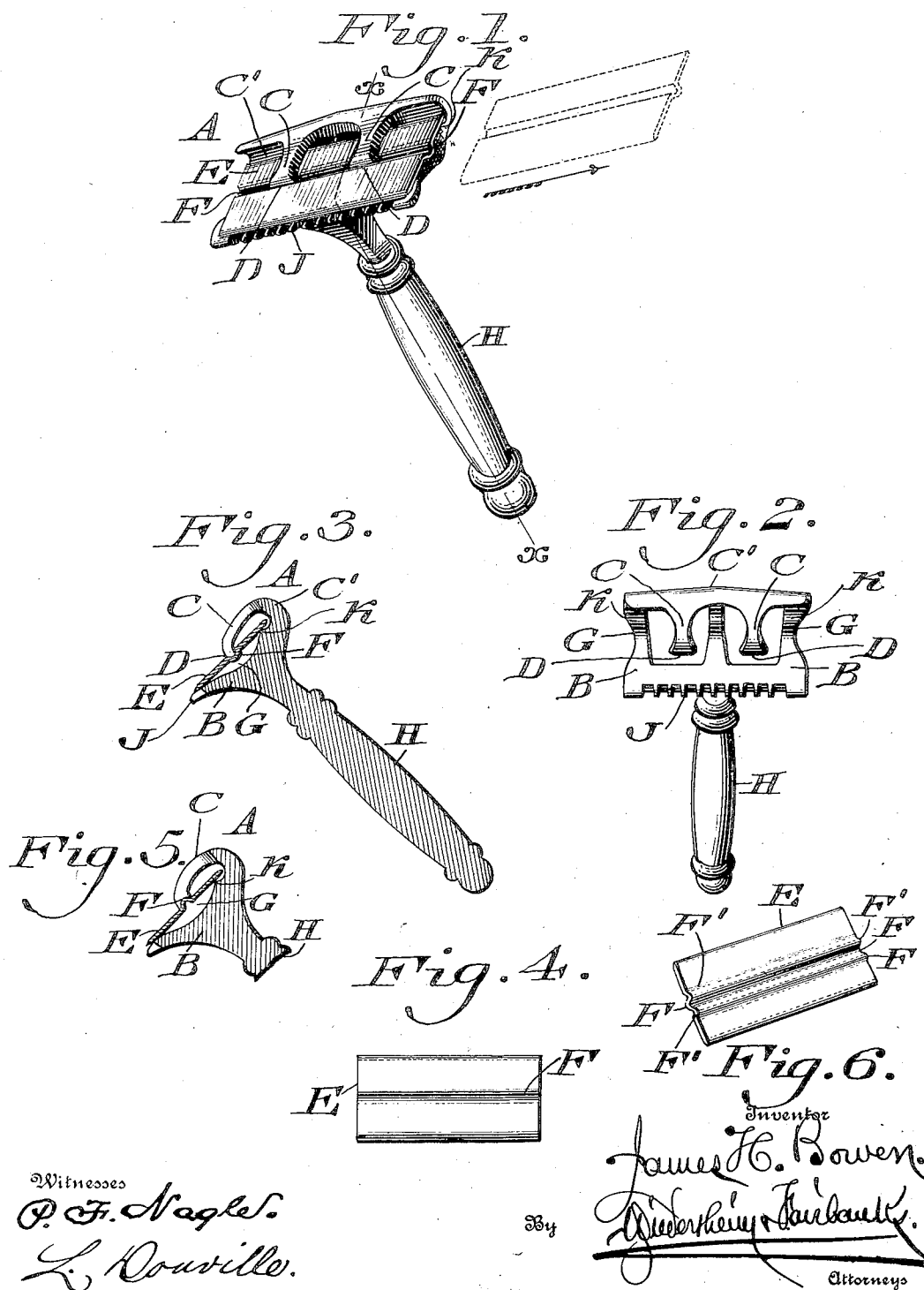


No. 880,860.

PATENTED MAR. 3, 1908.

J. H. BOWEN.
SAFETY RAZOR.

APPLICATION FILED MAR. 29, 1907.



UNITED STATES PATENT OFFICE.

JAMES H. BOWEN, OF PHILADELPHIA, PENNSYLVANIA.

SAFETY-RAZOR.

No. 880,860.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed March 29, 1907. Serial No. 365,234.

To all whom it may concern:

Be it known that I, JAMES H. BOWEN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Safety-Razor, of which the following is a specification.

My invention relates to a razor of the order of a safety, and consists of a blade which is provided with a longitudinally extending groove or channel, which may be engaged by a member of the head or holder of the razor so as to flex the blade centrally into a groove in the head employed, while the edge-portions of the same are seated on bearing surfaces on the head on opposite sides of said groove and which permits said blade to be applied in position and removed therefrom by slidable lateral motions, the wall of said groove or channel also serving to stiffen and strengthen the blade, as will be herein described.

Figure 1 represents a perspective view of a razor embodying my invention. Fig. 2 represents a front elevation thereof, the blade being removed. Fig. 3 represents a longitudinal section on line $x-x$, Fig. 1. Fig. 4 represents a face view of the blade of the razor. Fig. 5 represents a longitudinal section of a modification. Fig. 6 represents a perspective view of a modified form of the blade.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings: A designates a head which is composed of a suitably shaped plate B of metal or other rigid material, and rigid arms C, which latter extend from what may be termed the upper end of said plate downwardly in front of the face of said plate so as to overhang said front, the lower ends of said arms being inturned, forming the lips D, with which said arms are set out from said plate so as to form a space for the reception and location of the blade E, the latter having, intermediate of its edges, the longitudinally extending channel, groove or recess F which is adapted to receive said lips D, it being noticed that the face of the plate B is cut away sufficiently forming the recess or groove G, for the occupation of the back of said channel F, the plate thus having bearing surfaces for both edge-portions of the blade respectively on opposite sides of said groove. Connected with the plate B,

is the operative handle H, which when the head is formed of cast metal may be integral with the same.

On the face of the plate B, adjacent to the bend C', which connects the arm C with said plate, is the projection or hump K on which the adjacent portion of the blade is seated. This removes the inner cutting edge of the blade from contact with said plate, it being also noticed that the blade and its channel F are so spaced that said edge is also removed from contact with the inner wall of said bend, and thus injury to said edge is prevented, both in inserting and removing the blade, or when the razor is in use.

In order to apply the blade to the head, it is presented to the side of the latter and moved into the same between the plate B and arms C, with the lips D entering the channel F, thus seating the blade with its opposite edge portions resting on the adjacent bearing surfaces of the plate B, and engaging said lips with the walls of said groove G, it being noticed that the blade is more or less flexible so that the lips D, which have their outer terminals out of the plane which connects the opposite bearing surfaces on the plate B of the head A, press inwardly against the central portion of the blade and so flex the same into said groove G, thus firmly holding the blade at said center while its edge portions are forced against the opposite bearing surfaces of said plate B, thus doubly insuring the location and seating of the blade by friction in a firm and comparatively-immovable manner. The razor is now in condition for use, its shaving edge appearing at the guard J which is provided on the head as usual in razors of the kind. When the blade is to be removed, it is drawn laterally or in the direction of the arrow, Fig. 1, it sliding out over the plate B and the walls of the channel F, and passing the lips D without interference, the blade thus being entirely disconnected, as shown in dotted lines, Fig. 1. Attention is furthermore directed to the groove or channel F, in that it is turned out from the body thereof and its wall forms a bead, or in a measure a corrugation, which serves to stiffen and strengthen the blade, and thus render the same more durable in its nature.

In Fig. 5, I show the blade reversed, whereby the channel or recess F is located on the front of the head, and the arms C are

grooved, channeled or recessed to receive the wall of said recess and holdingly-engage the same without producing different results from those in the case.

- 5 While I have specified certain means for carrying out my improvements, I do not wish to be limited exactly to the same, but desire to make such changes as may come within the scope of the novelty involved.
- 10 As for instance, the number of beads or corrugations in the blade may be increased, as shown at F', F', Fig. 6, the same being parallel with the central bead or corrugation F, and serving to stiffen the blade to a great
- 15 extent intermediate of its cutting edges, so that the blade may be made light and yet possess strength and durability. If desired, the beads or corrugations F', F', may be of less depth than the corrugation F. The
- 20 corrugation or corrugations will be found also of importance in tempering, sharpening, honing, and stropping the blade, thus preventing warping of the same, without materially increasing the cost of construction
- 25 over a plain blade. Furthermore, the ends of the corrugation or corrugations present broad or blunt surfaces, with which the fingers may contact without cutting the latter when pressing the blade into or out
- 30 of position.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a safety razor, in combination, a
- 35 blade-holding device comprising a rigid head or backing plate having a groove or depressed part providing at each side thereof bearing surfaces constituting a blade-seat, a flexible blade supported on said blade-seat near its
- 40 longitudinal edges, a guard on one side of the backing plate and a rigid extension from its other side over-hanging the blade-seat and projecting slightly below the plane thereof, whereby the blade is slightly flexed and
- 45 securely held by friction.

2. A razor of the character stated, composed of a blade having a longitudinal deflection, and a blade-holder comprising a
- 50 head hollowed out near its center and an arm thereon set out therefrom to slidingly receive said blade between them, means on said arm to engage said deflection opposite the hollowed out portion and lock the blade
- 55 on the head, and a projection on the face of the head between the free end of said arm and the edge of the blade beneath said arm to

receive said edge of the blade and keep it from contact with the face of the head.

3. A razor of the character stated, composed of a blade having a turned-out wall on the face thereon, and a blade-holder composed of a head and an arm thereon set out therefrom so as to slidingly receive said blade between them, means on said arm adapted to engage said wall and lock the blade on the
- 60 head, and a projection on the face of said head adjacent to the inner place of connection of said arm with said head, on which projection the adjacent portion of the blade is seated and by which the relative cutting
- 65 edge is removed from said face.

4. In a razor of the character stated, a blade-holder comprising a plate hollowed out near its center, an arm extending from an end of said plate and adapted to over-
- 75 hang the face of the same opposite the hollowed out portion, and a projection on said face adjacent to the inner place of connection of said arm with said plate at a distance from the free end of said overhanging arm, said projection being adapted to hold the
- 80 relative cutting edge of the blade removed from the face.

5. A razor of the character stated comprising a head hollowed out near its center, an arm extending from an end of said head and adapted to overhang the face thereof, and a projection on said face at a distance from the free end of said overhanging arm, said projection being adapted to have the adjacent portion of the blade of the razor seated thereon and hold the relative cutting edge
- 90 from contact with said face the free end of said arm being disposed opposite said hollowed out portion.

6. A razor of the character stated comprising a handle, a head hollowed out near its center, an arm, and a guard, said parts being integral and a projection on the face of said head on which the adjacent portion of the blade is seated and by which the relative cutting edge thereof is removed from said
- 100 face, said arm extending from an end of said head and being adapted to overhang said face and projection opposite said hollowed out portion and controllingly-engage said
- 105 blade at a distance from the free end of said overhanging arm.

JAMES H. BOWEN.

Witnesses:

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