No. 659,917. Patented Oct. 16, 1900.

E. E. DEPUTY.

SAFETY RAZOR.

(Application filed Mar. 13, 1900.)

(No Model.)

Fig. 1.

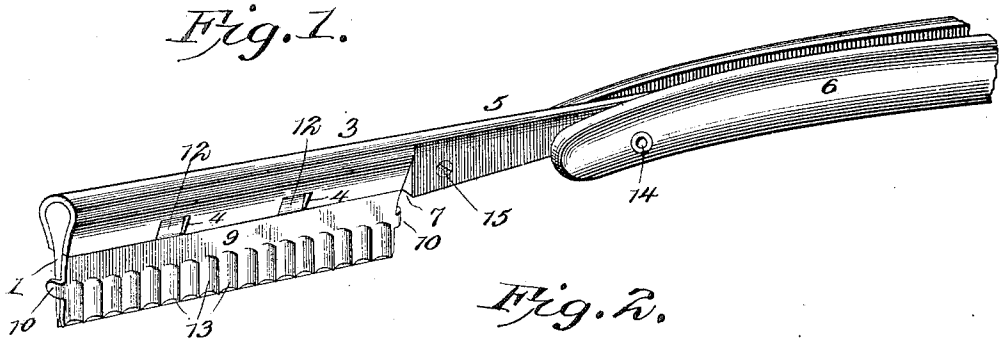


Fig. 2.

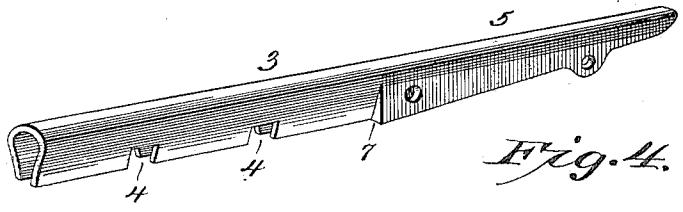


Fig. 4.

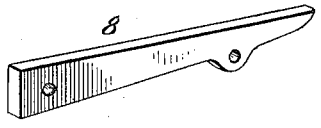


Fig. 3.

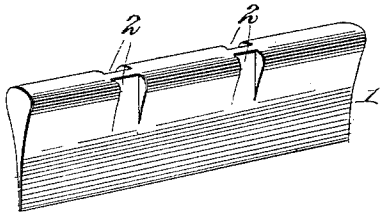


Fig. 5.

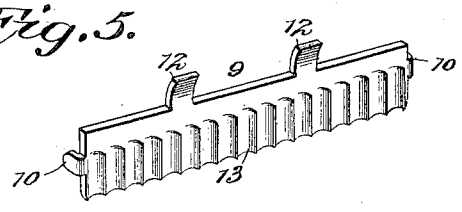


Fig. 6.

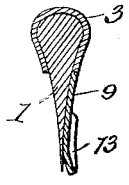


Fig. 7.

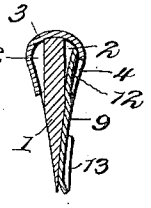


Fig. 8.



Witnesses
Howard D. Orr.
T. J. Riley

E. E. Deputy, Inventor.
By his Attorneys,
C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ELIJAH E. DEPUTY, OF MILLVILLE, NEW JERSEY, ASSIGNOR OF ONE-HALF TO EUGENE B. GOODWIN, OF SAME PLACE.

SAFETY-RAZOR.

SPECIFICATION forming part of Letters Patent No. 659,917, dated October 16, 1900.

Application filed March 13, 1900 Serial No. 8,469. (No model.)

To all whom it may concern:

Be it known that I, ELIJAH E. DEPUTY, a citizen of the United States, residing at Millville, in the county of Cumberland and State of New Jersey, have invented a new and useful Safety-Razor, of which the following is a specification.

The invention relates to improvements in safety-razors.

One object of the present invention is to improve the construction of safety-razors and to provide a simple, inexpensive, and efficient one capable of enabling the operation of shaving to be rapidly and thoroughly performed without liability of cutting the face and adapted to be readily stropped or honed similar to an ordinary razor and to be quickly and conveniently cleaned and dried after the operation of shaving has been completed.

A further object of the invention is to provide a safety-razor having a removable and reversible blade and to enable the guard to be reversed and changed from one side of the blade to the other.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a safety-razor constructed in accordance with this invention. Fig. 2 is a detail perspective view of the back which holds the blade. Fig. 3 is a detail view of the blade. Fig. 4 is a detail view of the filling-piece of the shank. Fig. 5 is a perspective view of the guard. Figs. 6 and 7 are sectional views taken transversely of the blade of the razor, illustrating the arrangement of the guard. Fig. 8 is a similar view taken transversely of the shank.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a reversible blade provided at opposite sides with transverse grooves 2, located equidistant of the ends of the blade and extending through the enlargement of the back of the blade and forming shoulders arranged in pairs, as clearly illustrated in Fig. 3 of the accompanying drawings. The blade 1 is arranged within a back or holder 3, constructed of resilient material and conforming to the configuration of the back of the blade and adapted to clamp the same. The back or holder 3, which is substantially U-shaped in cross-section, is provided with recesses 4, located adjacent to and registering with the grooves of the blade and forming a series of spring clamping portions for engaging the blade, whereby the latter is firmly held in place. The back or holder 3 is provided with an extension forming a shank 5, which is pivoted to a handle 6 in the usual manner, and the sides of the back or holder are bent at 7, adjacent to the inner end of the shank, to enable the sides of the latter to be arranged parallel with each other and at the same time permit the sides of the back or holder proper to converge and exert a spring clamping action on the blade.

The blade is introduced endwise into the back or holder, and it is locked in such position and held against longitudinal movement by means of a removable and reversible guard fitting against the blade, at one side thereof, and forming practically a continuation of the adjacent side of the back or holder 3, as clearly shown in Fig. 1. The guard is provided at its ends with transversely-disposed resilient lugs 10, and it has resilient arms or tongues 12 extending upward and outward from the inner longitudinal edge of the guard into the grooves 2 and the recesses 4 and forming keys and also serving to retain the guard in position. The resilient arms or tongues 12 engage the shoulders or edges formed by the grooves 2 and the recesses 4, and their end portions engage the inner face of the adjacent side of the back or holder. The resilient arms or tongues are bowed or curved, and the end lugs or projections 10 are adapted to clamp the ends of the blade. The guard is adapted to be readily removed by simply depressing the resilient arms or tongues, which can be conveniently done by holding the razor in both hands and engaging the tongues with the thumbs. This will readily throw the guard outward and disengage the clamping projections 10 from the ends of the blade. The outer portion of the guard extends beyond the cutting edge of the blade, as clearly illustrated in Figs. 6 and 7 of the accompanying drawings, and it is provided with a longi-

tudinal series of transversely-disposed crimps or corrugations 13, which while permitting the hair to come in contact with the cutting edge of the blade effectually prevent the skin from being cut. The crimped or corrugated edge of the guard, by preventing the skin from coming in contact with and being cut by the blade, enables the operation of shaving to be rapidly performed, and thereby adapts the safety-razor for use in barber-shops, where speed is a desideratum.

The guard is adapted to be readily arranged at either side of the blade, as each side of the razor is constructed the same, and when the said guard is removed the razor is adapted to be stropped and honed similar to an ordinary razor, and after the operation of shaving has been completed the blade and the guard may be cleaned and dried by simply removing the latter and without detaching the former from the back or holder. The blade may be removed and turned end for end, and the filling-piece 8 is retained in the shank or extension 5 of the back or holder by means of a rivet 14 and a screw 15. The rivet 14 pivots the shank to the handle, and a screw 15 passes through the shank, near the inner end thereof, and clamps the sides of the said shank against the filling-piece. The screw is loosened when it is desired to remove the blade from the back or holder, and the said screw, by drawing the sides of the shank together, is adapted to compress the back or holder, and thereby increase the clamping action of the same. The shank affords a smooth firm hold, and it serves to space the sides of the handle apart, so that there is no liability of the blade coming in contact with the same and being nicked.

It will be seen that the safety-razor is exceedingly simple and inexpensive in construction, that while it is adapted for general use it is especially advantageous for use in barber-shops, as it will enable the operation of shaving to be rapidly performed without liability of cutting the face, and that the parts may be quickly dried and cleaned after shaving by simply removing the guard and without detaching the blade. Furthermore, it will be clear that the blade may be stropped and honed without removing it from the back or holder and that the guard is reversible and may be readily changed from one side of the blade to the other. It will also be apparent that the resilient tongues or arms at the inner longitudinal edge of the guard not only operate to retain the guard in position on the blade, but that they also, by engaging the edges of the back and the blade at the notches 4 and the grooves 2, form keys for holding the blade against longitudinal movement, and that by depressing them with the thumbs the guard may be quickly and conveniently disengaged from the razor.

What is claimed is—

1. A safety-razor comprising a blade, a back or holder extending along and receiving the back of the blade and engaging the blade at both of its side faces, and a guard located at one side of the blade and extending from the cutting edge thereof to the adjacent side edge of the back or holder, said guard being detachably interlocked with the blade and with the back or holder and retaining the former in the latter, substantially as described.

2. A safety-razor comprising a back or holder, a blade fitted within the same, and a guard extending from the back or holder to the cutting edge of the blade and provided with a resilient tongue detachably engaging the blade and the back or holder, and securing the former within the latter and retaining the guard in place, substantially as described.

3. A safety-razor comprising a back or holder, a blade fitted within the same, and a guard arranged against the blade at one side thereof and extending from the back or holder to the cutting edge of the blade and provided at its ends with lugs engaging the ends of the said blade, said guard being provided at its inner edge with a tongue detachably interlocked with the blade and with the back or holder, substantially as described.

4. A safety-razor comprising a back or holder, a blade fitted within the back or holder and provided with a groove, and a guard provided with a tongue interposed between the back or holder and the blade and engaging the groove of the latter, whereby the guard is retained in place and the blade held against longitudinal movement, substantially as described.

5. A safety-razor comprising a back or holder provided at opposite sides with notches, a blade fitted within the back or holder and provided at opposite sides with grooves registering with the notches, and a reversible guard provided with resilient tongues or arms engaging the notches of the back or holder and the grooves of the blade, substantially as and for the purpose described.

6. A safety-razor comprising a blade, a back or holder conforming to the configuration of the back of the blade and receiving and embracing the same, said back or holder being provided with a shank or extension, a handle pivoted to the shank or extension, and a guard located at one side of the blade and detachably interlocked with the same and with the back or holder and retaining the former in the latter, substantially as described.

7. A safety-razor comprising a blade, a back or holder approximately U-shaped in cross-section conforming to the configuration of and receiving the back of the blade and terminating short of the cutting edges thereof, and a guard arranged at one side of the blade and extending from the adjacent side edge of the back or holder to the cutting edge of the blade and forming a continuation of the adjacent side of the back or holder and engaging the said blade and the back or

holder, whereby the blade is retained in the back or holder, substantially as described.

8. A safety-razor comprising a back or holder substantially U-shaped in cross-section, a blade arranged within the back or holder and projecting beyond both sides thereof, and a reversible guard extending from the back or holder to the cutting edge of the blade and forming a continuation of the adjacent side of the back or holder and interlocked with the latter and the blade and capable of engaging the said back or holder at either side of the blade, substantially as described.

9. A safety-razor comprising a blade, a back or holder receiving the back of the blade and engaging both of the side faces thereof and provided at opposite sides with notches, a reversible guard adapted to be arranged at either side of the blade and extending from the adjacent edge of the back or holder to the cutting edge of the blade and forming a continuation of the side of the back or holder, said guard being provided with arms or tongues extending through the notches, and holding the blade against longitudinal movement in the back or holder, substantially as described.

10. A safety-razor comprising a back or holder provided at opposite sides with notches, a reversible blade provided at opposite sides with transverse grooves located equidistant of the ends of the blade at the thickened rear portion thereof, said blade being arranged within the back or holder with the grooves registering with the said notches, and the reversible guard engaging the ends of the blade and provided at its inner edge with arms or tongues extending through the said notches and arranged in grooves of the blade, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ELIJAH E. DEPUTY.

Witnesses:
H. F. WHITAKER,
THOMAS WHITAKER.