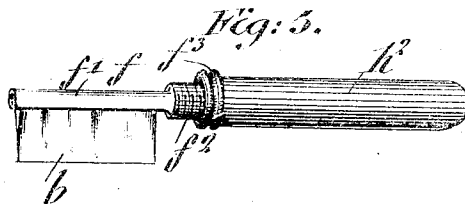
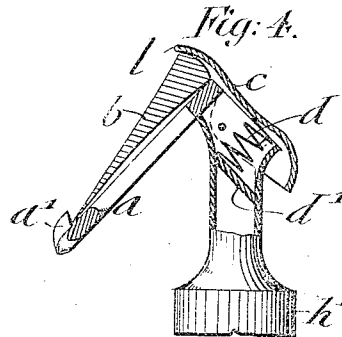
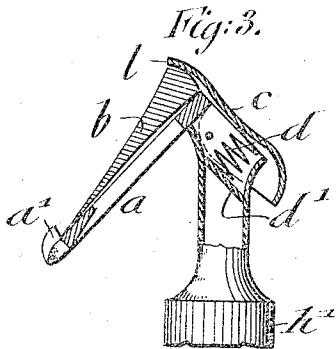
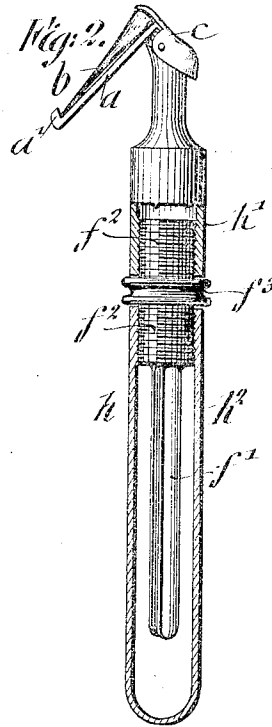
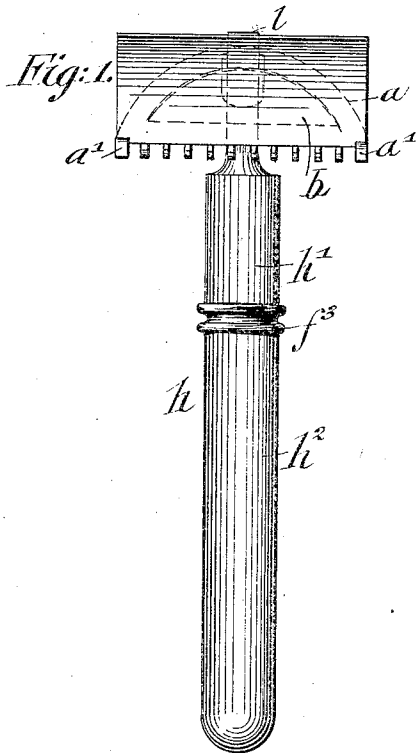


S. HAUSER & E. SHEPHERD.
SAFETY RAZOR.

APPLICATION FILED AUG. 7, 1907. RENEWED OCT. 22, 1908.

935,979.

Patented Oct. 5, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

SIMON HAUSER AND EDWARD SHEPHERD, OF NEW YORK, N. Y., ASSIGNORS, BY MESNE ASSIGNMENTS, TO SIMON HAUSER, OF NEW YORK, N. Y.

SAFETY-RAZOR.

935,979.

Specification of Letters Patent.

Patented Oct. 5, 1909.

Application filed August 7, 1907, Serial No. 387,430. Renewed October 22, 1908. Serial No. 459,093.

To all whom it may concern:

Be it known that we, SIMON HAUSER and EDWARD SHEPHERD, citizens of the United States, residing in New York, in the borough of Queens and borough of Brooklyn, respectively, and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

10 This invention relates to improvements in safety-razors by which the blade can be readily removed for sharpening and replaced in position on the guard-frame, as well as to a holder for the blade, which is located in the handle of the razor, so as to permit the convenient stropping of the blade on removing it from the guard-frame and inserting it in the blade-holder.

In the accompanying drawings, Figure 1 represents a front-elevation of our improved safety-razor, Fig. 2 is a side-elevation, partly in section through the handle of the same, Figs. 3 and 4 are vertical transverse sections showing different forms of the guard-frame, and Fig. 5 is a perspective view of the handle for the safety-razor, shown with the blade-holder in position for stropping.

Similar letters of reference indicate corresponding parts throughout the several figures.

Referring to the drawings, *a* represents the guard-frame of our improved safety-razor. The guard-frame is made semi-circular or other shape and provided at its front edge with raised studs *a'* which are recessed at their rear parts so as to hold the corners of the razor-blade *b*, which latter is of the usual form with concave sides. The guard-teeth that are located at the front edge of the guard-frame between the recessed end-studs are either provided with channels at the under-side for the passage of the hairs, as well as the soap-foam, as shown in Fig. 3, or with channels located at the upper side, as shown in Fig. 4. We prefer the form shown in Fig. 4 as the hairs and foam pass more easily through between the teeth and over the upper surface of the guard-frame than when the passages are at the under-side.

The butt of the blade is held by a catch *c* that is fulcrumed to the upper end of the handle and that is provided with a short lip *l* at the upper end of the catch, the rear or handle part of the catch being actuated

by a helical spring *d* which is interposed between the same and a seat *d'* at the upper hollow part of the handle. The spring acting on the pivoted catch is located in the hollow handle-end and covered by the catch, which extends completely over said hollow end. The spring presses the lip *l* of the catch firmly on the butt of the blade *b* so that the front corners of the same are firmly held in the recessed lugs *a'*, whereby the blade is prevented from dropping from the frame or shifting its position thereon. The helical spring *d* is freely seated in the seat formed in the upper hollow end of the handle and presses with its upper end directly against the under-surface of the catch, the latter acting at the opposite side of the fulcrum or pivot upon the butt of the blade. The force exerted by the catch is directed in the plane of the blade and urges the latter forwardly so as to hold it firmly in position in the recessed corner-lugs. When the blade is to be removed for cleaning or stropping, the thumb is pressed on the rear overhanging part of the catch against the tension of the spring, so that the upper part or lip releases the rear part of the blade and permits the dropping or removing of the same from the guard-frame *a*.

The safety-razor is of extremely simple construction and permits the insertion and removal of the blade with great facility by a simple pressure on the rear part of the fulcrumed, spring-actuated catch.

The handle *h* is made in two sections *h'* and *h''*, and interposed between and arranged within said sections is a holder *f* for holding the blade during the stropping thereof. Said holder consists of a part *f'* of U-shaped cross-section in which the blade is inserted, extending from a threaded cylindrical portion *f''* provided immediately with an annular rim *f'''*. The threads at opposite sides of the rim *f'''* are intended to engage corresponding threads formed in the ends of the handle-sections, so that the blade-holder can be inclosed in the handle, as shown in Fig. 2. The handle-sections are separated by the rim *f'''*, against which they are screwed. When the blade is to be stropped the handle-sections are unscrewed from the holder and the latter reversed and screwed into the longer section *h''*. The blade is then placed in the holder as shown in Fig. 5, and the section *h'* forms a handle

for the holder so that the blade may be readily stopped.

Having thus described our invention, we claim as new and desire to secure by Letters

5 Patent:

1. In a safety-razor, the combination of a handle carrying a guard-frame a blade lying on said guard-frame, means for holding the front edge of the razor, a pivoted catch engaging the rear edge of said blade, and resilient means for yieldably holding said catch in engagement with said rear edge.

2. In a safety-razor, the combination of a handle, a guard-frame carried by the handle, a blade lying on said guard-frame, means on said guard-frame for holding the front part of the blade, a blade-holding catch pivoted to said handle and engaging the rear edge of said blade, and resilient means for yieldably holding said catch in engagement with said rear-edge.

3. In a safety-razor, the combination, with a handle having a hollow end and a guard-frame adjacent said end, of a helical spring freely seated in the hollow end of the handle, and a spring-actuated blade-holding catch which extends over the handle-end and against the under-portion of which the upper end of said spring bears.

4. In a safety-razor, the combination of a guard-frame provided with recessed lugs at its corners, a blade placed on said guard-frame against the corner-lugs of the same, a fulcrumed and spring-actuated catch applied to the upper end of the handle of the safety-razor and provided with a lip for pressing against the thicker rear end of the blade, and a helical spring interposed between the rear portion of said catch and a seat at the upper end of the handle.

5. In a safety-razor, the combination of an outer handle-section carrying a blade at the outer end and having screw threads at the inner end, an intermediate connecting part threaded at opposite ends and screwed at its outer end to said inner end and having at its inner end a cross-sectionally U-shaped stopping holder in alinement with said con-

necting part and said handle-section, and a tubular cover section having a screw threaded end engaging the inner end of said connecting part and covering said stopping holder.

6. In a safety-razor, the combination of an outer handle section carrying a blade at its outer end and having a hollow internally screw-threaded inner end, a cylindrical connecting part having an exteriorly threaded outer end screwed into said hollow end, an intermediate rim abutting against said hollow end, and an exteriorly threaded inner end provided with an elongated cross-sectionally U-shaped stopping holder in alinement with said outer handle section and said connecting part, and a tubular cover section receiving and covering said stopping holder and having internal screw threads at its inner end for engaging the threads of the inner end of said connecting part.

7. In a safety-razor, the combination of an outer handle section carrying a blade at its outer end and having a hollow internally screw-threaded inner end, a cylindrical connecting part having an exteriorly threaded outer end screwed into said hollow end, an intermediate rim abutting against said hollow end, and an exteriorly threaded inner end provided with an elongated cross-sectionally U-shaped stopping holder in alinement with said outer handle section and said connecting part, and a tubular cover section receiving and covering said stopping holder and having internal screw threads at its inner end for engaging the threads of the inner end of said connecting part, the threads of the ends of the connecting part being of equal pitch, whereby either of said ends may be screwed into the cover section.

In testimony, that we claim the foregoing as our invention, we have signed our names in presence of two subscribing witnesses.

SIMON HAUSER.

EDWARD SHEPHERD.

Witnesses:

HENRY J. SUHRMER,
H. E. ROCKWELL.