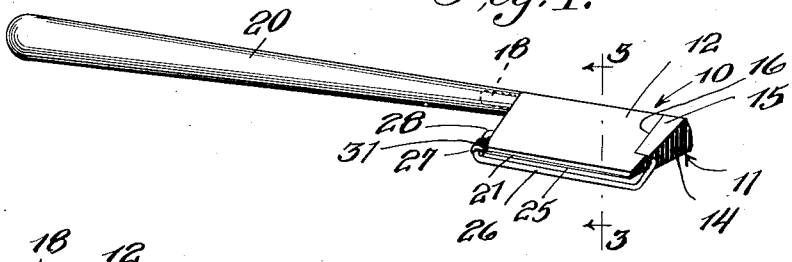
A. C. KNUDTSON.

SAFETY RAZOR.

APPLICATION FILED JUNE 10, 1920.

1,365,176. Patented Jan. 11, 1921.

Fig. 1.



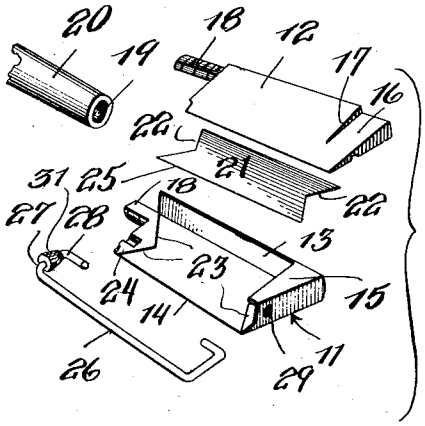


Fig. 2.

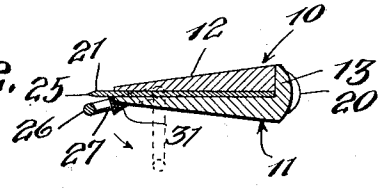


Fig. 3.

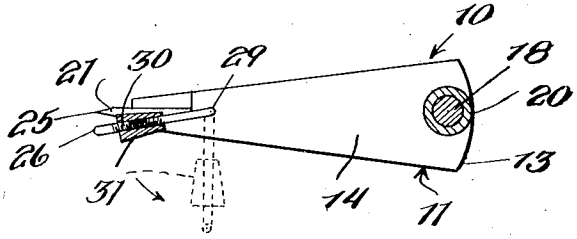


Fig. 5.

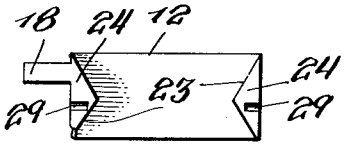


Fig. 4.

WITNESSES

Wynne Johnson

John P. Burch.

INVENTOR

A. C. Knudtson

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

ARTHUR CEDOLPH KNUDTSON, OF BISMARCK, NORTH DAKOTA.

SAFETY-RAZOR.

1,365,176. Specification of Letters Patent. Patented Jan. 11, 1921.

Application filed June 10, 1920. Serial No. 387,916.

To all whom it may concern:

Be it known that I, ARTHUR CEDOLPH KNUDTSON, a citizen of the United States, and a resident of Bismarck, in the county of Burleigh and State of North Dakota, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

This invention relates to new and useful improvements in safety razors and the object thereof is to provide an improved and simple structure in which the holder for the blade extends in alinement with the handle, the handle being disposed in the same plane and in the same direction in alinement with the back edge of the holder, instead of at right angles to the plane thereof as common, thus permitting the production of a device which is very narrow from edge to edge, thereby permitting shaving with greater facility in the proper way or direction over the entire face, and particularly under the nose, the construction being such as to permit shaving downwardly on the upper lip with facility.

A further object of the invention is to provide an improved safety razor which includes a holder of simple and novel construction adapted to prevent the same from clogging up at the sides of the blade with soap and hair, as occurs with most all safety razors now in use, and particularly those provided with the toothed guards which are stationary with respect to the holder and blade and which require constant cleaning or washing in order to permit use of the razor at all, while also providing an improved form of guard adapted to permit the desired angular disposition of the blade, while also permitting the cutting of one's hair and generally obviating the difficulties and objectionable features of safety razors as at present constructed.

A further object of the invention is to provide a holder in which the handle serves as a clamping means, and in which displacement of the blade and clogging up of the holder and guard, is positively prevented.

Other and further objects of my invention will become readily apparent to persons skilled in the art, from a consideration of the following description when taken in conjunction with the accompanying drawings, wherein:—

Figure 1 is a perspective view of the razor,

Fig. 2 is a detached perspective view of the parts forming the device, the handle being broken off,

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1,

Fig. 4 is an inside face view of the top section of the holder shown in Figs. 1 and 2, and

Fig. 5 is an end elevation on an enlarged scale, looking toward the handle and showing the adjustment means of the guard in section.

Referring to the drawings in detail, in which like reference characters indicate corresponding parts throughout the several views, my improved safety razor is shown as comprising a holder 10 including a pair of sections or sides 11 and 12 constituting the bottom and top portions thereof. The side or bottom portion 11 as well as the top or side portion 12, are both of tapered cross section, being tapered from the back edge of the holder to the front edge thereof and the back edge of the side portion 11 being formed with a flange or back portion 13 so as to be engaged by the adjacent edge at the back of the top portion or side 12 and form means to limit the displacement of one relative to the other. In addition, the back portion or side 11 is formed at one end, preferably at the outer or forward end thereof, with an end wall 14 provided with an overhanging flange 15 extending inwardly and terminating short of the edge portion at the front of the holder.

The top portion or side 12 is adapted to fit in the bottom portion or side 11 and at its outer or forward end, is provided with a depressed portion or recess 16 receiving the flange 15, the inner edge of the flange abutting the shoulder 17 formed at the inner limit of the depression. By this means, and flange 13, the sides are held against displacement one with respect to the other when secured in position in assembled relation and snugly held against each other. For this purpose, each of the side portions is provided with a semi-circular shank portion 18 leading from the back edge or substantially so, and coacting to form a circular threaded shank adapted for connection with the threaded socket 19 at the forward end of the handle 20, so as to detachably connect the parts with the handles in a straight line with the back of the holder. As the holder is preferably made comparatively narrow, or

about five-eighths of an inch wide, it will be seen that the device can be conveniently used in any desired position and in the proper way all over one's face, and particularly under the nose and on the upper lip, which can be shaved downwardly in the proper way, but which is not allowed by ordinary safety razors, owing to the fact that they are too wide to allow this operation.

The blade 21 is adapted to be held in position between the sides 11 and 12, and for this purpose, is preferably formed with V-shaped notches 22 at the ends thereof, while the side 12 is formed with correspondingly shaped shoulders 23 produced by raised portions 24 on the inner face of the side so as to be abutted by the ends of the blade. In this manner, it will be seen that when the sides or sections constituting the top and bottom portions of the holder, are held together in clamping relation, preferably by means of the handle socket as set forth above, the blade will be securely held against displacement and the sides 11 and 12 will fit tight against the same adjacent to the edge portions 25 of the blade, it being understood that one or both edges of the blade may be sharpened if desired. This will enable the blade to have double use, if both edges are sharpened. Also, since the sides fit snugly against the blade, the latter cannot slip out or sidewise and no soap or hair can get between the blade and the sides that hold the blade in place, thereby preventing the razor from clogging up like all other safety razors do.

A guard is also provided and consists of a substantially U-shaped member or yoke 26, preferably of steel wire and having right angularly bent end portions 27 disposed parallel to each other and directed inwardly as shown at 28, so as to engage coacting recesses or apertures 29 in the sides of the holder. At the end portion 14 a slanted aperture or opening 29 is made, while at the opposite end of the side 11 and at the ends of the side 12 this opening is slanted to receive the lock nut and at the inner faces, recesses are provided which are slanted and substantially semi-circular in cross section and coact to form slanted sockets or apertures for receiving the inturned extremities 28 for pivotal movement so that the same may be adjusted angularly on the pivots when in proper position to give the desired angle of shaving effect, as clearly shown in Figs. 1, 3 and 5 of the drawings. One end portion 27 is preferably made in two sections, as particularly shown in Fig. 5, the ends being threaded oppositely as indicated at 30 and engaged by a turnbuckle nut 31 preferably knurled and tapered toward one end to properly fit the end of the holder, as well as to permit the same to be tightened and adjusted in proper relation to the edge of the blade which projects from the adjacent edge of the holder, the blade being made slightly wider than its receiving recess for this purpose. This guard structure is very simple and no soap or hair can clog between the same and the holder like the ordinary stationary guard which extends outwardly over the blade and which is of toothed formation so as to permit hair and soap to get between the same and become clogged so as to necessitate constant cleaning or washing without complete satisfaction, as well as interfering with the free operation of the blade and the proper shaving action. The guard may be described as a swinging guard, as distinguished from a stationary one, and as before mentioned, cannot clog up. Furthermore, the razor can be stropped without taking the blade out as required in other razors of the type having a detachable blade, and can be used to cut hair with advantage. Of course, it is to be understood that the blade will be sufficiently large enough and wide enough so it will miss or be free of the bent sides of the swinging guard in order that the device may be effectively used, the ends of the holder being formed with recesses in conjunction with the adjusting means, so as to allow limited swinging or pivotal movement of the guard with respect thereto.

In view of the foregoing, it is thought that the use and operation of the device will be readily understood, and in view of the simplicity and practical value, that it will commend itself to those skilled in the art.

Having thus described my invention what I claim is:—

1. A safety razor comprising a relatively flat separable holder for a removable blade, and a rectilinear handle separate from the holder and serving to secure the same in clamping relation to the blade, said handle extending in a straight line from the back edge of the holder.

2. A safety razor comprising a separable holder, a blade clamped between the same, a handle to secure the sections of the holder together, and a detachable U-shaped guard pivoted to the ends of the holder and overlying the edges of the blade.

3. A safety razor comprising a separable holder, a blade clamped between the same, a handle to secure the sections of the holder together, and a detachable pivoted guard on the holder.

4. A safety razor comprising a separable holder, a blade clamped between the same, a straight handle extending in the same plane with the holder and serving to secure the sections of the holder together and against the blade, and means to prevent displacement of the blade from within the holder.

5. A safety razor comprising side sections disposed in interlocking relation, means to prevent movement of one section with re-

spect to the other, said sections having cooperating shank portions, a handle engaged on said shank portions to secure the sections together, said sections having coöperating recesses forming end shoulders, and a blade held in said recesses and engaging said end shoulders.

6. A safety razor comprising side sections disposed in interlocking relation, means to prevent movement of one section with respect to the other, said sections having cooperating shank portions, a handle engaged on said shank portions to secure the sections together, said sections having coöperating recesses forming end shoulders, said shoulders being oppositely beveled, a blade having end recesses fitting said shoulders to prevent displacement of the blade, and a guard carried by the holder and coöperating with the edge of the blade.

7. A razor comprising a holder consisting of side portions tapering toward one edge, one side being formed with a flange against which the widest edge of the other side abuts, a handle for said holder, said handle serving to connect said sides and extending in alinement therewith, and a blade held between said sides.

8. A razor comprising a holder consisting of side portions tapering toward one edge, one side being formed with a flange against which the widest edge of the other side abuts, a handle for said holder, means to connect said sides detachably, said sides having central recesses forming end shoulders adapted to receive and hold a blade therein with one edge projecting from the narrow edge of the holder, and means to prevent separation of the sides face-wise.

9. A razor comprising a holder consisting of side portions tapering toward one edge, one side being formed with a flange against which the widest edge of the other side abuts, a handle for said holder, means to connect said sides detachably, said sides having central recesses forming end shoulders adapted to receive and hold a blade therein with one edge projecting from the narrow edge of the holder, and a guard in the form of a yoke pivotally carried by the holder and swingable with reference to the edge of the blade.

10. A razor comprising a holder consisting of side portions tapering toward one edge, one side being formed with a flange against which the widest edge of the other side abuts, a handle for said holder, means to connect said sides detachably, said sides having central recesses forming end shoulders adapted to receive and hold a blade therein with one edge projecting from the narrow edge of the holder, one side portion having an end wall provided with an overhanging flange receiving the other side portion therebeneath and retaining the sides against lateral separation, and a swingable yoke carried by said sides and held in position when said sides are together, and means for tightening and adjusting said guard.

11. The combination with a safety razor including a blade holder formed of a narrow tapering member and a handle extending from one end thereof, said holder having sockets at the ends thereof; of a blade carried by said holder and having a projecting cutting edge, and a substantially U-shaped yoke having parallel end portions inwardly directed to engage said sockets for pivotal swinging movement adjacent to the edge of the blade and parallel thereto.

12. The combination with a safety razor including a blade holder formed of a narrow tapering member and a handle extending from one end thereof, said holder having sockets at the ends thereof; of a blade carried by said holder and having a projecting cutting edge, a substantially U-shaped yoke having parallel end portions inwardly directed to engage said sockets for pivotal swinging movement adjacent to the edge of the blade and parallel thereto, said yoke having one of its end portions formed with two sections oppositely threaded, and a turnbuckle nut engaged on said threaded portion to secure and tighten the guard in position.

ARTHUR CEDOLPH KNUDTSON.