

J. K. WATERMAN.
SAFETY RAZOR.
APPLICATION FILED APR. 8, 1909.

951,036.

Patented Mar. 1, 1910.

Fig. 1.

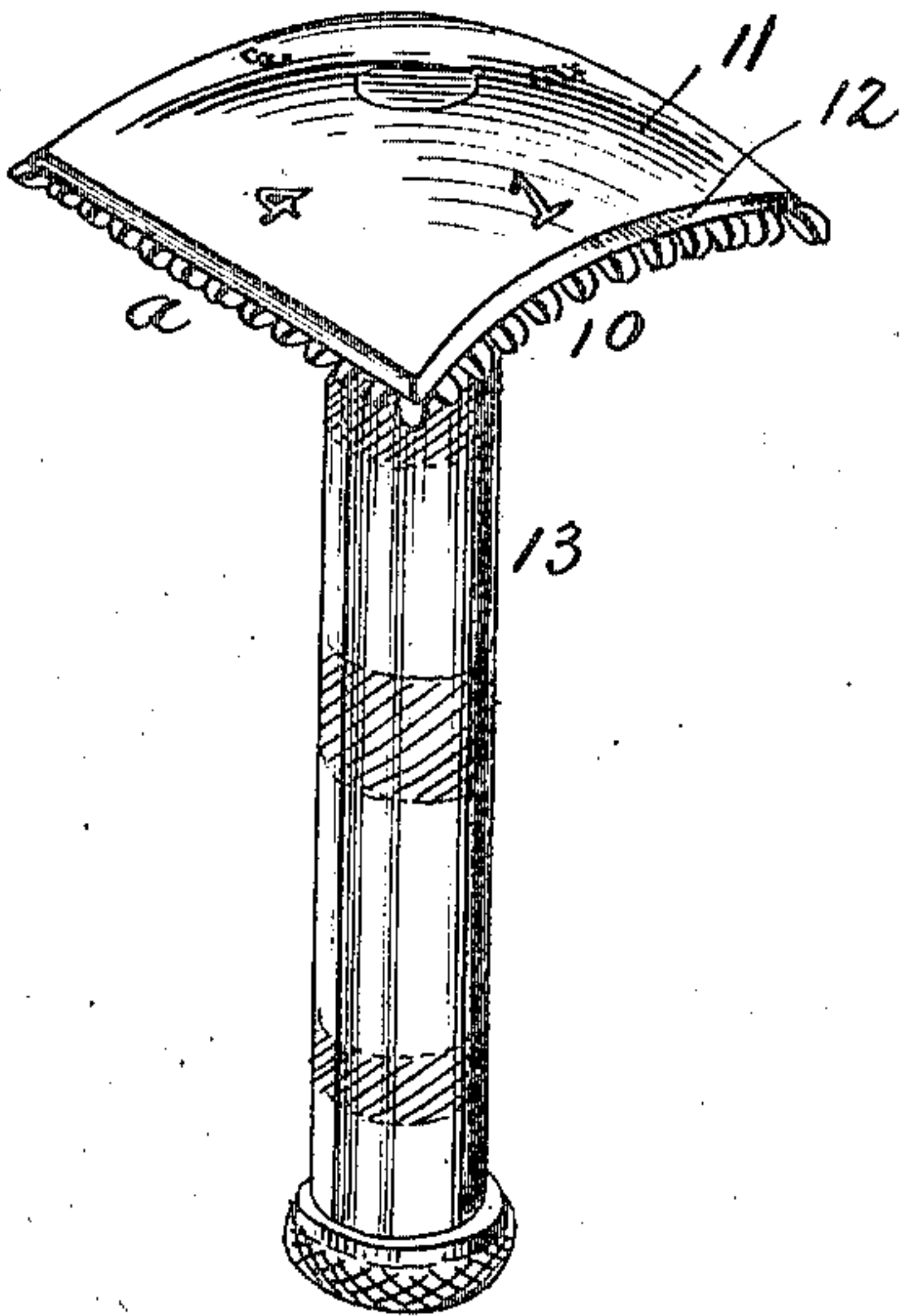


Fig. 2.

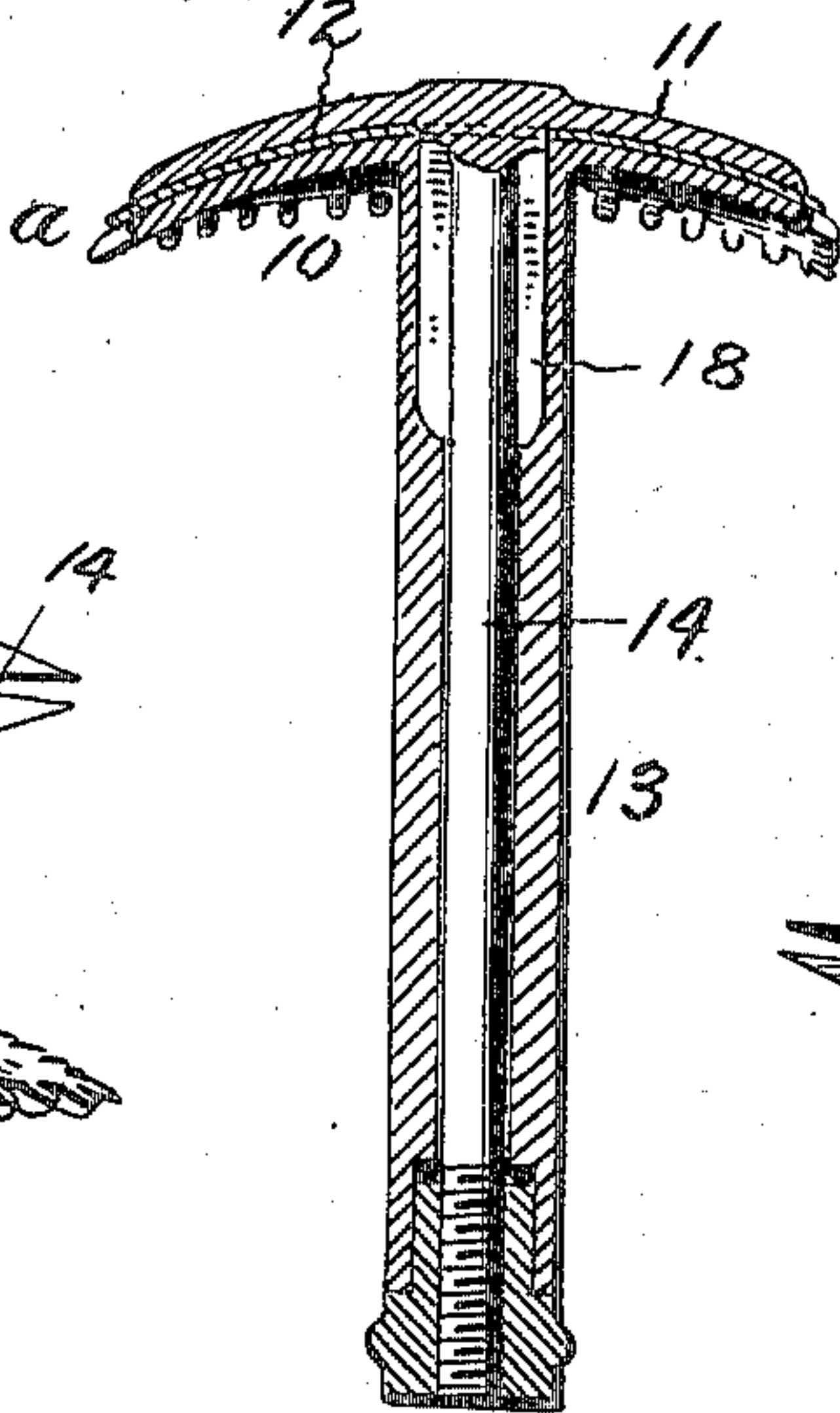


Fig. 3.

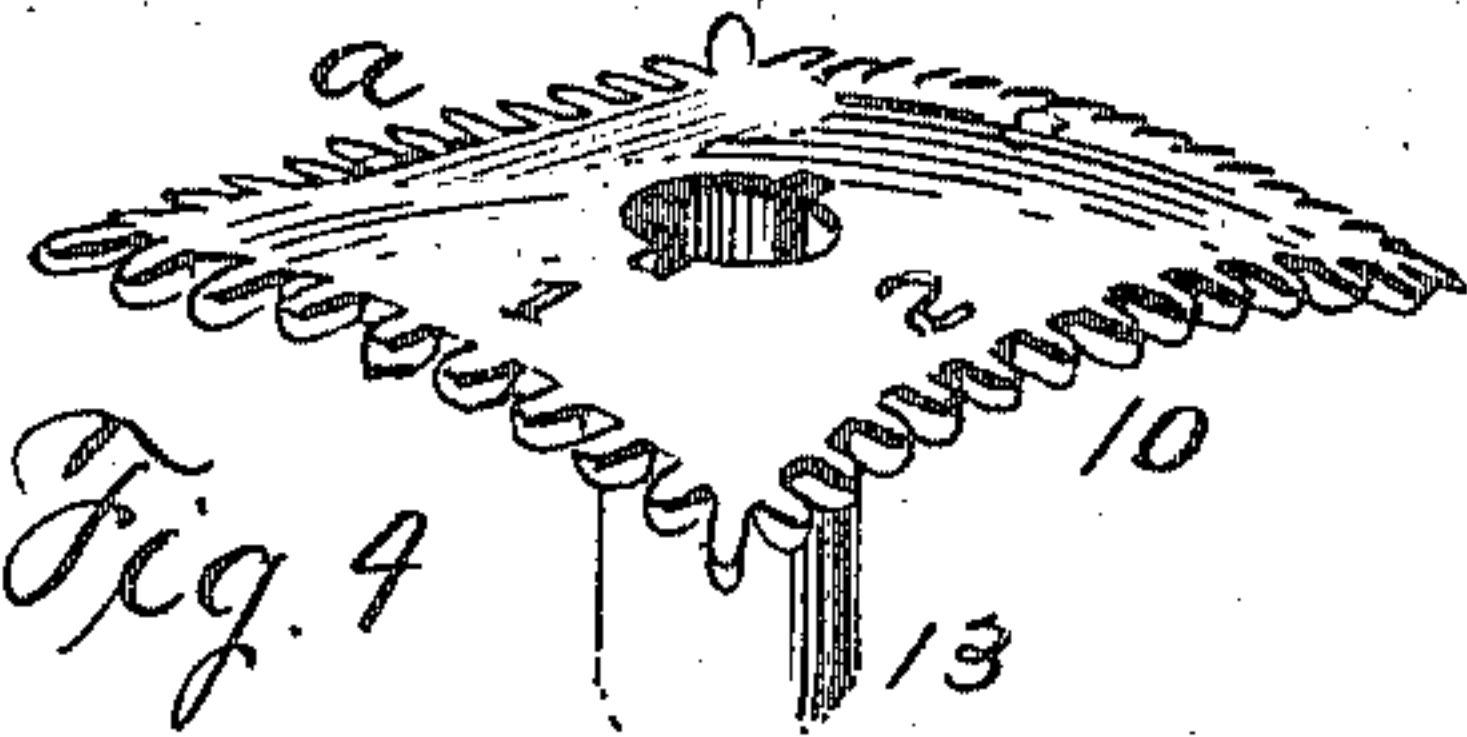
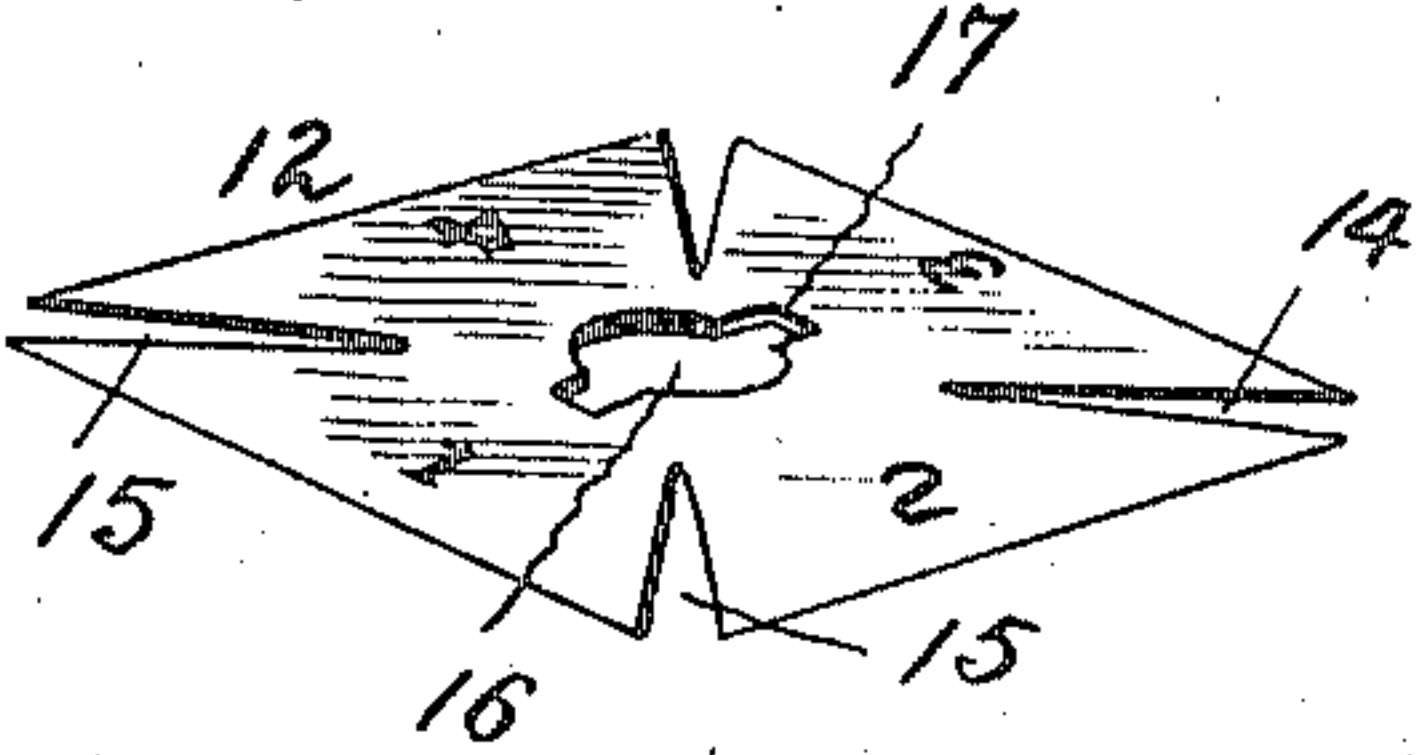
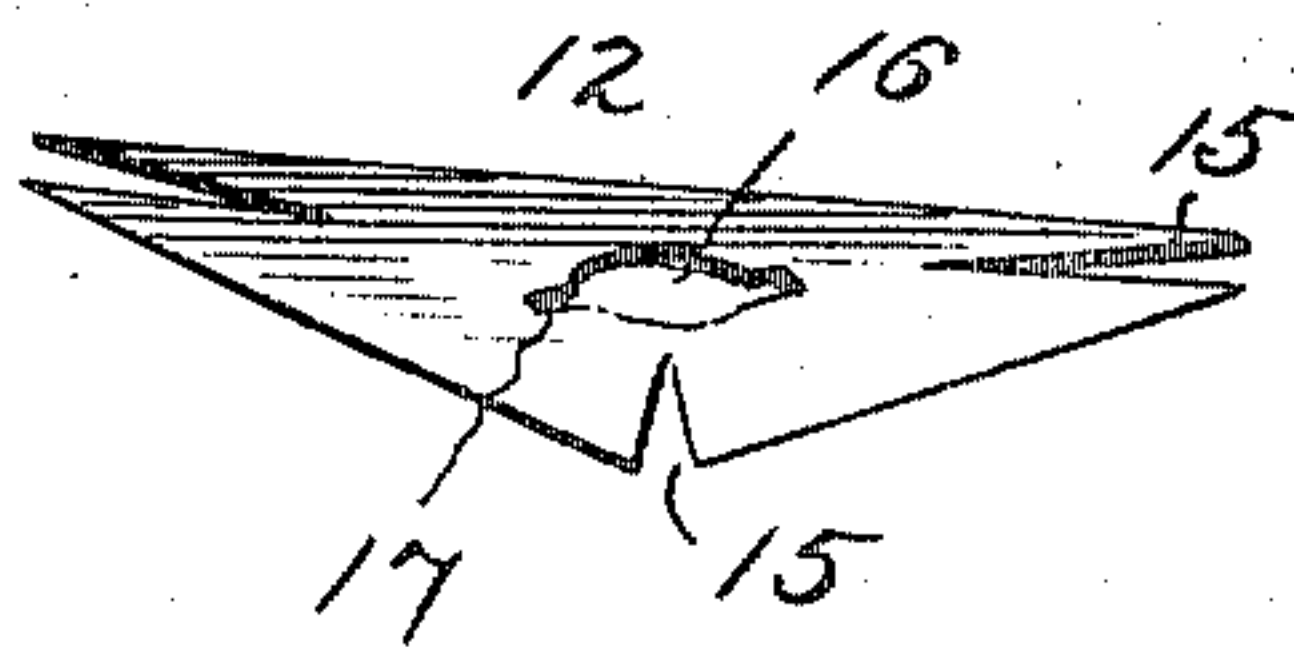


Fig. 4

Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN K. WATERMAN, OF NORFOLK, VIRGINIA.

SAFETY-RAZOR.

951,036.

Specification of Letters Patent.

Patented Mar. 1, 1910.

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To all whom it may concern:

Be it known that I, JOHN K. WATERMAN, of Norfolk, in the county of Norfolk and in the State of Virginia, have invented a certain new and useful Improvement in Safety-Razors, and do hereby declare that the following is a full, clear, and exact description thereof.

The object of my invention is to provide a safety razor which will be adaptable to all portions of the face, and which will have a great extent of cutting edge, and withal will be simple of construction and convenient of manipulation in assembling and separating its parts, and to such ends my invention consists in the safety razor having the construction substantially as hereinafter specified and claimed.

In the accompanying drawing, Figure 1 is a perspective view of a safety razor embodying my invention; Fig. 2 a vertical section; Fig. 3 a detail view in perspective of the blade adapted for use with the razor shown in the previous figures; Fig. 4 a perspective view of the guard plate; and Fig. 5 a similar view of a different form of blade.

My invention in the embodiment illustrated, as is common in safety razors, comprises a toothed guard plate 10, and a head or clamping plate 11, between which and the guard plate is placed the blade 12. In the construction shown, there is a handle 13 that projects from the guard plate that is tubular, and through which passes a shank or stem 14 attached to the head or clamping plate which projects at one end beyond the handle and has a nut by which the parts may be secured together.

In outline, the blade and the head and guard plate are angular in form, and as I prefer it, they are square, although, as illustrated in Fig. 5, for example, a triangular form of blade and clamping members may be employed. The square form, however, is desirable, because it gives cutting edges of greater extent, since there are four sides to the square. The angular form is advantageous because it enables one or more of the edges to be straight as at *a* and the remainder curved, thus presenting an assortment of edges suited to differences in the curvature or contour of the face.

In order to increase the adaptability of the razor to the surface of the face, the outer side of the clamping head is curved convexly, as are the corresponding surfaces of the blade and the guard plate, and in order to enable the blade, which is made of sheet or thin material, to be caused to assume the concavo-convex form required, it is slit on diagonal lines from the angles or corners by slits or slots 15. To add to the security of the blade to prevent its turning, the hole 16 provided for the passage of the clamping rod or stem, has at one or more points radial notches 17, and the rod or stem has a corresponding feather or key 18 to engage the same.

It will be seen that by reason of the curvature of certain of the cutting edges, access to portions of the face is possible, to which it is difficult to apply a straight edge, and by reason of the straight form of certain of the cutting edges portions of the face may be more comfortably and satisfactorily shaved than if only curved cutting edges were employed. The slitting of the blade as it renders each of the several edges independently adjustable, enables certain of the edges to be curved and others straight. It will be observed that the side edges of each slit or slot diverge outwardly. The object of this is to enable the closing in of the side edges under the pressure of the clamping means, so that when wholly clamped said edges may be in contact.

Instead of making the blade of flexible or bendable material, it may be made of sufficiently stiff material, so that in its original form it has the concavo-convex shape which the bendable blade is pressed, and in this case it is not necessary to provide the blade with slits because it always has the one form.

In order to enable the blade to be reapplied, after the parts have been separated, in the same position, I suitably mark the corresponding portions of the blade and of the head, as by numbers, using, for example, the numbers 1, 2, 3 and 4 on the respective corresponding parts.

Having thus described my invention, what I claim is—

A safety razor comprising a handle, a

guard plate having a concavo-convex blade
seat, the edges of which are straight and
curved, a like shaped clamping plate, a
blade between the guard plate and clamping
5 plate and means whereby the blade is held
to the straight and curved outline of the
guard plate.

In testimony that I claim the foregoing I
have hereunto set my hand.

JOHN K. WATERMAN.

Witnesses:

CHAS. J. WILLIAMSON,
F. J. EHLERS.