H. C. HARRISON.

MULTIBLADED RAZOR.

APPLICATION FILED NOV. 13, 1909.

1,024,509.

Patented Apr. 30, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

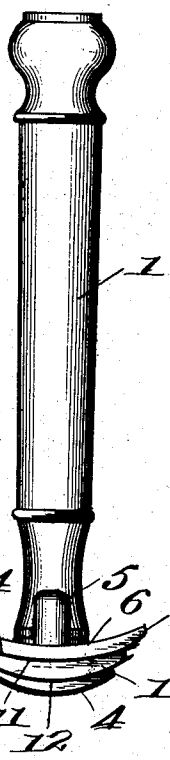
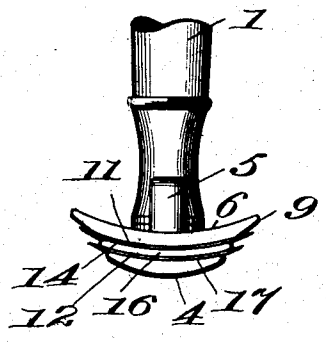


Fig. 5.



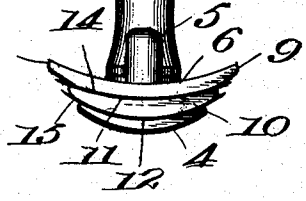


Fig. 3.

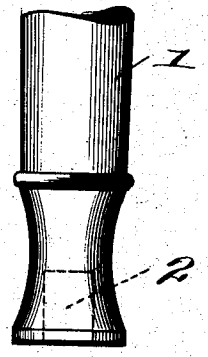
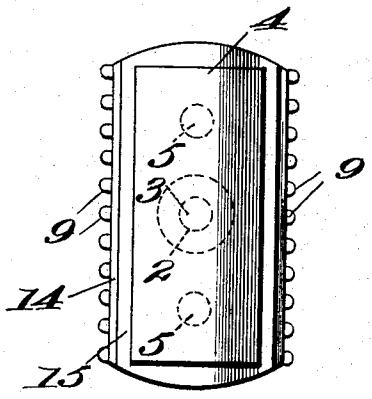


Fig. 2.



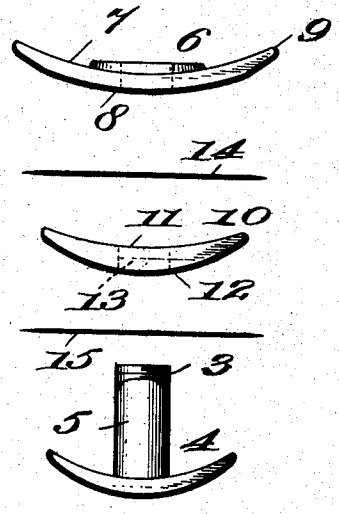
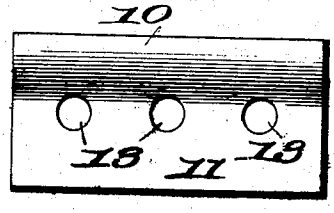


Fig. 4.



Witnesses

Geo. H. Bryant.

Jas. E. Dodge.

Inventor

H. C. Harrison by

Wilkinson Fisher & Wilkinson

Attorneys.

H. C. HARRISON.

MULTIBLADED RAZOR.

APPLICATION FILED NOV. 13, 1909.

1,024,509.

Patented Apr. 30, 1912.

2 SHEETS—SHEET 2.

Fig. 6.

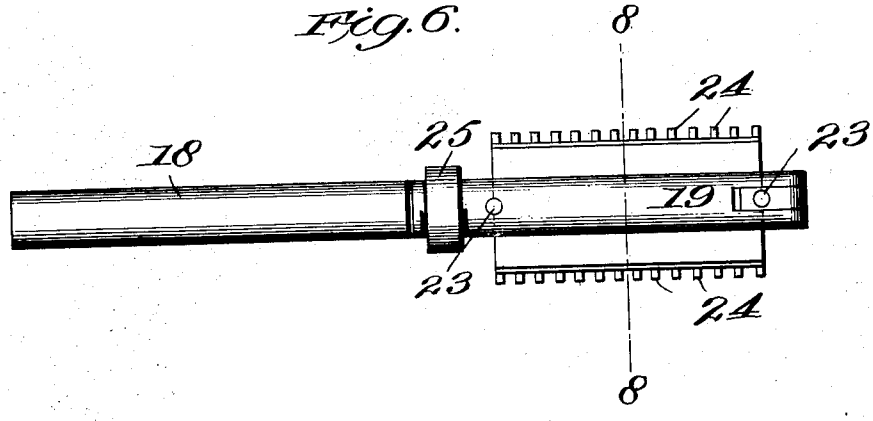


Fig. 7.

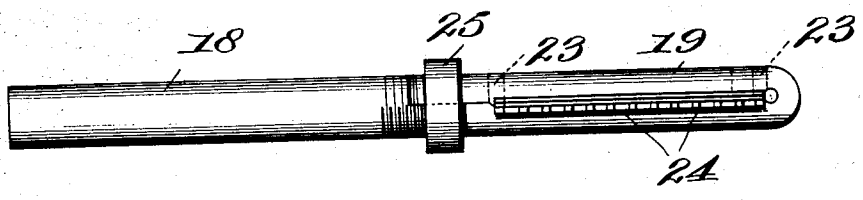


Fig. 8.

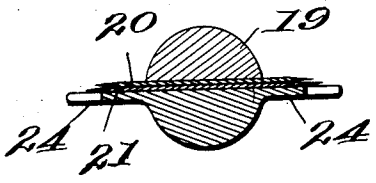
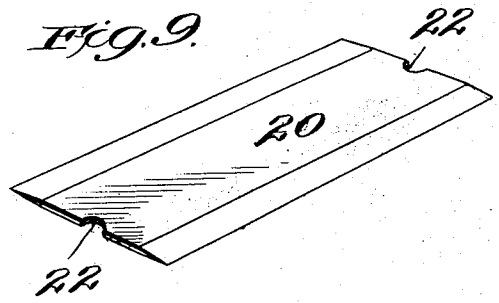


Fig. 9.



Witnesses

Geo. H. Byrne.

Jas. E. Dodge

Inventor

H. C. Harrison by

Williamson Fisher & Wilkinson

Attorneys.

UNITED STATES PATENT OFFICE.

HERBERT C. HARRISON, OF LOCKPORT, NEW YORK.

MULTIBLADED RAZOR.

1,024,509. Specification of Letters Patent. Patented Apr. 30, 1912.

Application filed November 13, 1909. Serial No. 527,896.

To all whom it may concern:

Be it known that I, HERBERT C. HARRISON, a subject of His Majesty the King of Great Britain, residing at Lockport, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Multibladed 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.

This invention relates to razors in general and especially to razors of the well known safety type, and has for its object to provide a razor having two blades so arranged as to cut more smoothly and, therefore, to produce a cleaner and closer shave than the razors now in use.

A still further object is to produce a razor the life of the blades of which will be longer and from which more satisfactory results may be obtained from slightly used blades than is the case with the present razors, all as will more fully appear hereinafter.

With these and other objects in view the invention consists in the novel details of construction and combinations of parts more fully hereinafter disclosed and particularly pointed out in the claims.

Referring to the accompanying drawings forming a part of this specification in which like numerals designate like parts in all the views:—Figure 1 is an end elevation of a safety razor of the well known type, showing my invention applied thereto; Fig. 2 is a bottom plan view of the parts shown in Fig. 1; Fig. 3, is an enlarged detail view of the parts before being assembled, showing part of the handle broken away; Fig. 4 is a detail plan view of a spacing member or distance piece; Fig. 5, is a detail view of a slightly modified form; Fig. 6, is a detail plan view of a further modified form of razor; Fig. 7, is a side elevation of the form shown in Fig. 6; Fig. 8, is an enlarged cross sectional view on the line 8—8 of Fig. 6; and, Fig. 9, is a detail perspective view of one of the razor blades shown in Fig. 6.

1 represents any suitable handle, the lower end of which is preferably provided with a screw threaded aperture 2, adapted to receive the screw threaded shank 3 of the clamping member 4, which clamping member is provided with two upwardly extending studs 5.

6 represents the guard, provided with the concave surface 7, the convex surface 8 and the guard teeth 9. This guard is also provided with the usual holes for alining the parts when assembled.

10 represents the spacing member or distance piece shown on an exaggerated scale for clearness. The concave surface 11 and the convex surface 12 of this piece 10, are eccentric to each other as shown and it is also provided with the alining holes 13.

14 and 15 represent a plurality of steel blades or steel wafers of the usual type and provided with the usual alining holes. These blades are so arranged on either side of the distance piece 10 when assembled, that their cutting edges are closely adjacent and are presented simultaneously to the skin in the act of shaving.

In the slightly modified form shown in Fig. 5, the distance piece 16 has its concave and convex surfaces 11 and 12 concentric instead of eccentric. As shown in the preceding figures, the bottom blade or wafer 17 in this form is also preferably slightly smaller than the upper blade 14, otherwise the structure is the same as in the preceding figures.

In the form shown in Figs. 6 to 9, the handle 18 is shown extending back from the blades and provided with a hinged member 19 between which is held a plurality of blades 20 and 21. The blade 20 is preferably smaller than the blade 21 and both are provided with alining notches 22 which fit the alining studs 23. In this form of the invention, the distance piece 10 is omitted and in assembling the parts, the larger blade 21 is placed directly against the guard 24, while the smaller blade 20 is preferably placed on top of the larger blade. The alining notches 22 contact with the studs 23 as will be readily understood. The hinged member 19 is then closed and the collar 25 is screwed over the end of the same as shown, thereby securely locking the blades, ready for shaving.

Of course, still other forms of my invention could be illustrated, but the above examples will be sufficient for a clear understanding of the same.

The operation of the improved razor is as follows:—In assembling the razor shown in

Figs. 1 to 5, the blade 15 is placed over the clamping member 4; the distance piece 10 is placed over the blade 15; the blade 14 is placed over the distance piece 10; and the guard 6 is placed over the blade 14. The handle is then screwed down on the screw threaded shank 3 until the parts are tightly bound. The parts in the other forms may be also suitably assembled in a manner which will be readily understood and when any of the forms of my razor is ready for shaving, I have found from experience that the use of two blades together produces far more satisfactory results than can be obtained from a single blade. When the two cutting edges are presented simultaneously to the skin there is less pulling of the hairs and the shave is much smoother than when only one blade is used. When so arranged, the edge of one blade will be closer to the skin than the other edge of the other blade and the two edges possibly act in quick succession on the same hair while it is under tension. Whatever may be the true explanation an arrangement of this kind produces a much cleaner and closer shave and with less inconvenience than is the case with a single blade. Even with blades that have become slightly dull more satisfactory results are still obtained.

It is obvious that those skilled in the art may vary the details of construction and the arrangement of parts without departing from the spirit of my invention, and, therefore, I do not wish to be limited to these features as disclosed, except as may be required by the claims.

What I claim is:—

1. A razor provided with a plurality of superposed blades, and with means for rigidly securing the cutting edges of said blades in such a close relation to each other that said edges may be simultaneously used for shaving the same spot, substantially as described.

2. A razor provided with a plurality of overlying blades and with means for rigidly securing the cutting edges of said blades one slightly behind the other and in such a close relation to each other that said edges may be simultaneously used for shaving the same spot, substantially as described.

3. A razor provided with a plurality of superposed removable blades, means for spacing said blades, and means for rigidly securing the cutting edges of said blades in such a relation to each other that said edges may be simultaneously used for shaving, substantially as described.

4. A safety razor provided with a guard, a plurality of overyling blades, and with clamping means for rigidly securing the blades in such a relation to each other that their cutting edges may be simultaneously used for shaving, substantially as described.

5. In a safety razor the combination of a plurality of superposed removable blades with curved clamping means, comprising a distance piece, for rigidly securing the blades in such a relation to each other that their cutting edges may be simultaneously used for shaving, substantially as described.

6. In a safety razor the combination of a plurality of superposed blades, a distance piece having eccentric curved surfaces; and means for rigidly securing said piece and blades in such a relation that the cutting edges will be presented to the skin simultaneously in the act of shaving, substantially as described.

7. In a safety razor the combination of a plurality of superposed blades with clamping means for rigidly securing the blades with the cutting edge of the one slightly in advance of the cutting edge of the other and in such relation to each other that their cutting edges may be simultaneously used for shaving, substantially as described.

8. A safety razor provided with a guard, a plurality of overlapping blades, and with means for securing the cutting edges of said blades in such a relation to each other that said edges may be used simultaneously for shaving, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

HERBERT C. HARRISON.

Witnesses:

W. Ross,

HARRIETT G. HUSTON.