July 6, 1926. 1,591,146

T. W. STEWART

SAFETY RAZOR

Original Filed April 3, 1923 2 Sheets-Sheet 1

Fig. 1.

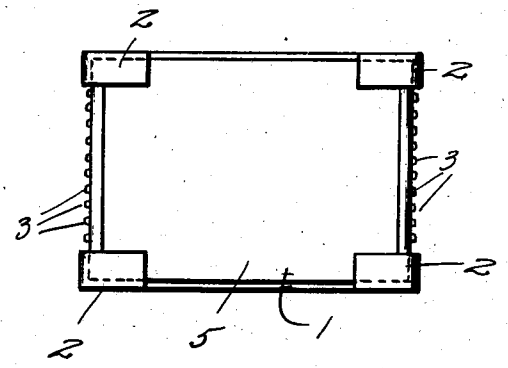


Fig. 2

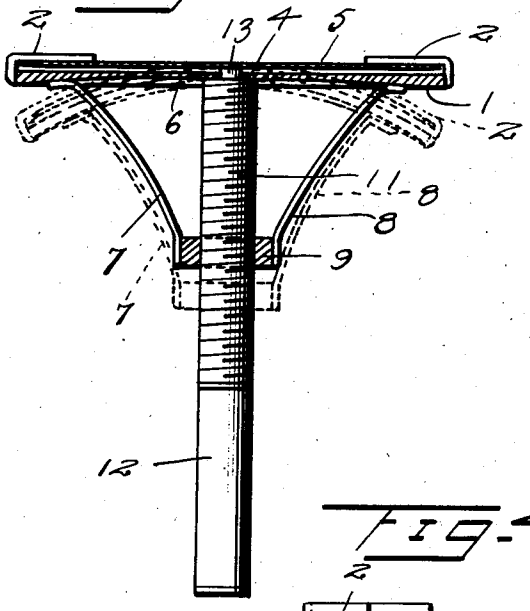


Fig. 3.

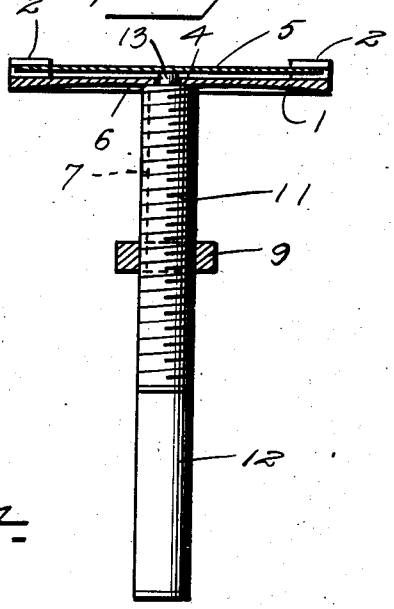
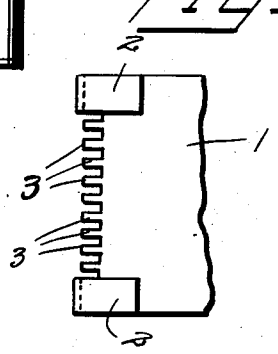


Fig. 4.



Inventor

T. W. Stewart

By William J. Jacobi

Attorney

July 6, 1926.

1,591,146

T. W. STEWART

SAFETY RAZOR

Original Filed April 3, 1923 2 Sheets-Sheet 2

Fig. 5.

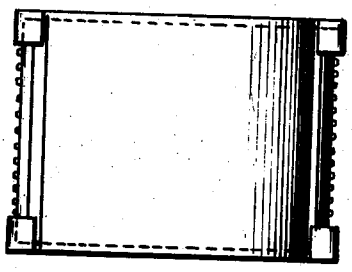


Fig. 6.

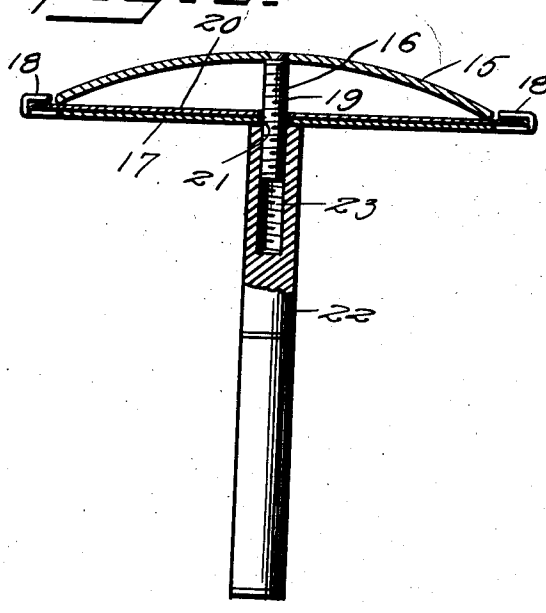
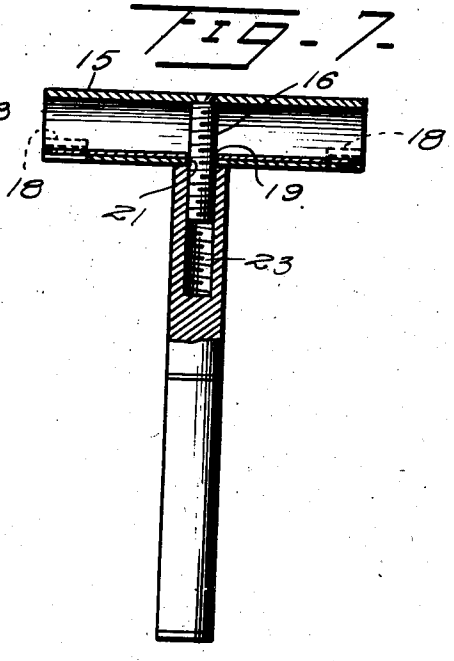


Fig. 7.



Inventor

T. W. Stewart.

By William J. Jacobi

Attorney

Patented July 6, 1926. 1,591,146

UNITED STATES PATENT OFFICE.

THOMAS W. STEWART, OF SOUTH SIOUX CITY, NEBRASKA.

SAFETY RAZOR.

Application filed April 3, 1923, Serial No. 629,613. Renewed December 10, 1925.

This invention relates to a safety razor and has for its principal object to provide a device whereby a flexible blade may be securely held in convex adjusted position to facilitate the proper operation of the blade when in use and furthermore be of such a construction as to enable the ready and easily assembling and disassembling of the razor.

A still further object of the invention is to provide a safety razor of the above mentioned character, which is of such a construction as to enable the blade to be flexed to a convex position and performing this function by merely rotating the handle.

A still further object of the invention is to provide a safety razor of the above mentioned character, which is simple in construction, inexpensive, strong, durable and well adapted for the purpose for which it is designated.

Another important object of the invention is to provide a safety razor of the above mentioned character, which will be flexed together with the flexible guard upon which it is mounted by the action of the handle which is associated therewith.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals designate like parts throughout the same:—

Figure 1 is a top plan view of the safety razor in assembled position.

Figure 2 is a transverse section.

Figure 3 is a longitudinal section.

Figure 4 is a fragmentary plan view of the flexible guard member.

Figure 5 is a top plan view of a modification of my invention.

Figure 6 is a longitudinal sectional view of the same.

Figure 7 is a transverse section of the modification.

In the drawings wherein for the purpose of illustration is shown the preferred embodiment of my invention, and more particularly with relation to Figs. 1, 2 and 3 of the drawings the numeral 1 designates a flexible guard and is provided with transverse flanges 2 at the corners of its respective sides. This is more clearly shown in Fig. 1 of the drawings. The transverse sides are provided with the usual teeth 3 on the respective edges and the flexible guard 1 is provided with a central aperture 4 for the purpose hereinafter to be more fully described.

The flexible guard 1 has its upper face provided with a flat surface for the purpose of receiving a flexible blade 5. The underface of the flexible guard 1 is provided at its central portion and extending longitudinally thereof with a thinner portion 6 as more clearly shown in Fig. 2 of the drawings. This is provided by having the longitudinal sides of the flexible guard 1 tapering towards the central portion thereof and the purpose of such a construction will be hereinafter more fully set forth.

The flexible blade 5 which is adapted to be supported upon the upper flat face of the flexible guard 1 is of the usual construction and is provided with sharpened edges at its opposite side and this blade 5 is adapted to be supported upon the flexible blade 1 and fit underneath of the transverse flanges 2 formed in the corners of the flexible guard 1.

The flexible guard 1 is provided or carries therewith on the underface thereof a pair of converging arms 7 and 8 respectively and these arms 7 and 8 respectively which are secured to the underside of the flexible guard 1 by any suitable fastening means such as solder or the like and are arranged adjacent the transverse sides of the flexible guard 1 and are also secured preferably in the central portion of the flexible guard 1 as more clearly shown in Figs. 2 and 3 of the drawings. The lower ends of the arms 7 and 8 are secured or fastened to a threaded sleeve 9. This sleeve 9 is provided with an internally threaded bore 10 and is adapted to cooperate with the threaded end 11 of a suitable handle 12.

This handle 12 has its upper end 11 threaded for the purpose above described and the upper end of the handle 12 is adapted to engage the underface of the flexible guard 1 and furthermore carries a projection 13 which is of less diameter than the handle 12 and this projection 13 is adapted to extend through the central aperture formed in the flexible guard 1 and has its free end adapted to engage the blade 5.

When the several parts are in assembled position as shown in Fig. 3 of the drawings the handle 12 is rotated so as to cause the

threaded end 11 thereof to cooperate with the threaded sleeve 9 and by this action the upper end of the handle 12 will be caused to bear against the flexible guard 1 and in turn will cause the flexible guard 1 and the blade 5 carried thereon to be flexed into a convex position as shown in the dotted lines in Fig. 3 of the drawings. The blade 5 and the flexible guard 1 having been flexed to the proper position the razor will then be held in the proper adjusted position and is then ready for use. A cutting edge is therefore provided on the transverse side of the flexible guard 1 and after the razor has been used it is only necessary to loosen the handle 12 from the threaded sleeve 9 and thereby cause the upper end of the handle 4 and the projection 13 carried thereby to be disengaged from the flexible guard 1 and the blade 5 respectively and thereby enable the several parts of the razor to be easily taken apart and cleaned.

In conjunction with the modified form of razor as shown in Figs. 4, 5 and 6 of the drawings the numeral 15 designates a rigid plate or head which is of a convex formation and centrally supports on the underface thereof a threaded stem 16. A flexible guard 17 provided with transverse flanges 18 similar to the one heretofore described is provided with a central aperture 19 and carried on the flexible guard 17 is a blade 20 which is of the same construction as the blade 5 above described and this blade 20 is also provided with a centrally located aperture at 21 which is adapted to register with the aperture 19 formed in the flexible guard 17 and permits the flexible guard 17 and the blade 20 to be loosely mounted upon the threaded stem 16 which is carried by the rigid convex plate 15.

A suitable handle 22 is provided at its upper end with an internally threaded bore 23 for the purpose of permitting the same to receive the free end of the threaded stem 16 and the upper end of the handle 22 is adapted to engage and sit against the underside of the flexible guard 17. After the flexible guard 17 and the blade 18 have been placed in proper position upon the threaded stem 16 the threaded end of the handle 22 is then caused to receive the free end of the threaded stem 16 and by rotating the same in the proper direction the flexible guard and the blade carried thereby are adapted to be flexed into the proper curvature so as to conform with the underface of the convex plate 15. When in this position the blade is held in the proper adjustment for use and after the razor has been used the handle is rotated in the reverse direction to cause the flexible guard and the plate to return to their normal flat position and thereby permit the several parts of the safety razor to be disassembled for cleaning.

It is to be noted from the foregoing description that a safety razor has been provided wherein a flexible guard and a blade are adapted to be flexed into a convex position by means of operating the handle upon which the blade and guard are supported and furthermore the simplicity of my device renders the same very efficient in its operation and does not necessitate the employment of several parts in order to accomplish the results. The safety razor of the above construction can furthermore be procured at the minimum cost and when taken apart can be carried in any suitable casing and can be very easily and quickly placed into operative position.

From the foregoing description of the construction of my improved apparatus, it will be seen that I have provided a simple, inexpensive and efficient means for carrying out the objects of the invention, and while I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the principles of the invention.

What I claim as new and desire to secure by Letters Patent is:—

1. A safety razor of the class described comprising a flexible guard, said flexible guard having its longitudinal sides tapering towards the central portion of the said guard to form a relatively thin longitudinal portion, a blade supported on the flexible guard, a handle having its upper end engaging the underface of said guard, and means associated with the said handle and guard for causing the handle to flex the guard into a convex position.

2. A safety razor of the class described comprising a flexible guard provided with transverse flanges at its respective corners, a flexible blade supported on the said guard and held in the said flanges, said flexible guard provided with a central aperture, a handle having its upper face in engagement with the underface of the said flexible guard, a projection carried by the upper end of the said handle and extending through the said opening in the said guard and engaging the said blade, and means associated with the handle and the flexible guard for causing the guard and blade to be flexed into a convex position by action of the handle.

3. A safety razor of the class described comprising a flexible guard, a blade, means at the respective corners of the said flexible guard for holding the flexible blade in position upon the said guard, a pair of arms secured to the underface of the said flexible guard and having their lower ends converging and fastened to a threaded sleeve, a

handle provided with a threaded end for co-operation with the threaded sleeve, the upper end of said handle being in engagement with the underface of the said flexible guard, a projection carried by the upper end of the said handle and extending through an aperture formed in the said flexible guard and having its free end in engagement with the blade, said flexible guard and blade adapted to be flexed to a convex position by rotation of the handle within the threaded sleeve.

In testimony whereof I affix my signature.

THOMAS W. STEWART.