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J. B. HARMON

1,908,016

SAFETY RAZOR

Filed Feb. 15, 1932

Fig. 1.

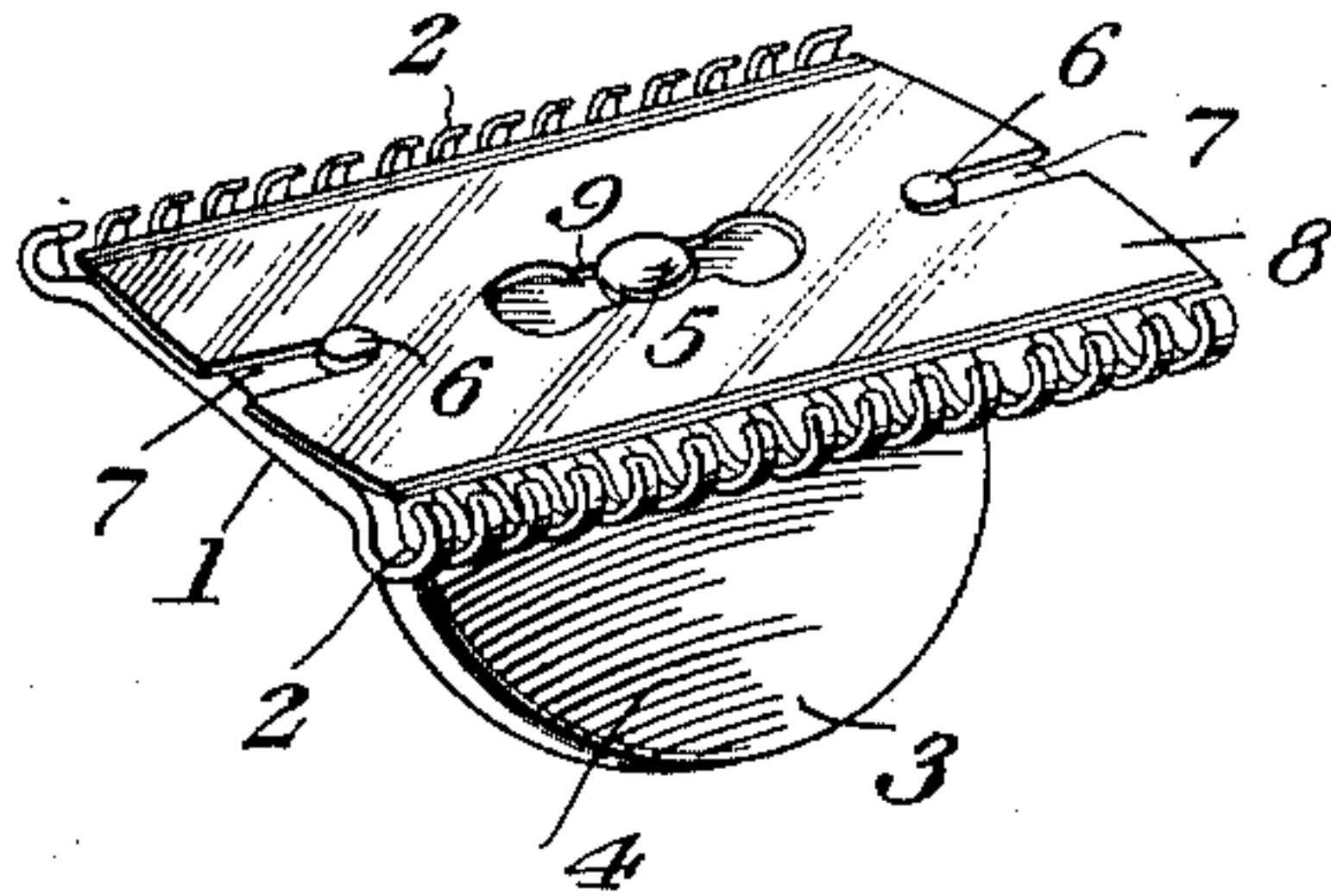


Fig. 2.

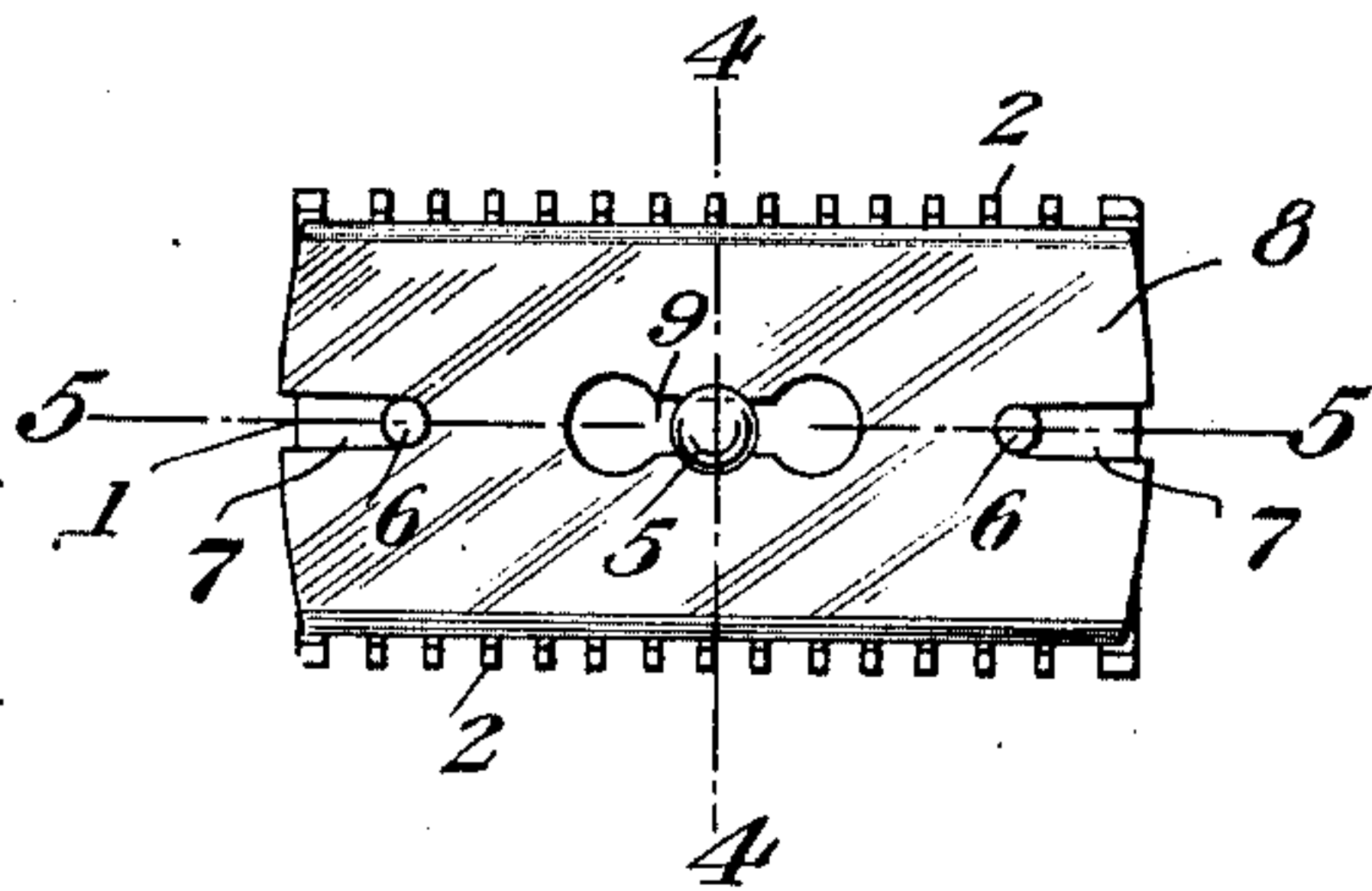


Fig. 3.

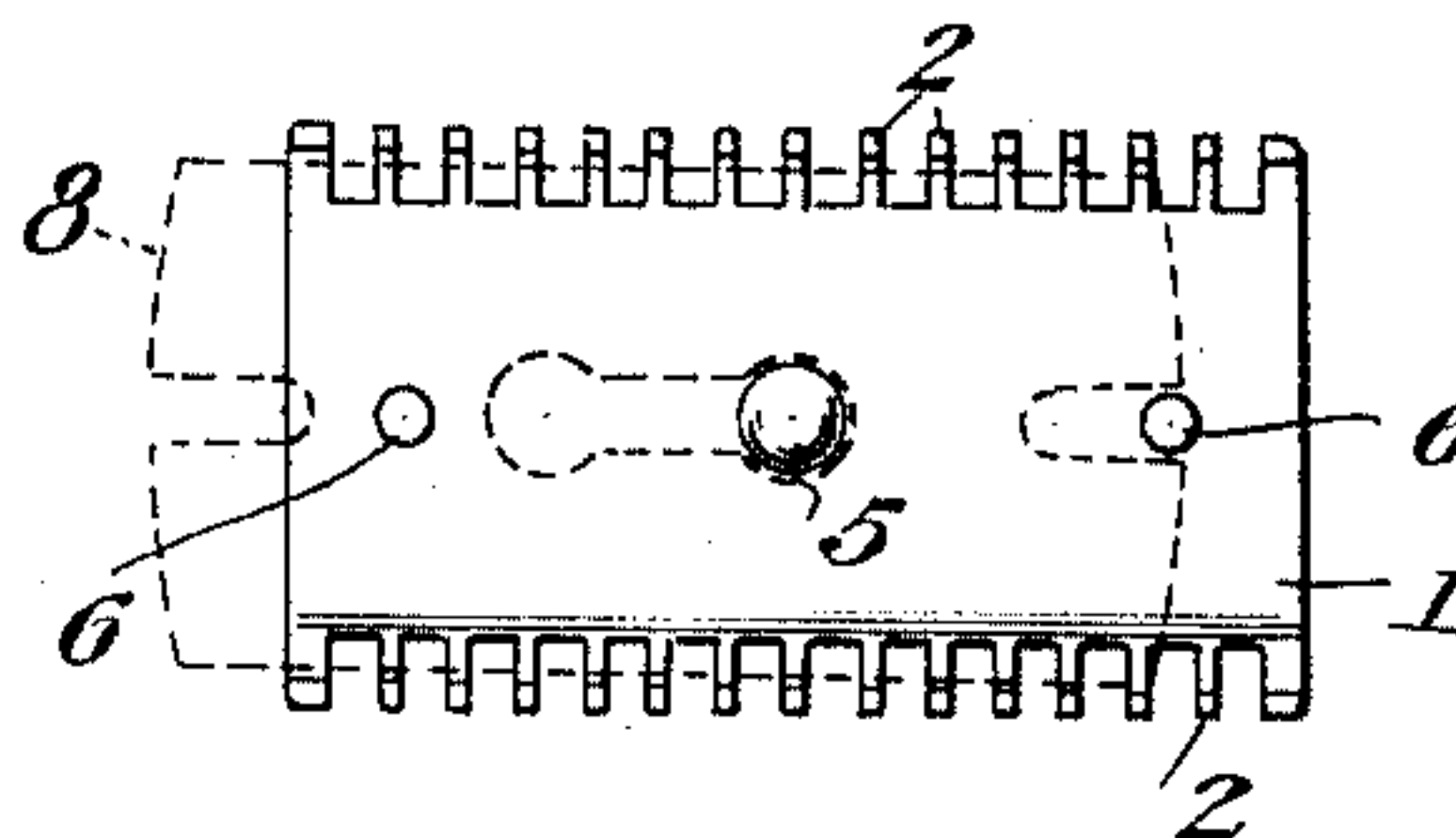


Fig. 6.

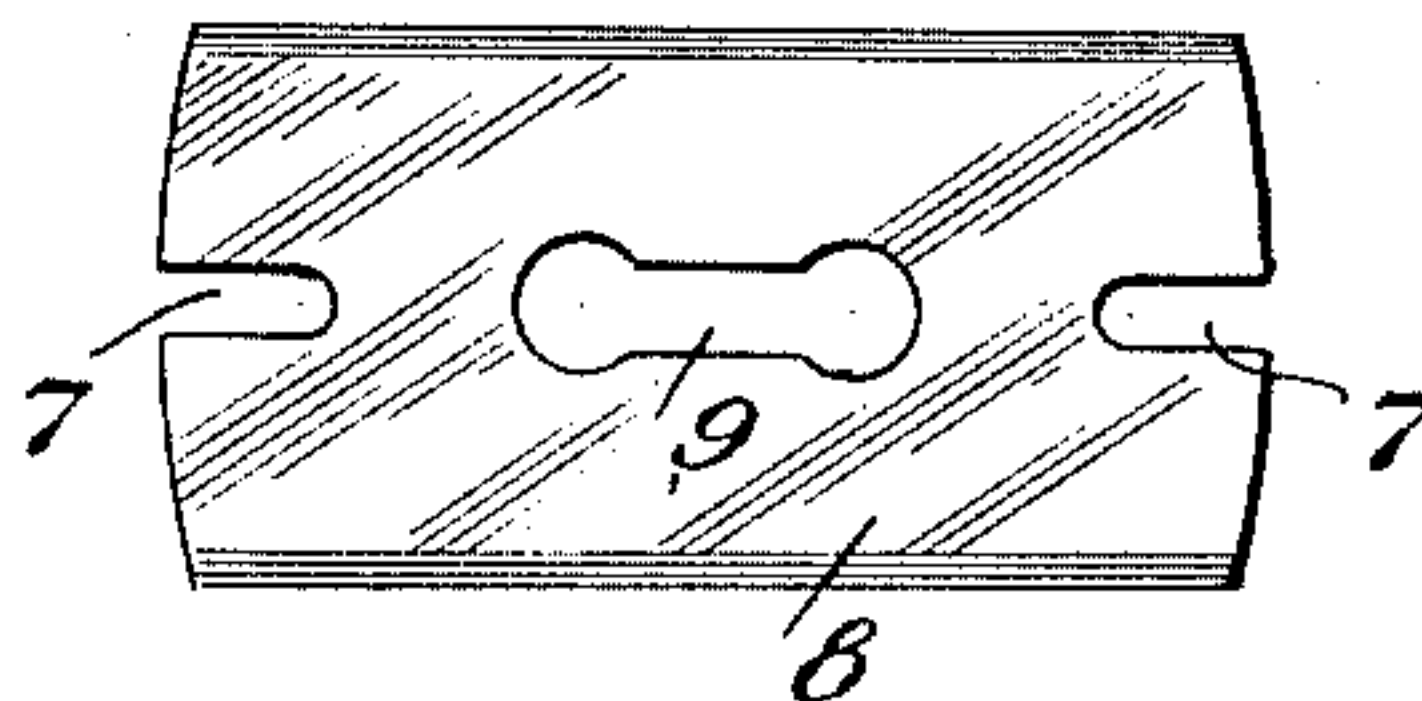


Fig. 4.

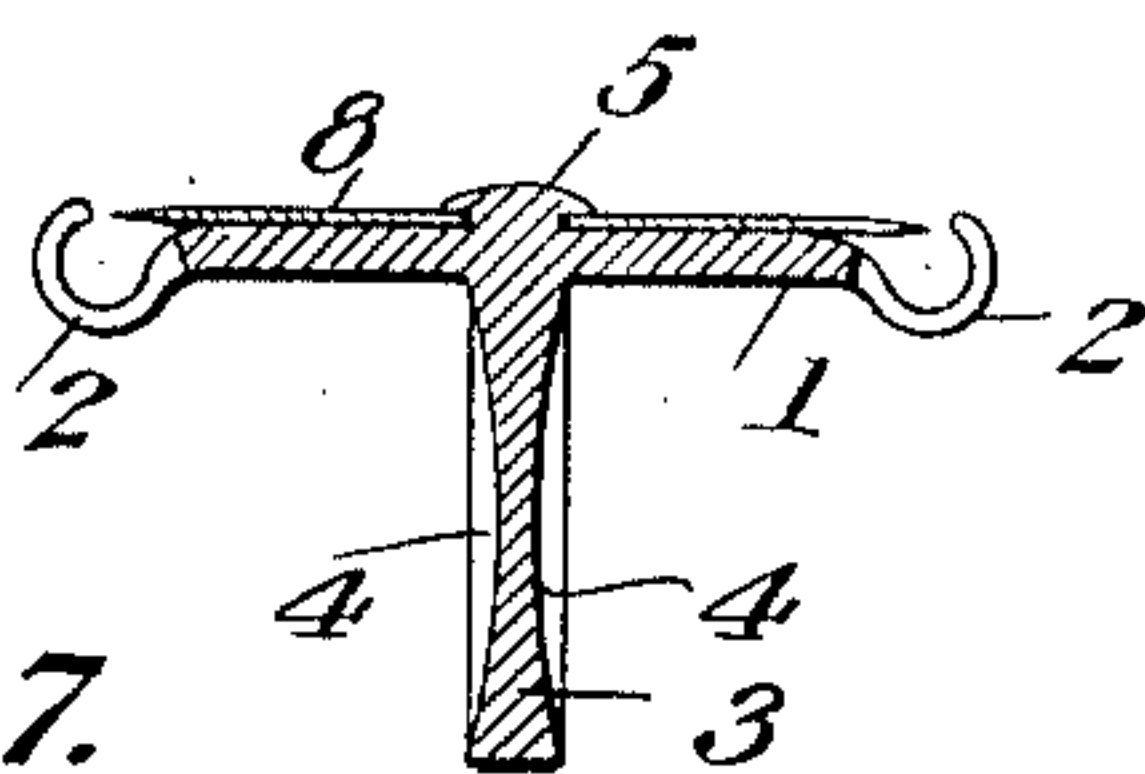


Fig. 7.

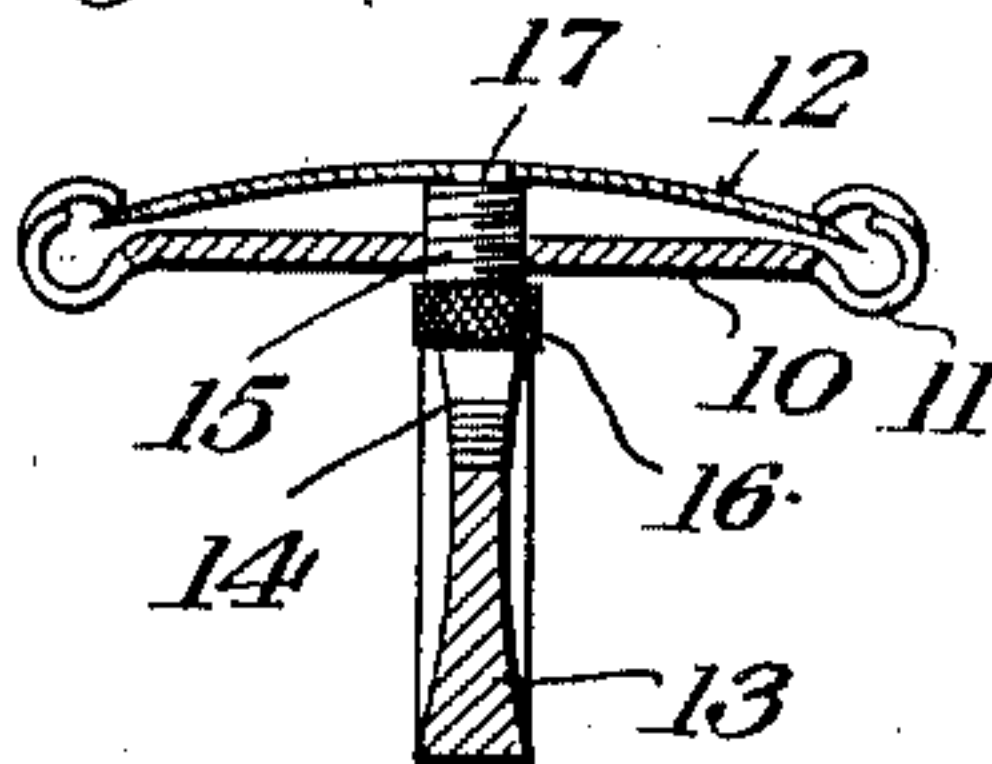


Fig. 5.

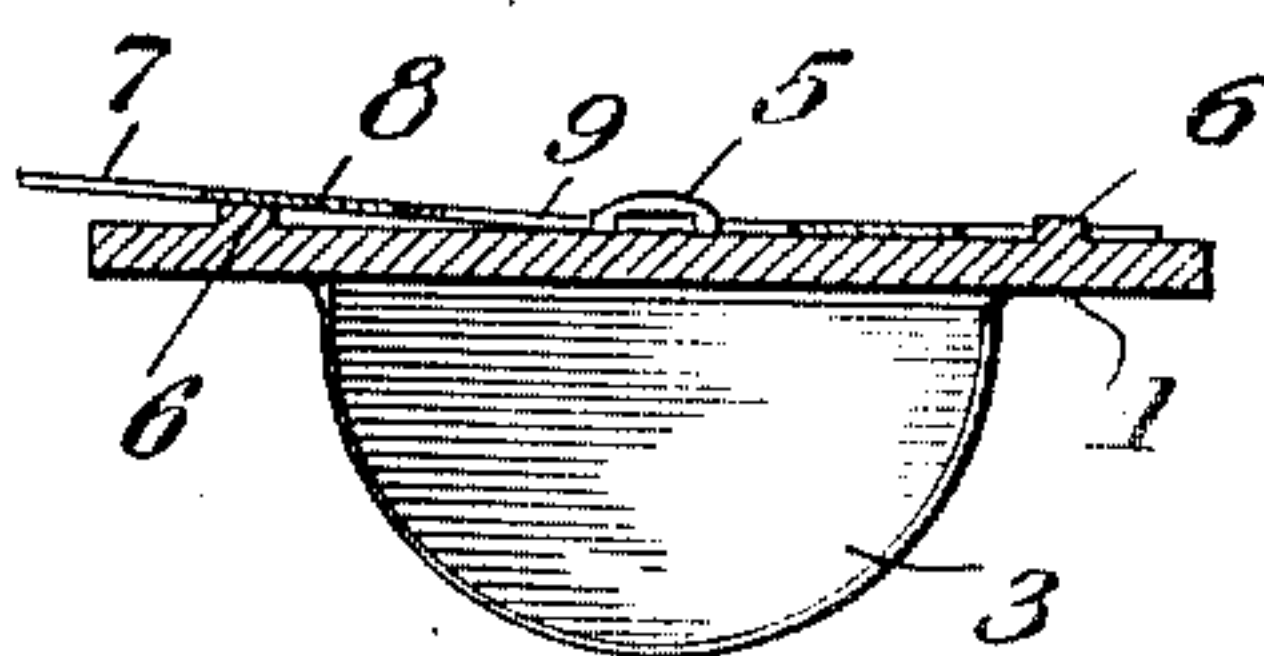
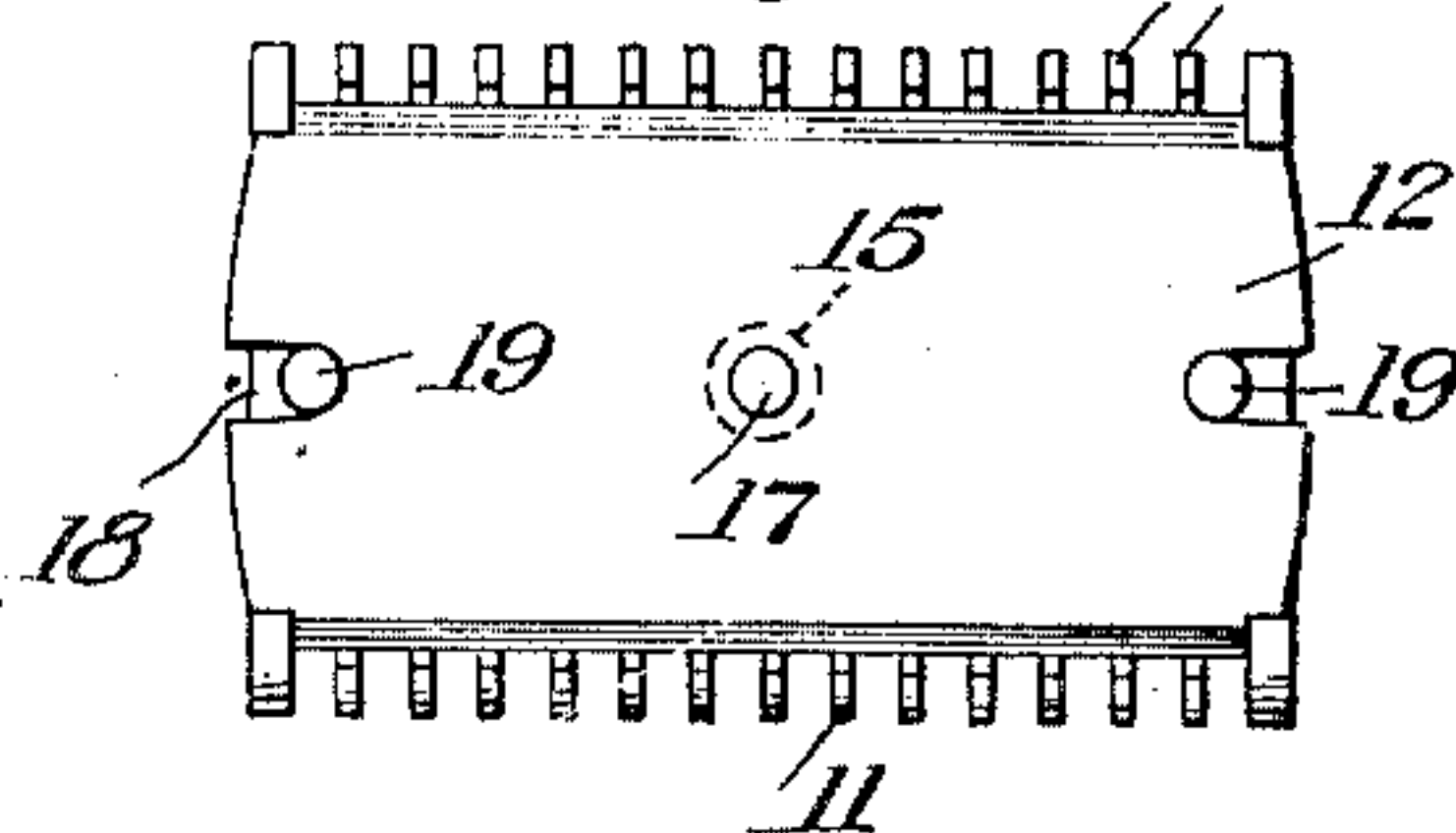


Fig. 8.



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SAFETY RAZOR

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This invention relates to razors and its general object is to provide a safety razor that includes a finger piece which affords a firm gripping surface and is associated with
 5 a blade holding means in a manner to place the operator's fingers close to the cutting edge of the blade so as to assure practically perfect control of the razor, which of course is necessary to provide a satisfactory shave.

10 A further object of the invention is to provide a safety razor that is used in a different manner than those now generally employed, as my razor is pushed over the face ahead of the operator's hand, instead of being pulled as
 15 is the case of practically all other safety razors, and the pushing action adds to the advantages derived from the position of the finger piece with respect to the blade holding means, in retaining the razor under constant
 20 control.

Another object of the invention is to provide in a safety razor a compact and what may be termed a handleless construction, with a finger piece and a blade holding means
 25 made into a single unit with the result there is no moving parts in one form of my razor except the blade and the latter can be securely fixed and removed with respect to the blade holding means with very little effort.

30 A further object of the invention is to provide an adjustable means for the blade, in another form of my razor.

A still further object of the invention is to provide a safety razor of the character set
 35 forth, that is simple in construction, inexpensive to manufacture and extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts,
 40 to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing my invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several
 45 views, and in which:

50 Figure 1 is a perspective view of one form of my razor.

Figure 2 is a top plan view thereof.

Figure 3 is a similar view illustrating the manner of applying the blade.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 2. 55

Figure 5 is a sectional view taken approximately on line 5—5 of Figure 2.

Figure 6 is a view of the blade for the form shown in Figures 1 to 5 inclusive.

Figure 7 is a vertical sectional view taken 60 through a modified form.

Figure 8 is a top plan view of the form shown in Figure 7.

Referring to the drawing in detail, and particularly to Figures 1 to 6 inclusive, the
 65 reference numeral 1 indicates the guard plate which as shown is of flat elongated formation, with curved guard teeth 2 extending from the opposite longitudinal edges thereof as best
 70 shown in Figure 3. Formed integral with and longitudinally of the center of the bottom of the guard plate and depending therefrom is a substantially flat finger piece 3, the
 75 latter being of semi-circular formation and having concaved sides 4 to provide a firm gripping surface, as will be apparent.

Formed with and rising centrally from the guard plate is a headed stud 5 and arranged in alignment with the headed stud and rising from the guard plate adjacent the
 80 ends of the latter, are pins 6 adapted to be received in slots 7 extending in the ends of the blade 8 for my razor and the blade has
 85 disposed centrally and longitudinally thereof a slot 9 which has rounded outer ends merging into a restricted intermediate portion as clearly shown in Figure 6.

In Figures 7 and 8, I have shown a modified form of my razor which includes a flat
 90 elongated guard plate 10 having curved teeth 11 formed with the longitudinal edges thereof and the end teeth of each edge are larger and longer than the intermediate teeth for
 95 the purpose of engaging the blade 12 at its four corners as shown. The guard plate 10 has also formed therewith and depending longitudinally from the center of its lower
 100 surface, a finger piece 13 which is likewise provided with concave opposed faces to provide finger engaging surfaces, and has

formed therein midway its ends at its juncture with the guard plate a slot 14 to accommodate an adjusting screw 15 that is threaded through the center of the guard plate. The
 5 adjusting screw is provided with a knurled operating head 16 and a restricted boss 17 at its upper end, which fits within a hole formed in the center of the blade 12 whereby movement of the adjusting screw through the me-
 10 dium of its knurled head will flex the blade 12 for changing the angle of its cutting edges with respect to the teeth 11. It will be noted that the blade 12 is formed with slots 18 which extend from the ends thereof for the
 15 purpose of receiving pins 19 rising from the guard plate 10 as shown in Figure 8.

From the above description and disclosure of the drawing, it will be obvious that I have provided a safety razor that is not only ex-
 20 tremely simple in construction but is capable of providing a satisfactory shave in an easy and expeditious manner and with very little effort due to the advantages brought about by the shape of the finger piece and its ar-
 25 rangement with respect to the cutting edge, as has been previously set forth. In the form shown in Figures 1 to 6 inclusive, the use of a heavy type of blade is contemplated, but other types can be used with efficiency, and
 30 when it is desired to secure the blade 8 to the guard plate, the blade is arranged whereby the head of the stud 5 is positioned into one of the rounded ends of the slot 9 with one of the end slots aligned with one of the pins 6
 35 as shown in Figure 3. The blade is then moved longitudinally of the guard plate for positioning the restricted portion of the slot 9 in a manner whereby the head of the stud 5 is arranged midway the ends of the restrict-
 40 ed portion as shown in Figure 2, and when in said position, the other pin 6 will be arranged in its slot 7.

In both forms of the invention, the teeth of the guard plates are curved in a manner
 45 whereby the free ends thereof terminate in close proximity to the cutting edges of the blades, with the exception of the end teeth of the form as shown in Figures 7 and 8 and these teeth act as abutting means for the
 50 blade 12 and co-operate with the boss 17 and pins 19 in securing the blade 12 to its guard plate 10. This securing action is brought about by inserting the blade so that one of the pins 19 is disposed in one of the end slots
 55 18, with the corners of one of the ends of the blade disposed under opposed end teeth 11. The blade is then flexed longitudinally for arranging its opposite end so that the opposite slot 18 is received by the opposite pin
 60 19 and the opposite corners received by the other end teeth 11. When in this position, the boss 17 will be disposed in the center hole of the blade 12, and upon rotation of the ad-
 65 justing screw 15, the cutting edges of the blade can be adjusted as desired.

The shape of the finger pieces 3 and 13 and their arrangement with respect to the guard plates, assure approximately perfect control of the razor which is pushed over the face ahead of the operator's hand, instead of
 70 being pulled as in the case of practically all other safety razors with the result my razor is capable of providing a smooth and satisfactory shave.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several
 80 parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. A safety razor of the character described comprising a guard plate including curved
 85 teeth arranged on opposite sides thereof, a semi-circular finger piece formed with and depending longitudinally from the guard plate, said finger piece having opposed con-
 90 caved faces, means connected with the guard plate, and pins extending from the latter and cooperating with said means for detachably securing a blade to said guard plate.

2. A safety razor comprising a guard plate including teeth, a finger piece for said guard
 95 plate and extending longitudinally thereof, a headed stud secured to and rising from said guard plate, pins aligned with the headed stud and arranged adjacent the ends of the
 100 guard plate, a blade having a slot disposed centrally and longitudinally thereof, said slot provided with rounded ends and a restricted intermediate portion for the purpose of receiving the headed stud, and said blade
 105 being provided with slots extending inwardly from the ends thereof to receive the pins whereby the latter cooperate with the headed stud for detachably securing the blade to the guard plate.

In testimony whereof I affix my signature.
 110 JAMES B. HARMON.

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