

B. VOM EIGEN.
SAFETY RAZOR.
APPLICATION FILED JUNE 27, 1911.

1,059,662.

Patented Apr. 22, 1913.

2 SHEETS-SHEET 1.

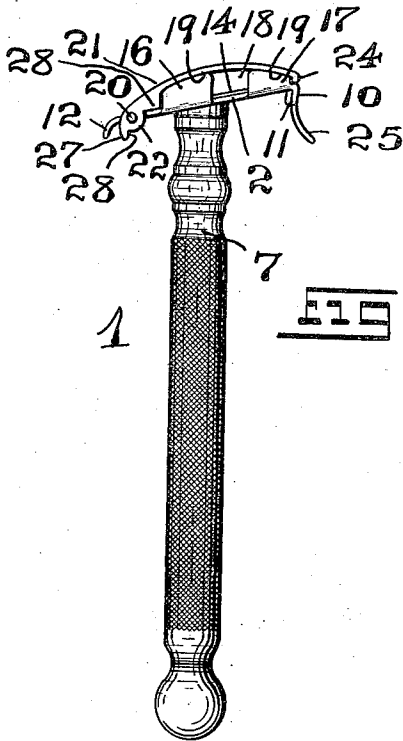


FIG. 1

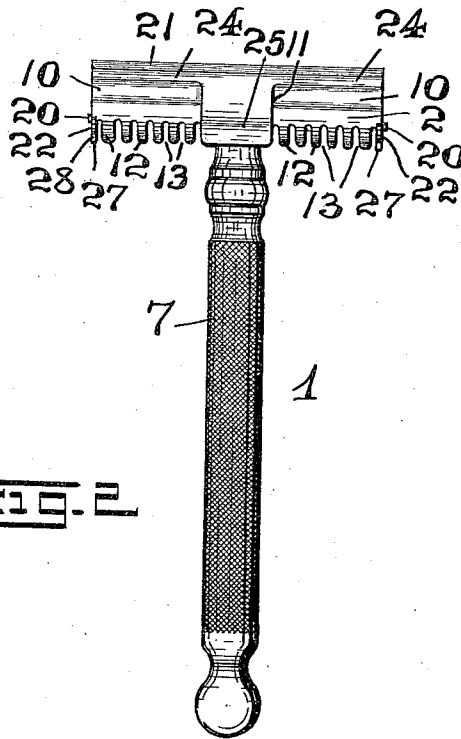


FIG. 2

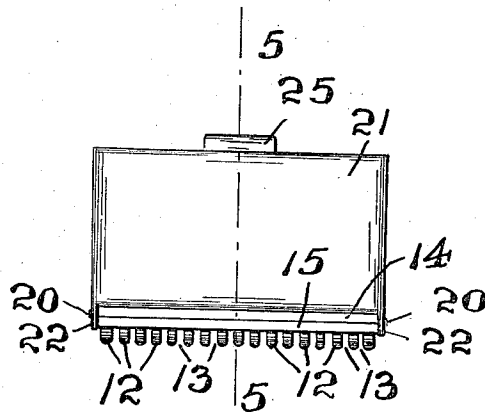


FIG. 3

WITNESSES:
Harry E. Pfeiffer
Frank M. W. Fraentzel

INVENTOR:
Bernhard vom Eigen,
BY *Fraentzel and Richards,*
ATTORNEYS.

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2 SHEETS-SHEET 2.

FIG. 4

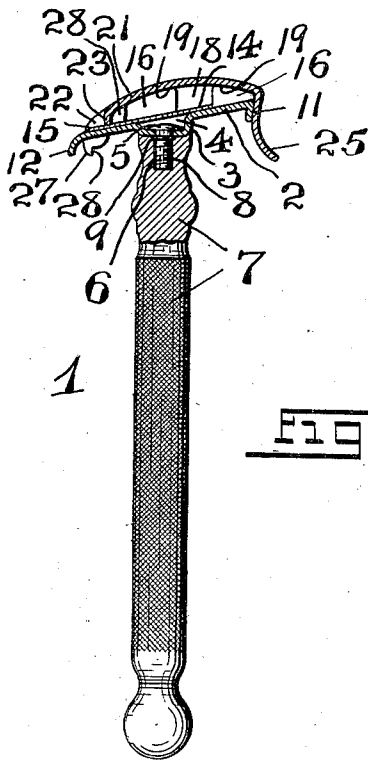
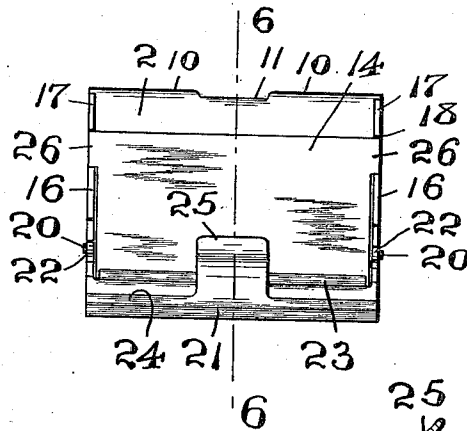


FIG. 5

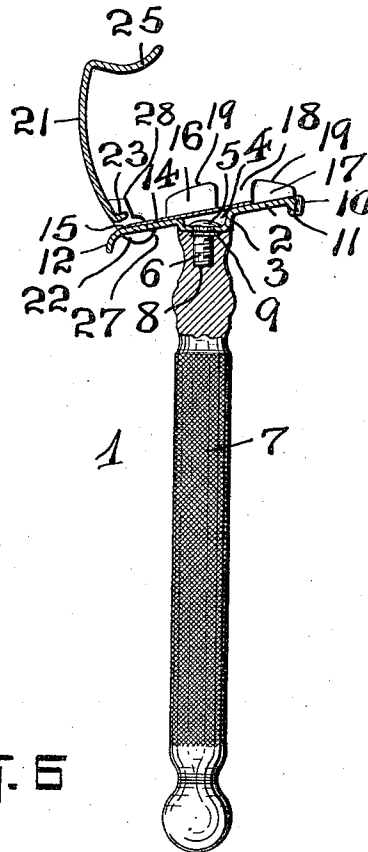


FIG. 6

WITNESSES:
Harry E. Pfeiffer
Fred H. W. Fraentzel

INVENTOR:
Berno vom Eigen,
BY
Fraentzel and Richards,
ATTORNEYS.

UNITED STATES PATENT OFFICE.

BENNO VOM EIGEN, OF NEWARK, NEW JERSEY.

SAFETY-RAZOR.

1,059,662.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed June 27, 1911. Serial No. 635,582.

To all whom it may concern:

Be it known that I, BENNO VOM EIGEN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Safety-Razors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

The present invention has reference, generally, to improvements in safety-razors; and, this invention relates, more particularly, to a novel means for securing the razor-blade in its operative, but separable relation, with the blade-retaining casing or element of the safety-razor.

The present invention has for its principal object to provide a novel and simple construction of safety-razor, and a means therefor for engaging the separable razor-blade near the cutting edge of the same and positively clamping that portion of the blade, near and along its cutting edge, upon the supporting member of the blade-retaining casing or element.

The invention has for its further object to provide a simply operating and hinged blade-clamping means for safety-razors, said means being made in the form of a cover for inclosing most of the razor-blade, except the projecting cutting or shaving portion of the blade, and serving at the same time, when the hinged cover is closed, as a positively acting clamping device for retaining the razor-blade in its clamped and operative relation upon the supporting member of the blade-retaining casing, but the said hinged cover being readily forced back into its opened relation by means of a slight pressure upon a thumb-latch, with which the said cover is provided, and the spring-like action of the clamping member of the said cover with the shaving-blade and the supporting member of the blade-retaining casing.

Other objects of this invention not at this time more particularly enumerated will be clearly understood from the following detailed description of the present invention.

With the various objects of this invention in view, the said invention consists in the

novel safety razor hereinafter set forth; and, the invention consists, furthermore, in the novel arrangements and combinations of the several parts, as well as in the details of the construction of the same, all of which will be more fully described in the following specification, and then finally embodied in the clauses of the claims which are appended to and which form an essential part of the said specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation and Fig. 2 is a rear view of a safety-razor made according to and embodying the principles of the present invention; and Fig. 3 is a top view of the same. Fig. 4 is a similar view, with the hinged razor-blade retaining cover in its open relation to the blade-supporting member of the safety-razor, said view showing also in plan, the general arrangement of the razor-blade upon the said supporting member. Fig. 5 is a transverse section of the safety-razor, said section being taken on line 5—5 in said Fig. 3, the handle of the device, however, being represented in elevation; and Fig. 6 is a similar sectional representation of the safety-razor, said section being taken on line 6—6 in Fig. 4, with handle being also shown in elevation.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the several figures of the drawings, the reference-character 1 indicates a complete safety razor showing one embodiment of the features of the present invention, the blade-retaining casing of which comprises an angularly disposed base-plate 2, forming a blade-supporting member, as will presently appear. This base-plate is usually formed with a downwardly extending and perforated boss or hub, as 3, which is preferably pressed out of the said base-plate and therefore forms an integral part thereof, the said boss or hub forming with said base-plate 2, a recess or depression, as 4. Arranged in this recess or depression is the head 5 of a screw, the screw-threaded shank 6 of which extends through the perforation in the said boss or hub 3 and is screwed into a screw-threaded portion 8 of a suitable handle 7. The preferred method of permanently securing this screw to the said boss or hub is by means of a slight annular projection 9 which is formed upon the said screw-

threaded shank at the proper distance below the head 5 of the screw, and by means of a suitable tool is upset and firmly pressed against the lower surface of the boss or hub; so as to provide a shoulder which suitably surrounds the hole or perforation in the said boss or hub, and thereby securely joins the said screw to the said base plate against displacement therefrom, as will be clearly evident. Of course it will be understood, however, that the said screw may be otherwise secured to the said base-plate; or, that any other fastening means may be employed for securing the handle of the safety-razor to the said base-plate. As shown, the said base-plate 2 is formed along one of its marginal edge-portions with a downwardly extending lip or projection, as 10, which acts as a reinforcing or strengthening means, and in which there is a depression, as 11, which forms a catch-portion or holding means with which the thumb-piece or catch of a pivoted or hinged cover to be presently more fully described is adapted to be sprung into retaining or holding engagement. At its opposite marginal edge-portion, the said base-plate 2 is formed with the usual curved and downwardly projecting lugs 12 and intervening spaces 13, above which the shaving or cutting edge 15 of the razor-blade 14 rests. At its side-edges, the said base-plate 2 is made with upwardly projecting lugs or ears 16 and 17, said ears or lugs 16 and 17 being provided with a space 18 between them, substantially as shown, and the upper marginal edge-portions of said ears or lugs being suitably curved, as at 19, and as clearly illustrated in Figs. 1, 5 and 6 of the drawings. The said base-plate 2 is also provided at or near the edge-portion which is formed with the lugs 12 and the intervening spaces 13 with outwardly projecting pivots or pintle-like fingers 20, upon which are pivotally mounted the perforated pintle-receiving ears or lugs 22 of a suitably curved cover-member or element 21. This cover-member or element is made along its marginal edge-portion which is located between the said ears or lugs 22 with a downwardly projecting clamping or binding member 23, and at its opposite edge-portion the said cover-member or element is made with a downwardly projecting marginal rib, as 24, which is adapted to rest upon the upper surface of the said base-plate 2, when the said cover-member or element has been brought into its closed relation with the said base-plate. Connected with and extending downwardly from the said marginal rib 24 is a suitably curved and slightly outwardly extending thumb-piece or catch, as 25, the convexly curved surface-portion of which can be sprung into separable retaining or holding engagement with the metal forming the depression 11 in the previously mentioned lip or projection 10, as will be clearly understood from an inspection more particularly of Figs. 1 and 5 of the drawings. To secure the razor-blade 14 in its operative position upon the upper surface of the said base-plate 2, the cover-member or element 21 is brought into the raised position indicated in Fig. 6 of the drawings, and the razor-blade which is provided with the laterally extending marginal projections 26 is arranged upon the upper surface of the said base-plate with its cutting or shaving edge in position above the lugs 12 and spaces 13, and the said marginal projections 26 in the spaces 18 between the upwardly projecting lugs or ears 16 and 17 of the base-plate 2. When thus arranged, the clamping or binding member 23 of the cover-member or element 21 is in the position indicated in Fig. 6 of the drawings, out of engagement with the said razor-blade, so that the latter can be readily placed in its position upon the said base-plate, or removed therefrom, as the case may be. When the said shaving-blade has, in this manner, been placed upon the said base-plate of the blade-retaining casing, with the cutting or shaving edge of the blade extending beneath the clamping or binding member 23 of the said curved cover-member or element 21, substantially as shown in Fig. 6 of the drawings, and with the said edge of the blade resting partially upon the lugs 12 of the base-plate, as shown more particularly in Fig. 3 of the drawings, the cover-member or element 21 is closed down, so as to bring its thumb-piece or catch 25 into its holding engagement with the depressed portion 11 of the lip or projection 10, whereby the marginal clamping or binding edge of the said member or element 23 is brought into positive frictional engagement with the blade-surface, slightly back of the cutting or shaving edge of the blade, in the manner clearly illustrated in Fig. 5 of the drawings, and whereby, owing to the spring-like action of the metal of which the blade is made, the cutting or shaving portion of the blade is securely held, along its entire length, down upon the said lugs 12, so that the device can be most efficiently used for properly shaving the face. In order that the said cover-member or element 21 may be retained in its raised position, represented in said Fig. 6 of the drawings, while removing or replacing the razor-blade, the pivot-lugs or ears 22 of the cover-member or element 21 are made with slight projections or fingers, as 27, each projection or finger 27 being formed with a straight edge or shoulder, as 28, see Figs. 1 and 5, which is adapted to be brought against the lower face of the base-plate 2, and whereby each projection or finger 27 acts as a stop to arrest the opening movement of the said cover-member or element 21, and thereby hold it in the raised position

shown in the said Fig. 6 of the drawings. When the said cover-member or element has been closed, the lower edge of the marginal rib 24 rests upon the upper surface of the base-plate 2, and the lower marginal surface-portions of the cover-member or element rest upon the upper marginal and curved edges 19 of the ears or lugs 16 and 17, with the spaces between the ears or lugs 16 and the pintle-receiving ears or lugs 22 closed by the angular parts 28 of the cover-member or element 21, so that a simple, neat and compact razor-blade retaining casing for safety-razors is provided, which can be readily cleansed after use, and in which there are no parts to get out of order, the movable parts of the retaining case being most easily manipulated, by holding the safety-razor by means of its handle in the one hand, and by means of the thumb of the same hand applying a slight pressure upon the thumb-piece, whereby the latter is released from its holding engagement with the base-plate, and the cover-member or element automatically springs into its raised position.

I am aware that some changes may be made in the various arrangements and combinations of the several parts of the device, as well as in the details of the construction of the same, without departing from the scope of the present invention as set forth in the foregoing specification, and as defined in the claims which are appended to the said specification. Hence, I do not limit my present invention to the exact arrangements and combinations of the several parts as described in the said specification, nor do I confine myself to the exact details of the construction of the said parts, as illustrated in the accompanying drawings.

I claim:—

1. In a safety-razor, a razor-blade retaining casing comprising a base-plate, pintles extending laterally from said base-plate, a cover-member, perforated pivot-ears connected with said cover-member, said ears

being pivotally mounted upon said pintles, means connected with said cover-member for clamping a razor-blade near its cutting edge upon said base-plate, and a hook-shaped projection connected with each pivot-ear adapted to be brought into engagement with the base-plate and serving as a stop to limit the pivotal movement of the cover-member, said base-plate being provided with a lip formed with a depression, and a thumb-latch connected with said cover-member, said thumb-latch being adapted to enter said depression and being adapted to be sprung into retaining engagement with the depressed portion of said lip, substantially as and for the purposes set forth.

2. In a safety-razor, a razor-blade retaining casing comprising a base-plate, pintles extending laterally from said base-plate, a cover-member, perforated pivot-ears connected with said cover-member, said ears being pivotally mounted upon said pintles, a downwardly extending marginal clamping element connected with the said cover-member near its hinged connection with the said base-plate for clamping a razor-blade near its cutting edge upon said base-plate, and a hook-shaped projection connected with each pivot-ear adapted to be brought into engagement with the base-plate and serving as a stop to limit the pivotal movement of the cover-member, said base-plate being provided with a lip formed with a depression, and a thumb-latch connected with said cover-member, said thumb-latch being adapted to enter said depression and being adapted to be sprung into retaining engagement with the depressed portion of said lip, substantially as and for the purposes set forth.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 23rd day of June, 1911.

BENNO VOM EIGEN.

Witnesses:

FREDK. C. FRAENTZEL,

FREDK. H. W. FRAENTZEL.