

H. C. GUETSCHOFF.

SAFETY RAZOR.

APPLICATION FILED JAN. 8, 1910.

991,151.

Patented May 2, 1911.

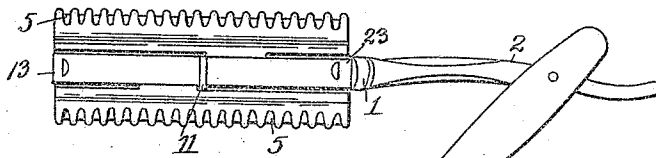


Fig. 1.

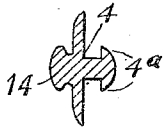


Fig. 12.

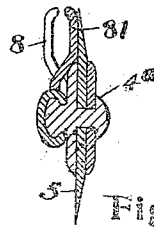


Fig. 10.

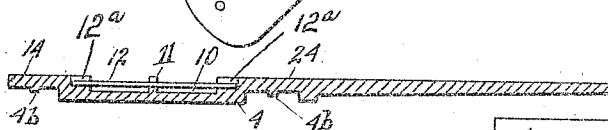


Fig. 2.

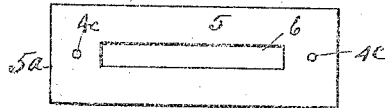


Fig. 7.

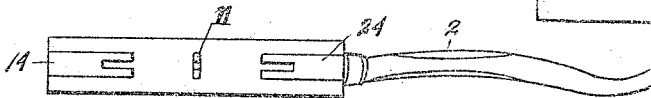


Fig. 3.

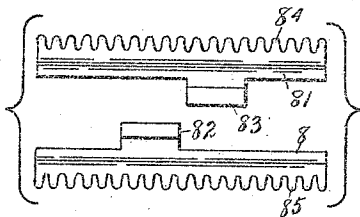


Fig. 4.



Fig. 9.



Fig. 8.

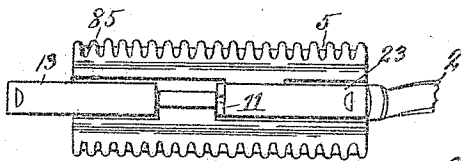


Fig. 5.

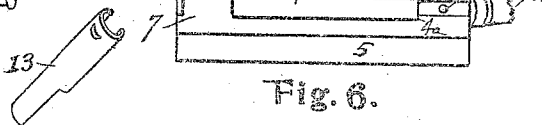


Fig. 6.

Fig. 11. Herman C. Guetschoff

Witnesses

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UNITED STATES PATENT OFFICE.

HERMAN C. GUETSCHOFF, OF FRASER, MICHIGAN.

SAFETY-RAZOR.

991,151.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed January 6, 1910. Serial No. 536,647.

To all whom it may concern:

Be it known that I, HERMAN C. GUETSCHOFF, a citizen of the United States, residing at Fraser, county of Macomb, State of Michigan, have invented a certain new and useful Improvement in Safety-Razors, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to safety razors.

It has for its object an improved razor blade provided with guard attachments which may be turned back to enable the blade to be sharpened, may be separately and individually removed from the blade, are held very firmly and rigidly in position on the blade, and the complete razor is cheap and simple to construct.

In the drawings:—Figure 1, is a side elevation of the assembled parts of the razor. Fig. 2, is a longitudinal section through the blade and guard holder. Fig. 3, is a plan view of the blade-holding shank of the razor. Fig. 4, is in plan view the two leaves of the guard. Fig. 5, shows in plan the leaves of the guard in place on the shank; the holding key of one guard is inserted in place, and of the other guard partially inserted in place. Fig. 6, shows the shank with the blade in place and the blade key in place. Fig. 7, is a plan view of the blade. Fig. 8, is a plan view of the blade key. Fig. 9, is a longitudinal section of the blade key. Fig. 10, is a cross section of the assembled parts. Fig. 11, is a perspective of the guard holding key. Fig. 12, is a cross section of the main shank.

The shank 1 of the structure is provided with a tang 2 that is pierced to enable it to be pivotally secured to the handle 3. The shank on one side is provided with a long longitudinal rib 4, over which the blade 5 engages, and the blade 5 is provided with a longitudinal slot 6 arranged along its middle longitudinal line and of proper size to engage around the rib 4. The rib 4 is provided with a flange 4^a at each side extending its entire length, and the shank is provided with small projections 4^b that engage in the holes or indentations 4^c in the blade.

The engagement of the projections 4^b in the holes or indentations 4^c prevent the

blade from slipping sidewise as well as longitudinally, and a key plate 7, hereinafter called a blade key, engages under the overhanging flanges 4^a, and holds the blade and itself securely in place on the tang. The blade key 7 also serves as a backing to stiffen the otherwise flexible blade 5, which is not only made of thin material, but which by reason of the long slot 6 and the short connections 5^a between the two sides of the blade is quite flexible. On the side of the shank opposite to that on which the blade is held is provision to hold hinged or pivoted guard members 8 and 81. These are made with knuckle members 82 and 83 and with serrated or crenate guard edges 84 and 85, which, in the assembled structure, project slightly beyond the edges of the blade 5, and serve as a guard for the blade.

The shank 1 is provided with a depressed recess 10 at the middle point of which is an eye or pierced lug 11 through which engages a pintle 12. On either side of the eye 11 the recess 10 extends suitably to permit the hinge knuckles 82 and 83 of the guard to drop into the recess when the pintle is removed therefrom; at the ends of the recess 10 are short extension recesses 12^a for the ends of the pintle 12; after the knuckle joints have been dropped into the recess the pintle is inserted and the guard now held pivotally to the shank may be turned to its guard position as shown in Figs. 1 and 3, or it may be turned back to leave an edge of the blade entirely unguarded at both sides thereof, as is shown in Fig. 10. In either position the guard is held in place by a key, which key consists of a split tubular member 23, with inturned edges shown in Fig. 11, adapted to engage over the rib 14 or 24 with the inturned edges of the split tubular key 23 engaging under the overhanging flanges on the rib 14 or rib 24. The key is held from any movement except a movement along the axis of the rib. The guards are held very securely in guarding relation to the blade, but either guard may be turned back to the position shown in Fig. 10 by slipping the key off the rib, and after the guard has been turned to expose the edge of the blade the key can be re-inserted, engaging with its proper part of the rib on the shank, and engaging over its proper guard leaf.

What I claim is:—

1. In a safety razor, in combination with

a shank pivotally connected to a handle, said shank being provided on its opposite faces with longitudinally extending ribs, a centrally apertured blade member resting on said shank and engaging with its apertured portion around one of said ribs, means engaging said blade-engaged rib whereby said blade is removably held in place, guard members engaging the other ribbed face of the shank from that against which said blade member lies, and means slidably engaging the rib on said last mentioned face of the shank, whereby said guard members are secured in position thereon, substantially as described.

2. In a safety razor, in combination with a shank provided with longitudinal ribs, a blade member removably engaging over one face of the shank, a guard member pivotally secured to the other face of the shank from that whereon said blade is carried, and a key member slidably engaging with that rib of the shank adjacent the guard member whereby the guard member is locked in position with respect to the shank and blade, and a blade key slidably engaging over the blade and under the sides of the rib on the blade-engaged face of the shank, whereby the blade is locked on the shank, substantially as described.

3. In a safety razor in combination with a shank provided with longitudinal ribs, a blade member engaging one ribbed face of said shank, a guard pivotally secured on the opposite side of said shank guarding the edge of the blade, a locking member slidably engaging the adjacent rib on the shank for locking said guard in position, and a key member slidably engaging the rib on that face of the shank adjacent the blade, whereby the blade is held in place, substantially as described.

4. In a safety razor, in combination with a shank provided with projecting ribs, a guard member pivoted to the shank on one ribbed face thereof, a blade engaging against the opposite ribbed face of the shank, and locking keys slidably engaging said ribs, whereby the blade and the guard are inde-

pendently locked in position in the shank, substantially as described.

5. In a safety razor, in combination with a shank provided with longitudinal ribs, a blade engaging one ribbed face of the shank, a key slidably engaging the rib adjacent the blade, whereby the blade is removably held in place on the shank, a guard member having a pivotal connection with the shank, whereby it may be swung into guarding relation to the edge of the blade or turned to expose the blade throughout the length of its cutting edge, and a locking member for said guard slidably engaging the rib on the opposite face of the shank to that engaged by the blade, substantially as described.

6. In a safety razor, in combination with a shank provided with a blade seat and with a seat for a sliding key, a blade carried on said seat, a key slidably engaging lengthwise of its seat over said blade pivotally attached guard members on said shank, whereby the edge of the blade is protected when the members are in lengthwise position with respect to the shank, said members being adapted to be swung to angular position with respect thereto to permit access to edges of the blade, and means slidable longitudinally of said shank for locking the guard members in position with respect thereto, substantially as described.

7. In a safety razor, in combination with a shank provided with longitudinally extending ribs, a blade, means for holding the blade to the shank, comprising a key member slidably engaging one of said ribs, guard members pivotally attached to said shank in position to protect the cutting edges of the blade, a key slidable lengthwise of the shank along another of said ribs whereby said guard members are held in position, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses.

HERMAN C. GUETSCHOFF

Witnesses.

GEORGE W. STEFFENS,
HENRY BOHN.