W. F. GROSCHOPP.

SAFETY RAZOR.

APPLICATION FILED AUG. 18, 1914.

1,146,868. Patented July 20, 1915.

Fig. 1.

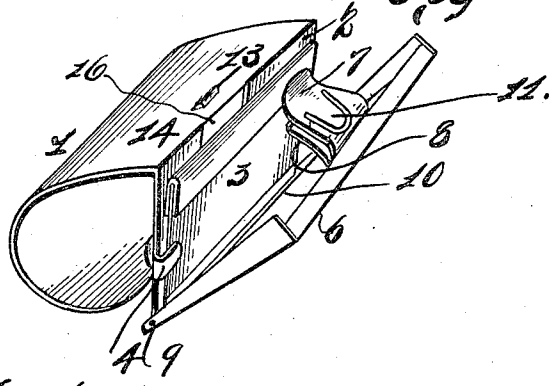


Fig. 2.

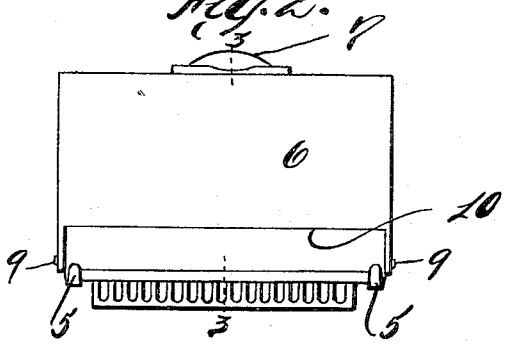


Fig. 3.

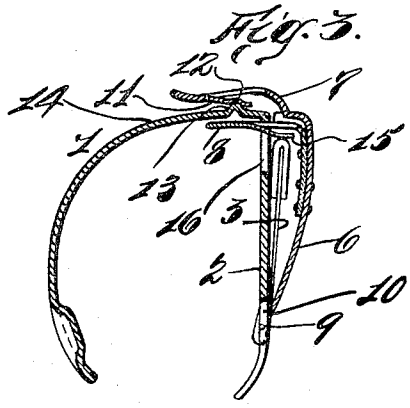
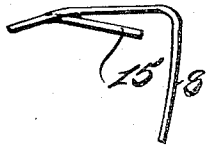


Fig. 4.



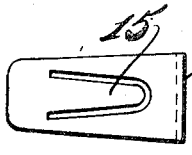


Fig. 5.

Witnesses
E. A. Jans
Edna Nathan

Inventor
William F. Groschopp
by Maurice Block
attorney.

UNITED STATES PATENT OFFICE.

WILLIAM F. GROSCHOPP, OF BROOKLYN, NEW YORK, ASSIGNOR TO KAMPFE BROS., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

SAFETY-RAZOR.

1,146,868. Specification of Letters Patent. Patented July 20, 1915.

Application filed August 18, 1914. Serial No. 857,290.

To all whom it may concern:

Be it known that I, WILLIAM F. GROSCHOPP, a subject of the Emperor of Germany, residing at Brooklyn, Kings county, State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a full, clear, and exact description.

This invention relates to an improvement in safety-razors, but more particularly to the means for holding the cutting-blade in operative position in the frame.

The object of the invention is to provide a blade holding mechanism that is of simple construction, effective in operation and cheaply manufactured.

To carry out the object of my invention I preferably form a portion of the clamping mechanism integral with the cover-plate for the blade, which plate acts to hold the blade firmly against the guard portion of the frame. The coöperating clamp element is secured to the cover-plate adjacent its locking element and preferably underneath the same and spaced sufficiently therefrom to permit of the passage therebetween of the top plate of the frame.

I will now proceed to describe my invention in detail, the novel features of which I will point out in the appended claims, reference being had to the accompanying drawing, forming part thereof, wherein—

Figure 1 is a perspective view of my improved safety-razor frame, the cover plate being illustrated in open position; Fig. 2 is a face view thereof; Fig. 3 is an enlarged cross sectional view, the section being taken on a line 3—3 of Fig. 2; Fig. 4 is an enlarged side view of the blade locking element; and Fig. 5 is a plan view thereof.

In the drawing, 1 indicates the body portion of an ordinary safety-razor frame provided with a blade guard 2, upon which the blade 3 is held, the usual guides 4 and stops 5 being also employed.

My improvement resides mainly in a cover-plate 6 for the blade 3 and locking or clamping devices 7 and 8 carried thereby, the cover plate being pivotally connected to the guard 2 as at 9. The function of the lock 7 is to hold the cover-plate 6 closed and in contact with the blade 6 along the lower edge 10 thereof. The projection or locking element 7 is provided with a resilient tongue or finger 11 having a recess 12 (Fig. 3.) adapted to engage a struck-up projection 13 on the top portion or plate 14 of the frame 1. When the projection 13 and resilient finger 11 are in engagement the cover plate 6 will be firmly locked and the blade 3 securely held in position on the guard 2.

It will be seen that the projection or tongue 7 is integral with the material of the cover-plate and also that said tongue 7 and finger 11 integral therewith are arranged to pass over the plate 14 when said cover-plate 6 is closed. By forming the tongue 7 integral with the cover-plate a cheap but efficient structure is provided. Furthermore, the tongue 7 acts as a handle whereby the cover-plate can be readily opened, which action automatically releases the blade 3.

To hold the blade 3 down against the stops 5, I provide a resilient abutment consisting of the locking element 8 which is provided with a resilient finger 15 adapted to exert a downward pressure upon the blade 3. As can be seen in Fig. 3 the locking element 8 is secured to the cover-plate 6 underneath the tongue 7 and spaced therefrom sufficiently to allow the top plate 14 of the frame to pass between said tongue and abutment support 8, the guard 2 being provided with an opening 16 adapted for the passage therethrough of said abutment 15 and support 8 therefor. It is evident that the locking of the cover plate and the locking of the blade is a simultaneous operation, as is also the releasing of the same.

It will be seen from the drawing that the tongue 7 and the support 8 with their resilient fingers are located intermediate the side edges of the cover-plate and at its upper edge and that the fingers 11 and 15 are superposed and approximately in alinement, there being a space between them to permit the passage therebetween of the top plate of the frame.

Having now described my invention, what I claim and desire to secure by Letters Patent, is:

1. A safety-razor frame consisting of a body portion, a guard plate carried thereby, provided with an opening, and adapted to support a cutting blade, a cover-plate pivotally secured to said guard, a locking element for said cover plate integral therewith and adapted to engage the razor frame, a resilient abutment secured to said cover plate adjacent said locking element, said abutment

being adapted to pass through the opening in said guard plate when said cover is closed and means carried by said abutment adapted to engage the heel of the cutting blade.

2. A safety-razor frame consisting of a body portion, a guard plate carried thereby, provided with an opening, and adapted to support a cutting blade, a cover-plate pivotally secured to said guard, a locking element for said cover plate integral therewith and adapted to engage the razor frame, a resilient abutment secured to said cover plate adjacent said locking element, said abutment being adapted to pass through the opening in said guard plate when said cover is closed and a resilient finger carried by said abutment adapted to engage the heel of the cutting blade.

3. A safety-razor frame consisting of a body portion, a guard plate carried thereby, provided with an opening at its upper edge, and adapted to support a cutting blade, a cover plate for said blade pivotally secured to said guard plate, a tongue integral with said cover-plate, a resilient finger integral with said tongue provided with a recess, a projection on said frame adapted to engage the recess in said finger, said tongue being positioned to pass over the top of said frame when said cover-plate is closed, an abutment secured to said cover-plate under said tongue adapted to pass through the opening in said guard plate and under the top plate of said frame when said cover-plate is closed, and a resilient finger carried by said abutment adapted to engage the heel of said cutting blade.

4. A safety-razor frame consisting of a body-portion, a guard carried thereby, a cover-plate pivotally secured to said frame, a pair of superposed locking tongues on said cover plate, said tongues being substantially in alinement and spaced apart to permit of the passage therebetween of the top-plate of the frame.

5. A safety-razor frame consisting of a body-portion, a guard carried thereby, a clamping cover-plate pivotally secured to said frame, and a plurality of independently acting locking-tongues extending outwardly from said cover-plate at substantially a right angle thereto and adapted to simultaneously lock the cover-plate and blade when the cover-plate is closed.

Signed at New York city, N. Y., this 14 day of August, 1914.

WILLIAM F. GROSCHOPP.

Witnesses:

EDWARD A. JARVIS,

MAURICE BLOCK.

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