The object of my invention is to provide a safety razor in which a guard member is provided with blade guarding means along a substantially medial portion of said member and with means to detachably retain one or more blades with the cutting edge extending inwardly in relation to the guarding means, whereby when blades are used in the razor with their cutting edges extending inwardly either cutting edge may be used according to the direction of travel of the razor along a face to be shaved.

In carrying out my invention I provide a guard member having guarding means for a blade edge located along a medial or substantially central portion of the member, means to support one or more blades on said member with their cutting edge in shaving relation to said guarding means, and means to detachably retain said blades in shaving position.

A further embodiment of my invention includes a resilient blade retainer carried by the guard member and having edge portions normally bearing against the blades to retain them in shaving position, said retainer being adapted to be flexed or bent from the normal position to release the blades for removal and replacement.

My invention also comprises novel details of improvement that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawing, wherein

Fig. 1 is a side view of my improved razor;
Fig. 2 is a section on line 2, 2 in Fig. 1;
Fig. 3 is a partly broken plan view of the razor;
Fig. 4 is a section on line 4, 4 in Fig. 2;
Fig. 5 is a section on line 5, 5 in Fig. 2, and
Fig. 6 is a view similar to Fig. 1, illustrating the parts in a different position.

Similar numerals indicate corresponding parts in the several views.

The numeral 1 indicates a guard member and 2 indicates a handle that may be attached to the guard member in any desired way. In the example illustrated the handle is provided with a threaded stem 3 operative in a threaded recess 4 in the guard member, for detachably connecting said parts. The handle is shown made in two main parts 2a and 2b, connected together by a pivot at 5, whereby the guard member may be adjusted in parallelism with or at a desired angle to the handle portion 2a for shaving. The parts 2a and 2b may be retained in set position by frictional engagement between said parts, as by the projection 6 and jaws 7 receiving the pivot 5 and retained snugly together.

The guard member 1 is shown provided with spaced guard teeth or projections 8, located along the medial portion of the member 1 in a longitudinal marginal portion 1a of the member. The guard member is shown provided with stops or abutments 9 extending in a longitudinal direction along the marginal portions 1a of said member in position to engage the heels or back edges of the blades 10 opposite their cutting edges, to position the cutting edges in shaving relation to the guard teeth. The guard member has rests at 11 for the blades, shown located adjacent to the guard teeth. The rests 11 are shown in the form of spaced projections, aligned on opposite sides of the guard teeth, whereby the lather and shavings may pass freely behind the blades. The guard member is also shown provided with holes 12 spaced apart, and shown located in alignment with the spaces between the guard teeth and the rests 11, for the passage of lather and hairs and for easy washing of the razor.

I provide means to bear against the blades to keep them in shaving position against the blade supports including the stops or abutments 9 and the rests 11, which means may be moved conveniently for removal and replacement of the blades. I have illustrated a retainer 13 for the blades whose free edges bear against the blades and keep them in shaving position. The retainer 13 may comprise a sheet or piece of resilient metal, having a base portion at 14, provided with a hole 15 to receive the handle 2, the base extending under the guard member, (Fig. 4), portions of the retainer being bent inwardly at 16 around and receiving the marginal portions of the guard member, the edge portions 17
of the retainer extending toward the guard teeth and into engagement with the blades to retain them against the abutments 9 and the rests 11. The mid-portion of the retainer is extended outwardly away from the guard member, in spaced relation thereto, and said retainer is movably attached to the guard member. I have illustrated the retainer as provided with holes 18 loosely receiving rivets 19 that may be driven tightly into holes in the marginal portions of the guard member, to keep the retainer in place thereon, (Fig. 5). When the mid-portion of the retainer is bent inwardly toward the guard member the marginal portions 1a of the guard member will act as fulcra to enable the edge portions of the retainer to recede from the blades.

With the parts as shown in Figs. 1, 4 and 6 the blades are in shaving position, with their cutting edges facing the guard teeth and suitably spaced on opposite sides thereof, the blades being held by the retainer. The cutting pressure against the blade edges is resisted by the stops or abutments 9. When the blades are to be removed or replaced the mid-portion of the retainer will be pressed inwardly toward the guard member, thereby causing the outer curved portions of the retainer to move outwardly by bearing against the curved extended marginal portions 1a of the guard member as fulcra, whereby the edge portions of the retainer will move away from the blades and release them from pressure, as in Fig. 5. In the last named position of the parts the blades may be removed from the guard member and be replaced, the new blades resting against the stops or abutments 9 and the rests 11. Upon release of the retainer its inherent spring tendency to bear against the blades will cause the edge portions 17 of the retainer to move inwardly against the blades and its mid-portion to move outwardly, from the position in Fig. 5 to the position in Fig. 4.

With the cutting edges of the blades facing the centrally disposed guard teeth one blade may be used for shaving with the razor head or holder moved in one direction along a face, and by reversing the direction of movement of the razor the other blade may be used for shaving, the razor thus being capable of shaving when moved on opposite directions. By tilting the blade holder from one position to another, as in Fig. 6, one blade may be used for a down stroke when the parts are in the full line position in Fig. 6, and when the parts are in the dotted position in said figure the other blade may be used for a down stroke. It will be understood, also, that one blade only may be used in the razor at time if desired.

My improvements are simple and cheap to manufacture, and are easily manipulated for removal and replacement of blades in the holder without requiring any parts to be detached.

Having now described my invention what I claim is:—

1. A safety razor comprising a guard member having guarding means located along a medial portion of said member, a series of spaced projections on said member for supporting a pair of blades with their cutting edges in shaving relation to said guarding means, and means to detachably retain said blades in shaving position on the guard member, the blade retaining means including a piece of metal having sides embracing the guard member and having edge portions extending inwardly over the blades to retain them in shaving position.

2. A safety razor comprising a guard member having guarding means located along a medial portion thereof, means to support blades on said member with their cutting edges in shaving relation to said guarding means, and means for detachably retaining said blades in position including a piece of metal extending along the outer sides of the guard member, the mid-portion of said piece being spaced from the guard member to permit bending and outer portions of said piece bearing against marginal portions of the guard member, edge portions of said piece extending inwardly over the blades.

3. A safety razor comprising a guard member having guard teeth between its marginal portions, means to support blades on opposite sides of said guard teeth with their cutting edges adjacent to said teeth, and a retainer for the blades comprising a piece of resilient metal having a portion located along the side of the guard member opposite the guard teeth, said retainer having marginal portions enclosing marginal portions of the guard member and having inwardly extending edge portions to engage the blades to retain them on the supports.

4. A safety razor as set forth in claim 3 provided with means loosely attaching the retainer to the guard member.

5. A safety razor as set forth in claim 3, in which the retainer is provided with holes and the guard member is provided with rivets located in said holes to keep the retainer in position on the guard member and permit the retainer to bend.

6. A safety razor comprising a guard member having guard teeth, means to support a blade with its cutting edge adjacent to said teeth, the guard member having a handle, and a blade retainer having a mid-portion provided with a hole receiving said handle, side portions of the retainer being extended over the guard member to retain a blade on said support.

7. A safety razor comprising a guard mem-
ber having guard teeth along a mid-portion of the member, blade supports on opposite sides of said teeth, the guard member having a handle, a blade retainer having a mid-portion spaced from the guard member and provided with a hole receiving the handle, said retainer having portions bearing against the guard member and having side portions extending around marginal portions of the guard member and edge portions extending over the guard member to retain blades on said supports.

8. A safety razor as set forth in claim 7 in which the mid-portion of the retainer extends away from the guard member to be bent toward the latter to cause the edge portions of the retainer to move away from blades on the guard member.

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