Oct. 14, 1924. 1,511,220

F. ISMAN

SAFETY RAZOR

Filed Nov. 9, 1923

Fig. 1.

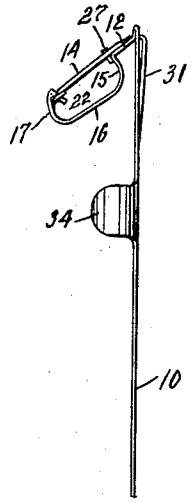


Fig. 2.

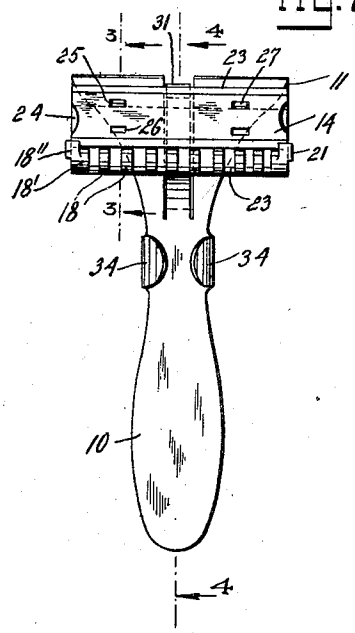


Fig. 4.

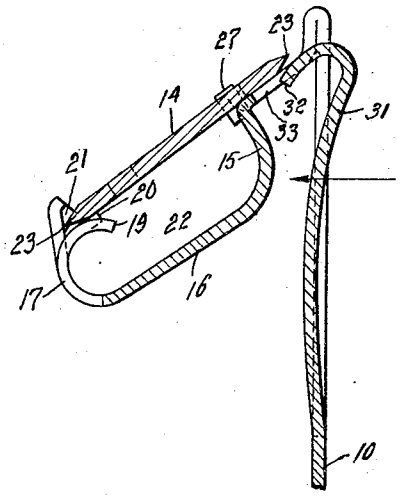
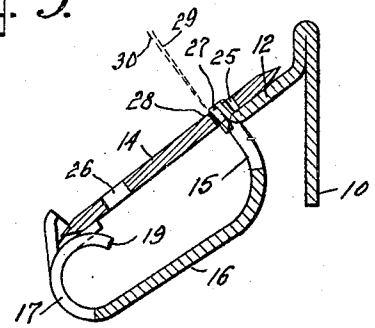


Fig. 3.



INVENTOR

F. Isman

BY Sigmund Herzog

ATTORNEY

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FELIX ISMAN, OF NEW YORK, N. Y., ASSIGNOR TO EDWIN N. DUFFY, OF NEW YORK, N. Y.

SAFETY RAZOR.

Application filed November 9, 1923. Serial No. 673,731.

To all whom it may concern:

Be it known that I, FELIX ISMAN, a citizen of the United States, and resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Safety Razors, of which the following is a specification.

The present invention relates to improvements in safety razors, and has for its main object to provide a simple and efficient razor blade holder that is struck up from a single piece or blank of sheet metal.

Another object of the invention is to provide a holder of the type mentioned having simple means for ejecting the razor blade whenever it is desired to replace the one in the holder by another one.

A further object of the invention is to provide a razor blade holder of the character mentioned which is extremely simple in construction, efficient in operation, durable in use and capable of manufacture on a commercial scale, or in other words one which is not so difficult to make as to be beyond the reasonable cost of such a contrivance.

Still another object of the invention is to provide a safety razor blade having two cutting edges, with simple means for facilitating the handling of the same.

With these and other objects in view, which will more fully appear as the nature of the invention is better understood, the same consists in the combination, arrangement and construction of parts hereinafter described, pointed out in the appended claims and illustrated in the accompanying drawings, it being understood that many changes may be made in the size and proportion of the several parts and details of construction within the scope of the appended claims, without departing from the spirit or sacrificing any of the advantages of the invention.

One of the many possible embodiments of the invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of a razor embodying the invention; Fig. 2 is a front elevation thereof; Fig. 3 is a section taken on line 3—3 of Fig. 2, on a larger scale; and Fig. 4 is a section taken on line 4—4 of Fig. 2, also on a larger scale.

The razor blade holder comprises a handle 10 of any suitable configuration, the same gradually widening out toward its upper end 11, where it merges into a flat base 12, that extends at an acute angle to the plane of the handle 10. The length of this base corresponds substantially to that of the razor blade 14, as clearly shown in Fig. 2 of the drawings, it extending thence downwards and forwards, as shown at 15 and 16, respectively, the forward end of the section 16 being bent upwards as indicated at 17, and this upwardly bent portion 17 being provided with notches, forming guard fingers 18. The free ends of these guard fingers are bent downwards, as shown at 19, below the plane of the base 12. The outermost guard fingers, denoted by the numerals 18′, have their free ends 20 bent toward the base 12, the upper faces of the said ends 20 being disposed in the plane of the upper face of the base 12 and serving with the latter as a supporting means for the razor blade. The outermost portions of the fingers 18′, denoted by the numeral 18″, extend above the razor blade and are thence bent vertically downwards, as shown at 21. These downwardly bent sections 21 prevent movement of the razor blade in a lateral direction on the blade holder and also serve to facilitate the insertion of the blade, as will hereinafter appear, into the said holder.

As appears from Figs. 2 to 4, inclusive, of the drawings, there is provided between the blade supporting surfaces of the blade holder a transverse channel 22, in which the lather, used in shaving, may collect, the lather flowing into the said channel through the notches between the guard fingers 18, so that the cutting edge of the razor blade is always clean and ready to perform its proper function.

The razor blade 14 is provided with a cutting edge 23 on each of its longitudinal edges, and with a notch 24 in each of its transverse edges. These notches are engaged by the fingers of the user, to facilitate handling of the blade. The blade is furthermore provided with two sets of quadrangular apertures 25 and 26, the apertures 25 being spaced from one of the cutting edges and the apertures 26 a similar distance from the opposite cutting edge. The apertures 25 are in alignment with the apertures 26, that is to say the distance between each set of apertures is the same.

For the purpose of holding the razor blade on the holder and for locking the same thereto, there project above the base 12 two lugs 27, spaced apart and of a size to fit into one set of the apertures in the razor blade. These lugs are struck up from the downwardly extending portion 15 of the holder, the forward face 28 of each lug extending at an obtuse angle to the upper face of the base 12, as clearly shown in Fig. 3 of the drawings, in which the dotted line, denoted by the numeral 29, extends at right angles to the upper face of the base 12, while the dotted line, denoted by the numeral 30, which is an extension of the forward face 28 of the lug 27, is slightly inclined to the line 29. The purpose of this arrangement will appear hereinafter.

From the upper portion of the handle 10 is struck up a resilient strip 31, the free upper end 32 of which is bent forwards into a slot 33 in the base 12, it being normally disposed below the razor blade 14. When this resilient strip is forced forwards in the direction of the arrow shown in Fig. 4 of the drawings, it engages the underface of the blade 14 and, in its further forward movement, ejects the blade from the holder, it forcing the blade upwards out of engagement with the lugs 27.

The handle 10 is provided with two forwardly projecting finger rests 34, the free ends of which are bent inwards toward each other, as clearly shown in Fig. 2 of the drawings. These finger rests afford means whereby the fingers of the operator may firmly grasp the instrument. They serve also as a means for holding a small tube of shaving cream on the safety razor, when not in use, thereby preventing mislaying of the shaving cream.

The operation of inserting, clamping and releasing the razor blade on the blade holder is as follows: The razor blade is held by placing two of the fingers of the user into the notches 24 and bringing one of its cutting edges against the guard fingers 18 between the vertical portions 21 of the outermost fingers 18′. In this manner the one set of apertures in the blade is brought into alignment with the lugs 27. When now the rear cutting edge of the blade is forced toward the base 12, the front edges of the apertures in alignment with the lugs 27 engage first the forward edges 28 of the said lugs, and, when then the blade is forced further against the said base, the forward edges of the said apertures are extended below the highest points of the forward edges 28 of the said lugs, whereby the blade is held by friction upon the blade holder, the lugs yielding somewhat when the blade is forced against the base 12 and springing back into place when the said blade has passed the highest points of the lugs 27. In order to eject the blade, the resilient strip 31 is forced forwards in the direction of the arrow shown adjacent the same in Fig. 4 of the drawings, engaging the underface of the blade and lifting it up out of engagement from the lugs 27, far enough to be easily grasped by the fingers of the user for the purpose of lifting it entirely out of the blade holder.

As appears from above, the blade holder is made of one integral piece and thus adapted to be manufactured at a small expense. It is adapted to securely confine the blade in its operative position and to permit of a convenient insertion and removal of the blade.

What I claim is:—

1. A razor blade holder including means for locking the blade thereto, said locking means being made integral with said holder, and means made integral with said holder for ejecting the blade therefrom.

2. A razor blade holder comprising a handle, a base extending forwardly of said handle, said base being bent downwards, thence forwards and the front portion of the latter section being extended upwards to form a guard, the outer sections of said guard extending toward said base in the plane of the latter and serving with said base to support the razor blade, said base being provided with two upwardly projecting lugs for engagement with apertures in the razor blade, the forward faces of said lugs extending at an obtuse angle to the upper face of said blade.

3. A razor blade holder according to claim 2, comprising means for ejecting the razor blade from said holder.

4. A razor blade holder according to claim 2, comprising a resilient strip having its upper end adjacent said base extending forwards for engagement with the blade when moved toward said lugs.

Signed at New York, in the county of New York and State of New York, this 30th day of October, A. D. 1923.

FELIX ISMAN.