E. N. HUMPHREY & F. S. GOODRICH.

SAFETY RAZOR.

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1,066,497. Patented July 8, 1913.

Fig 1

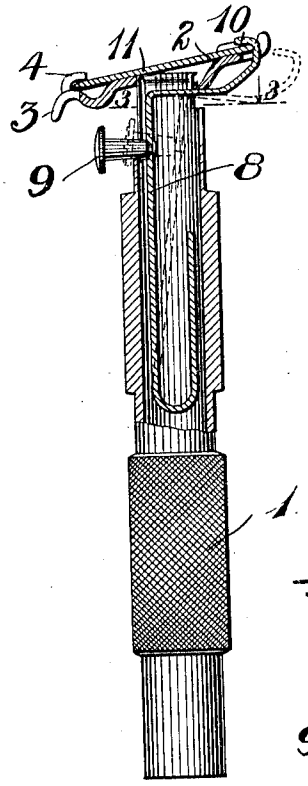


Fig 2

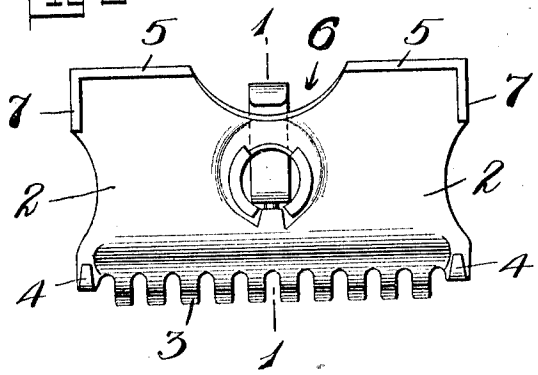


Fig 3

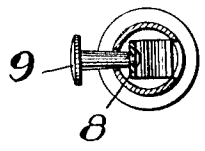


Fig 4

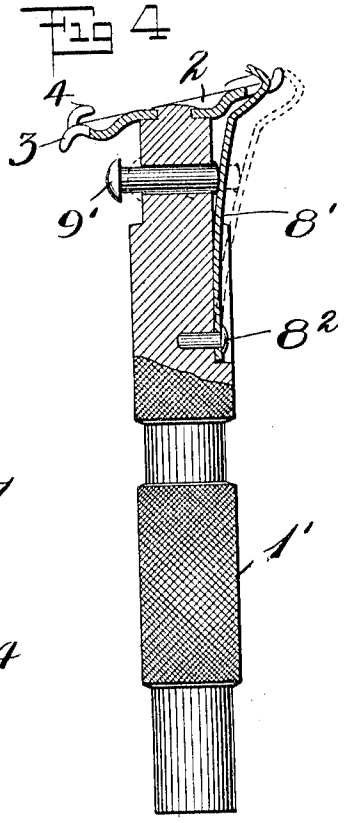
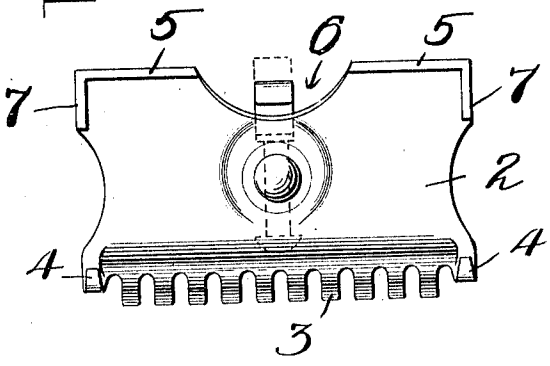


Fig 5



WITNESSES

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ERNEST N. HUMPHREY AND FRANK S. GOODRICH, OF NEW BRITAIN, CONNECTICUT, ASSIGNORS TO THE TRAUT & HINE MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

SAFETY-RAZOR.

1,066,497. Specification of Letters Patent. Patented July 8, 1913.

Application filed October 25, 1912. Serial No. 727,639.

To all whom it may concern:

Be it known that we, ERNEST N. HUMPHREY and FRANK S. GOODRICH, citizens of the United States, residing at New Britain, Hartford county, State of Connecticut, have invented certain new and useful Improvements in Safety-Razors, of which the following is a full, clear, and exact description.

Our invention relates to improvements in safety razors and has for its object to produce a safety razor having a simple and efficient holder for the razor blade.

It further has for its object to produce a holder which holds the blade without relying on a clamp extending longitudinally along the top of the blade, and in which the blade, when inserted, engages an abutment at its rear edge so as to be firmly held in place.

It further has for its object to produce a holder having a clamping spring which acts to move the rear end of the blade downward into engagement with said abutment, the front edge of the blade extending beneath rearwardly turned prongs adjacent to the guard.

The following is a description of an embodiment of our invention, reference being had to the accompanying drawings, in which,

Figure 1 shows a side elevation of a razor embodying our invention, the upper part being in section on the line 1—1 of Fig. 2. Fig. 2 is a plan view showing the holder without the blade. Fig. 3 is a section on the line 3—3, Fig. 1. Fig. 4 is a side elevation, partly in section, of a modification of a holder. Fig. 5 is a plan view of the same.

Referring more particularly to the drawings, 1 is a handle secured to a base or plate 2, which base plate is provided with a guard 3 at the ends of which are two rearwardly turned prongs 4. The rear edge of the base plate is provided with an abutment 5 cut away together with a portion of the base plate at 6 so as to form a reëntrant portion. The front face of the abutment 5 slopes backward from the base plate so that it forms an obtuse angle with the surface of the base, the angle being only slightly greater than a right angle. The base is also provided with flanges 7—7 on its ends near its rear part which serve to define the position of the razor blade so far as lateral movement is concerned, and center it upon said base. The handle carries a spring 8, provided with a thumb piece 9 riveted thereto and extending to the front of the handle 1. The upper end of the spring is provided with a hook 10 which is adjacent to the reentrant portion 6 where it engages the rear portion of the blade. The under surface of this hook 10 is slanted upward so that it forms a small angle with the outer surface of the blade when the same is in position, the result being that if the blade is not fully in its down position, the hook will force it down by a cam action and hold it in position against the abutment 5.

11 is the blade.

In the form shown in Figs. 1 to 3, the upper end of the handle is hollow and holds the lower end of the spring 8. The modification shown in Figs. 4 and 5 is similar, but in this form the handle 1′ is not hollow and the spring 8′ is located in a recess therein, being secured thereto by a rivet 8^2 at its lower end, and the thumb piece 9′ is not riveted to the spring, but is headed over slightly so that it will not fall out of its socket in the handle.

In inserting the blade in the holder, the holder is held in one hand and the thumb piece pressed so as to move the hook backward. The razor blade is then placed in position so that the ends of its sharpened edge lie beneath the rearwardly turned prongs. The rear portion of the blade is then dropped toward the base plate, whereupon the releasing of the thumb piece permits the hook to move forward into engagement with the rear portion of the blade, forcing it to its seat against the abutment and holding it firmly in place. The parts are preferably so proportioned that the blade, when fully seated, engages the upper surface of the base as well as the abutment.

The embodiment shown, as will be evident to those skilled in the art, permits of various other modifications without departure from the spirit of the invention or the scope of the appended claims.

What we claim is:

1. In a razor, the combination of a handle, a base secured thereto having at its front edge a guard and two rearwardly turned prongs, a spring having a hook at

its free end adjacent to the rear portion of said base and tending to move toward said guard, a thumb piece for retracting said spring, and a blade held between said prongs and said hook, said base being provided with an abutment at its rear edge at an angle to the face of said base and engaging the rear edge of said blade, said hook having an inclined surface adapted to draw the rear edge of said blade into engagement with said abutment.

2. In a razor, the combination of a handle, a base secured thereto having at its front edge a guard and two rearwardly turned prongs, a spring having a hook at its free end adjacent to the rear portion of said base and tending to move toward said guard, a thumb piece for retracting said spring, and a blade held between said prongs and said hook, said base being provided with an abutment at its rear edge at an angle to the face of said base and engaging the rear edge of said blade, said hook having an inclined surface adapted to draw the rear edge of said blade into engagement with said abutment, and being carried by said handle.

3. In a razor, the combination of a handle, a base secured thereto having at its front edge a guard and two rearwardly turned prongs, a spring having a hook at its free end adjacent to the rear portion of said base and tending to move toward said guard, a thumb piece for retracting said hook, and a blade held between said prongs and said hook, said base being provided with an abutment at its rear edge at an angle to the face of said base and engaging the rear edge of said blade, said hook having an inclined surface adapted to draw the rear edge of said blade into engagement with said abutment, said handle having a hollow portion into which the lower end of said spring projects so that said spring is carried by said handle.

4. In a razor, the combination of a handle, a base secured thereto having at its front edge a guard and two rearwardly turned prongs, a spring having a hook at its free end adjacent to the rear portion of said base and tending to move toward said guard, a thumb piece for retracting said spring, a blade held between said prongs and said hook, said base being provided with an abutment at its rear edge at an angle to the face of said base and engaging the rear edge of said blade, said hook being so inclined as to draw the rear edge of the blade into engagement with said abutment, and also side flanges adapted to center said blade upon said base.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."