3.

Fig. 2.



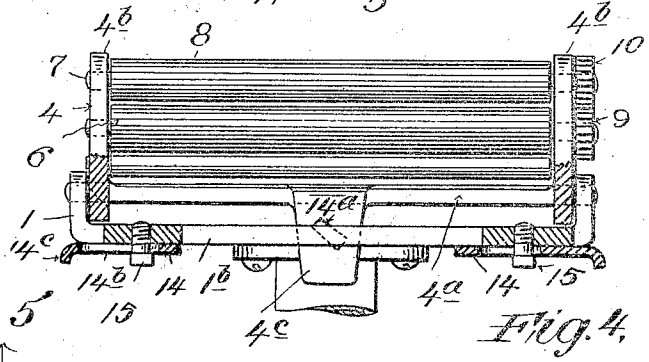


Fig. 4.

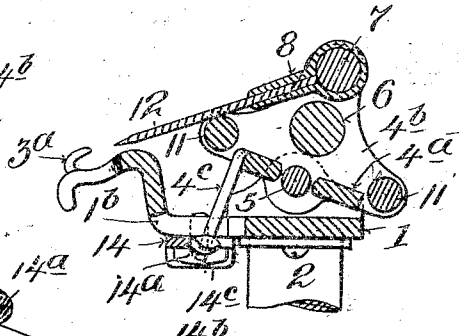


Fig. 5.

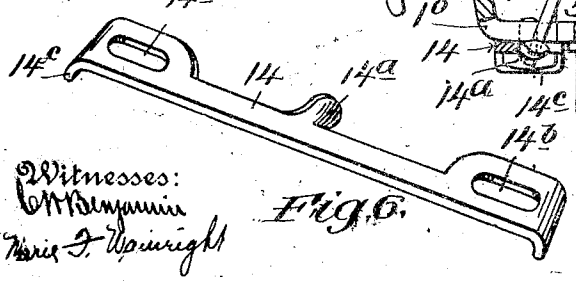


Fig. 6.

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UNITED STATES PATENT OFFICE.

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SAFETY-RAZOR.

1,147,229. Specification of Letters Patent. Patented July 20, 1915.

Application filed June 13, 1910. Serial No. 567,555.

To all whom it may concern:

Be it known that I, FRANZ A. FULLER, a citizen of the United States, and resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

My invention relates to improvements in safety razors, and has for its object to provide improved means for retaining the blade in connection with the guard and for releasing the blade from the guard, and also to enable the blade to be stropped without removing it from its holder.

My invention comprises novel details of improvement and combinations of parts that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming part hereof, wherein—

Figure 1 is a side view of a safety razor embodying my improvements; Fig. 2 is a plan view thereof partly broken away: Fig. 3 is an under side view of the razor; Fig. 4 is a section substantially on the line 4, 4, in Fig. 2; Fig. 5 is a section on the line 5, 5, in Fig. 2, showing the parts in a different position, and Fig. 6 is a detail perspective of the blade retaining member.

Similar numerals of reference indicate corresponding parts in the several views.

The numeral 1 indicates a suitable frame or base shown provided with a handle 2 and having a guard 3 which may be of any suitable construction. The parts 1 and 3 may be made of a suitable piece of material and the handle may be suitably attached thereto.

At 4 is a movable frame carried by frame or base 1, and shown comprising a base piece 4^c and uprights 4^b at opposite ends, adapted to rock or move upon and relatively to frame or base 1. For this purpose I have shown a rod 5 supported upon frame 1, as upon uprights or ears 1^a at opposite ends thereof, the frame 4 being pivotally supported upon rod 5 so as to rock back and forth relatively to the guard. Frame 4 is shown provided with a shaft 6 and above the same is a shaft 7 journaled in frame 4 and provided with a blade holder 8 secured thereto so as to rock therewith, said shafts being geared together as by gears 9, 10, so that blade holder 8 will be rocked when shaft 6 is drawn back and forth in contact with a strop that is passed between the lower part of roller 6 and base 4^a. Frame 4 is also shown provided with tension rods or rollers 11 on opposite sides against which the strop bears when passed through above rollers 11 and beneath shaft 6. Guard 3 is shown provided with blade stops 3^a against which the cutting edge of the blade 12 abuts, which stops are shown in the form of hooks serving to retain the blade in shaving position upon the guard. Means are provided to hold the frame 4 in shaving position, as illustrated in Fig. 1, or to release said frame to permit it to rock to withdraw the blade from the guard, as illustrated in Fig. 5. For this purpose I have shown frame 4 as provided with a projection 4^e adapted to engage a projection 14^a on a movable member 14 carried by frame or base 1. Projection 4^e is shown passing through an opening 1^b in frame 1. Member 14 is shown in the form of a bar mounted to slide lengthwise of the razor frame, and for this purpose member 14 is shown provided with slots 14^b receiving screws or keepers 15 screwed or otherwise secured in base 1. The outer ends 14^c of member 14 are shown bent downwardly in convenient position to be pushed by the thumb or finger.

When member 14 is slid in one direction to carry the projection 14^a out of alinement with projection 4^e of frame 4, the latter frame will be released and can move backwardly so that blade 12 may be lifted from the guard, whereby the blade may be swung over upwardly for removal or insertion, or to be stropped. For the latter purpose a strop will be slid through frame 4 beneath roller 6 and when the strop is held taut and the razor is reciprocated along the strop the blade will be swung back and forth for stropping its edge. When the blade is to be used for shaving it is laid down upon the guard, frame 4 is swung forwardly to engage the blade edge against stops 3^a, and then member 14 is slid along the frame to engage its projection 14^a with projection 4^e of frame 4, thereby locking said frames in operating relation and maintaining the blade in engagement with stops 3^a. The hook form of stops 3^a prevents the blade

from rising from the guard and the blade will be in shaving position as in Fig. 1.

Changes may be made in the details set forth, within the scope of the appended claims, without departing from the spirit of my invention.

Having now described my invention what I claim is:—

1. A safety razor comprising a frame having a guard, a frame for a blade carrier, a blade carrier rotatably mounted in the last mentioned frame, means for pivotally connecting the second mentioned frame to the first mentioned frame whereby a blade carried by the blade holder may be moved by the travel of the second mentioned frame into and out of engagement with the guard, and razor stropping mechanism associated with the second mentioned frame.

2. A safety razor comprising a frame provided with a guard having blade stops, a frame mounted on the first mentioned frame and having a swinging movement relative thereto, a blade holder carried by the second mentioned frame, the blade of which is adapted to be carried into engagement with or removed from engagement with the blade guard by the movement of the said second mentioned frame, and blade holder oscillating means associated with the second mentioned frame.

3. A safety razor comprising a frame provided with a guard, a handle for said frame, a second frame, means for movably mounting the second frame on the first mentioned frame, a blade holder on the second mentioned frame, a locking device carried by one of the frames, a member carried by the other of said frames with which the said locking device is adapted to interlock for holding the frames in one position of adjustment, and a razor sharpening mechanism associated with the second mentioned frame.

4. A safety razor comprising a frame provided with a guard, a frame mounted thereon, a pivot by which the frames are movably connected with relation to each other, a blade holder carried by the second mentioned frame, and a blade stropping mechanism operative when the second mentioned frame is tilted away from the guard.

5. A safety razor comprising a frame provided with a guard, a handle for the frame, a frame movably supported by and independently of the first named frame, a blade sharpening mechanism associated with the second mentioned frame, said sharpening mechanism including a blade holder, and means for holding the frames against movement with relation to each other when the blade is in position for shaving with relation to the guard.

6. A safety razor comprising a frame provided with a guard, a frame movably supported by the first named frame and provided with a blade holder, a pivot for the second mentioned frame, whereby it is supported on the first mentioned frame, means for temporarily holding one frame against movement with relation to the other frame when the blade is in shaving position with relation to the guard, and a blade stropping mechanism associated with the movable frame operative when the said second mentioned frame is released.

Signed at Newark, in the county of Essex and State of New Jersey this fifteenth day of June A. D. 1910.

FRANZ A. FULLER.

Witnesses:
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J. A. RAUSEHOUSEN.