T. C. SHEEHAN.

SAFETY RAZOR.

APPLICATION FILED JAN. 28, 1920.

1,363,362. Patented Dec. 28, 1920.

Fig. 2,

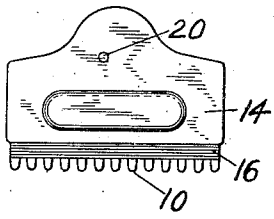


Fig. 1,

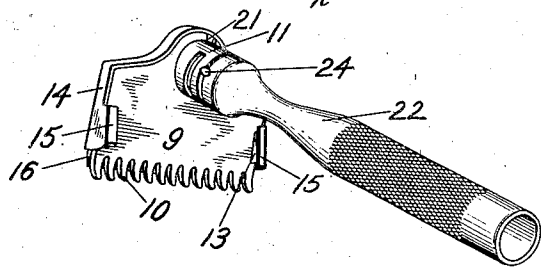


Fig. 3,

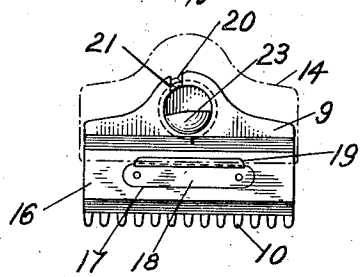


Fig. 4,

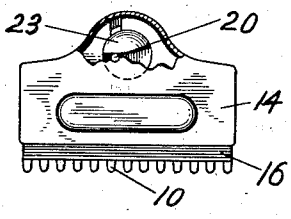


Fig. 6,

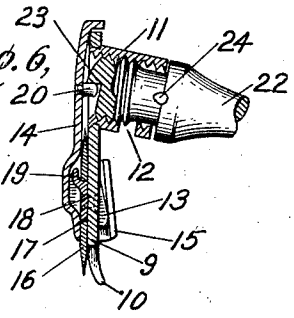


Fig. 5,

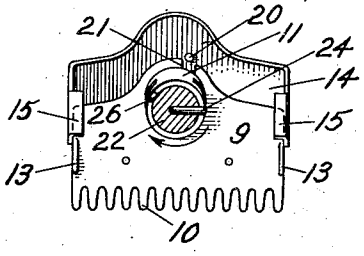


Fig. 7,

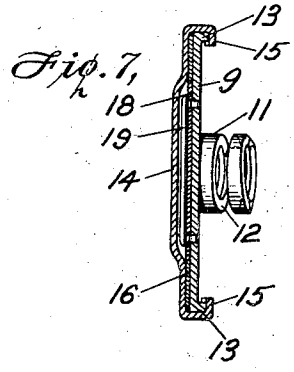
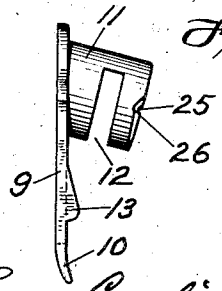


Fig. 8.



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UNITED STATES PATENT OFFICE.

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SAFETY-RAZOR.

1,363,362. Specification of Letters Patent. Patented Dec. 28, 1920.

Application filed January 28, 1920. Serial No. 354,592.

To all whom it may concern:

Be it known that I, THOMAS CORNELIUS SHEEHAN, a citizen of the United States, residing at Upper Montclair, county of Essex, and State of New Jersey, have invented a new and useful Improvement in Safety-Razors, of which the following is a specification.

This invention relates to an improvement in safety razors, and it has for its main object the production of a simple, inexpensive and quickly operated device particularly adapted for use in connection with interchangeable double-edged blades. With this and other objects not specifically mentioned in view, the invention consists in certain constructions and combinations which will be hereinafter fully described and then specifically set forth in the claims hereunto appended.

In the accompanying drawings, which form a part of this specification and in which like characters of reference indicate the same or like parts, Figure 1 is a general perspective view of a device constructed in accordance with the invention; Fig. 2 is an end view of the structure shown in Fig. 1; Fig. 3 is an end view with the blade holding member indicated by broken lines; Fig. 4 is an end view with the blade holding member in locked position, but partly broken away; Fig. 5 is a reverse end view showing the handle in cross section and the blade holding member in unlocked position; Fig. 6 is a central vertical section, the handle being partly broken away; Fig. 7 is an inverted horizontal section through the base and blade holding members, the blade and blade positioning member, the handle being omitted in this view; and Fig. 8 is a detail side elevation of the base member.

In carrying the invention into effect, there is provided a base member, a co-acting interlocking blade holding member, a rotatable handle mounted in said base member, and co-acting devices one of which is carried on the holding member and the other on the adjacent end of the handle, these devices being operated by rotation of the handle and adapted to produce a relative locking or unlocking movement of said members. In the best constructions, there is also provided means for positioning a blade on one of said members before the latter are locked; a stud is carried by the holding member and engaged by a lug on the end of the handle, the two coöperating to produce the relative locking or unlocking movement of the members; the base member is split transversely to permit a slight springing movement of one of its parts, and the handle is provided with a stop engaging the yielding part of the boss and adapted to limit the rotation of the handle and to hold the parts either in locked or unlocked position.

The above mentioned members, means and parts may be widely varied in construction within the scope of the claims. The invention therefore is not to be restricted to the precise details of the structure shown and described.

Referring to the drawings, 9 indicates a base member which at its lower end is provided with a set of teeth 10 forming a safety guard. At its upper end, the base member 9 is provided with a boss 11 transversely split at 12 in order to permit the overhanging part of the boss to have a slight yielding movement. The base member 9 is further provided on either side with a rearwardly turned lug 13.

There is also provided a co-acting interlocking blade holding member 14 having at either side rearwardly extending tapered lugs 15 adapted to overlie the base member lugs 13 and to force the two members together when the holding member is moved downwardly.

The device is particularly adapted for use in connection with a double-edged blade 16 having an elongated slot 17, and the base member is provided with a blade positioning device 18 in engagement with the blade slot. The positioning device 18 is riveted to the base member and has an offset edge 19 passing through the slot of the blade and partially overlying the latter. By means of the structure just described, a blade may be hung over the offset edge of the positioning device and accurately positioned upon the base member before the holding member is brought into operative relation with the base member. The holding member 14 is further provided with a stud 20, and the base member 9 is provided with a slot 21 through which the stud 20 may pass in a vertical direction.

Threaded into the boss 11 is a rotatable

handle 22, the end of the handle within the boss being cut away to form an end lug 23, this end lug being adapted to engage the stud 20. For the purpose of limiting rotation of the handle 22 it is provided with a stop pin 24 which rides around on the rear end of the boss 11, the lower part of the boss end having the same pitch as the thread of the boss and handle and having notches 25 and 26 into which the stop 24 snaps at opposite ends of the rotating movement of the handle. In Fig. 3, the base member 9 and end lug 23 are shown in the position which they occupy when the device is to be assembled, the stop 24 being at this time seated in the notch 25. Fig. 3 also shows a blade 16 hung over the offset edge of the positioning device 18 and accurately located or positioned on the base member. The figure also shows by broken lines the position of the blade holding member 14 as the stud 20 is passed down through the slot 21 into the interior of the boss 11 and overlying the end lug 23. The handle 22 is then given a rotating movement of a little more than half of one revolution which forces the parts into the position shown in Fig. 4, at which time the stop 24 engages the notch 26. The relative movement of the base and blade holding members produced by the stud 20 and lug 23 during rotation of the handle jams or wedges the base member lugs 13 tight in the tapered blade holding member lugs 15 and holds the blade firmly in position between the two members. It will be readily understood that a reverse rotating movement of the handle will release the interlocking base and blade holding members so that the latter may be readily removed to expose the blade for ready removal.

What is claimed is:

1. In a razor, the combination with a base member, of a co-acting interlocking blade holding member, a rotatable handle mounted in said base member, and co-acting devices in eccentric engagement and respectively carried on one end of said handle and on said holding member whereby rotation of said handle produces a relative wedging movement of said members.

2. In a razor, the combination with a base member, of a co-acting interlocking blade holding member, means for positioning a blade on one of said members, a rotatable handle mounted in said base member, and co-acting devices in eccentric engagement and respectively carried on one end of said handle and on said holding member whereby rotation of said handle produces a relative wedging movement of said members.

3. In a razor, the combination with a base member, of a co-acting interlocking blade holding member, a blade positioning device carried by said base member and provided with an offset edge adapted to partially overlie a blade, a rotatable handle mounted in said base member, and co-acting devices in eccentric engagement and respectively carried on one end of said handle and on said holding member whereby rotation of said handle produces a relative wedging movement of said members.

4. In a razor, the combination with a base member, of a co-acting interlocking blade holding member, a rotatable handle mounted in said base member and having an eccentric end lug, and a stud carried on said holding member and adapted to be engaged by said lug during rotation of said handle to produce a relative wedging movement of said members.

5. In a razor, the combination with a base member, of a co-acting interlocking blade holding member, a rotatable handle mounted in said base member and provided with an eccentric end lug and with a stop engaging said base member the latter for limiting rotation of said handle and holding said members in locked position, and a stud carried on said holding member and adapted to be engaged by said lug during rotation of said handle to produce a relative wedging movement of said members.

6. In a razor, the combination with a base member provided with a transversely split boss, of a co-acting interlocking blade holding member, a rotatable handle mounted in said boss and provided with an eccentric end lug and with a stop engaging said boss the latter for limiting rotation of said handle, and a stud carried on said holding member and adapted to be engaged by said lug during rotation of said handle to produce a relative wedging movement of said members.

7. In a razor, the combination with a base member, of a co-acting interlocking blade holding member, a blade having an elongated longitudinal slot, a blade positioning device carried by said base member in engagement with said slot and provided with an offset edge passing through said slot and partially overlying said blade, a rotatable handle mounted in said base member, and co-acting devices in eccentric engagement and respectively carried on one end of said handle and on said holding member whereby rotation of said handle produces a relative wedging movement of said members.

In testimony whereof, I have signed my name to this specification.

THOMAS CORNELIUS SHEEHAN.