F. D. JONES.

SAFETY RAZOR.

APPLICATION FILED OCT. 8, 1913.

1,109,336. Patented Sept. 1, 1914.

Fig. 1.

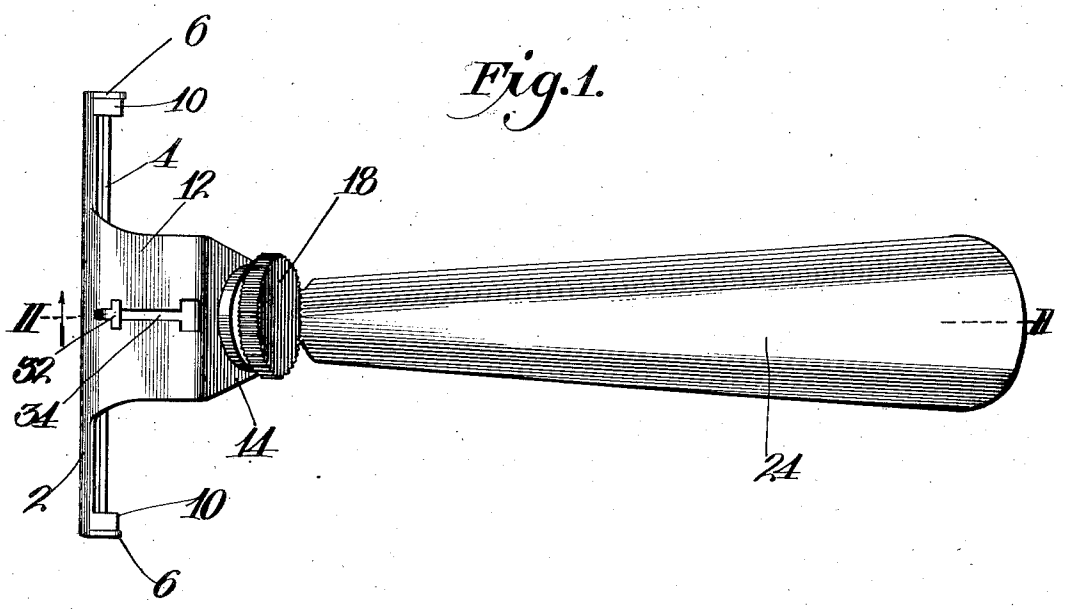
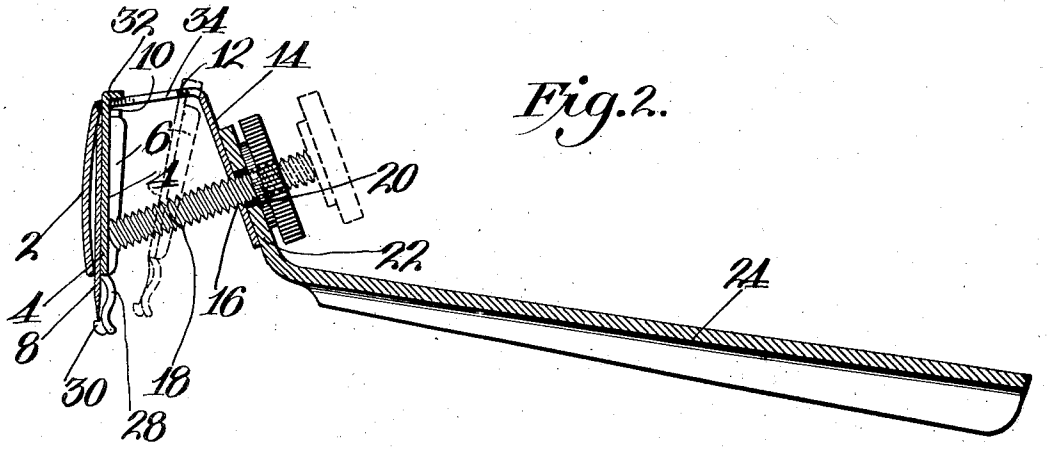


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

FLOYD D. JONES, OF KANSAS CITY, MISSOURI.

SAFETY-RAZOR.

1,109,336. Specification of Letters Patent. Patented Sept. 1, 1914.

Application filed October 8, 1913. Serial No. 794,052.

To all whom it may concern:

Be it known that I, FLOYD D. JONES, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

This invention relates to safety razors and one object in view is to produce a strong, efficient and attractive razor having an improved construction whereby the blade and handle can be firmly secured in position by a single clamping movement.

A further object is to provide a simple razor construction wherein the guard may be unclamped for the exchange of blades, but is provided with means for retaining it in the holder while in its unclamped condition.

With these objects in view the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and pointed out in the appended claims, and in order that it may be fully understood reference is to be had to the accompanying drawing, in which—

Figure 1, is a top plan view of the razor. Fig. 2, is a section through the same on the line II—II of Figure 1.

Referring to the drawing the blade holder comprises a front clamping plate 2 and a guard member 4. The plate 2 is provided with end flanges 6 for embracing the ends of the guard member 4 and also the ends of the blade 8. The upper edge of the plate 2 is provided with end lugs 10 for engagement with the upper corners of the blade 8 to hold the edge of the blade out of engagement with the adjacent end of an angular arm formed integral with the plate 2 and having its portion 12 adjacent the plate projecting therefrom at a greater angle than the lugs 10 and its free end portion 14 extending opposite to and nearly parallel with said plate. The portion 14 of said arm is provided with a threaded opening 16 adapted to receive a screw 18 which also passes through a plain opening 20 in the angularly bent portion 22 of the handle 24. The plate 2 and its arm are formed of resilient metal and the length of the screw 18 is such that its inner end engages and forces the guard 4 against the blade and resiliently clamps the latter by spreading of the plate 2 and its arm before the head of the screw engages the end of the handle, after which further turning of the screw positively clamps the handle in place.

The guard member is provided with the usual guard teeth 28 on its lower edge, the ends of the outer teeth being bent to form shoulders 30 against which to seat the lower corners of the blade. The guard has also formed integral with its upper edge a T-shaped lug 32 adapted to fit a T-shaped slot 34 formed in the portion 12 of the resilient arm. This is for the purpose of retaining the guard member in place when the same is unclamped for the exchange of blades. It is only necessary to withdraw the screw slightly to unclamp the guard sufficiently to free the blade, and with the guard retained in the holder, as shown, there is no chance of getting it placed back in the wrong position with its shoulders 30 turned away from the blade. I have formed the T-shaped lug 32 with its head portion deflected to the rear when the guard is properly placed so that with the screw 18 partially withdrawn, as indicated in dotted lines in Fig. 2, the guard can be tilted sufficiently to detach the lug and remove the guard for cleaning purposes. It is apparent however, that if an attempt should be made to insert the guard back in place with the guard reversed end for end, the head of the lug 32 will be presented in advance of the head of the slot 34 so that the lug could not be engaged with the slot without further withdrawal of the screw and consequently such an error in assembling of the parts is prevented. It will also be observed that any size of blade of approximately standard safety razor length can be used in the device if it be of sufficient width to permit it to be clamped between the plate 2 and the guard, with its lower corners resting on the shoulders 30. It is not required that the upper edge of the blade be supported against the lugs 10, the latter being provided merely for insuring the upper edge of the blade shall not come in contact with the portion 12 of the annular arm and thus preventing the dulling of such edge in the case of a duplex blade.

From the foregoing it will be apparent that I have produced a safety razor of a very practical and efficient construction, the simplicity of which will enable it to be manufactured at a minimum expense, and I wish it to be understood that while I have illustrated and described the preferred embodi-

ment of the same, I reserve the right to make all changes properly falling within the spirit and scope of the appended claims.

I claim:—

1. In a safety razor, the combination of a blade, a clamping plate provided with an angular arm projecting rearward therefrom, the free end of said arm extending opposite to and approximately parallel with said plate, the other portion of said arm being provided with a slot enlarged at its rear end, a guard member for holding said blade against said plate and having a headed lug adapted to be inserted through the enlarged portion of said slot, a screw operating through the free end of said arm to force said guard member into engagement with said blade and hold said guard member with said lug normally in engagement with the narrow portion of said slot, the length of the narrow portion of said slot being such as to prevent detachment of the guard member upon withdrawal of the screw only sufficiently to unclamp and release said blade, while further withdrawal of the screw will permit said guard member to be tilted about the end of the screw to present the head of said lug in position to withdraw the same through said enlarged end of the slot.

2. In a safety razor, the combination of a blade, a clamping plate provided with an arm projecting rearward therefrom, said arm having a slot enlarged at its rear end, a guard member for holding said blade against said plate and having a headed lug adapted to be inserted through the enlarged portion of said slot and into engagement with the front portion of the slot, thereby holding said guard member detachably in position, and means for clamping said guard member against said blade, said means holding said guard member with said lug normally engaged with the narrow portion of said slot.

3. In a safety razor, the combination of a blade, a clamping plate provided with an angular arm projecting rearward therefrom, the free end of said arm extending opposite to and approximately parallel with said plate, the other portion of said arm being provided with a slot enlarged at its rear end, a guard member for holding said blade against said plate and having a headed lug adapted to be inserted through the enlarged portion of said slot, the head of said lug being deflected rearward, a screw operating through the free end of said arm to force said guard member into engagement with said blade and hold said guard member with said lug normally engaged with the narrow portion of said slot, said guard member being permitted a slight tilting movement when said screw is partially withdrawn to present the head of said lug in position to withdraw the same through said enlarged end of said slot.

4. In a safety razor, the combination of a blade, a clamping plate provided with an angular arm having a threaded opening near its free end, said plate having a pair of end lugs at its upper margin, overlying and engaging the upper corners of said blade and holding the latter out of engagement with said arm, a guard member for holding said blade against the inner face of the plate, a handle having one end thereof provided with an opening, and a screw extending through said openings into engagement with said guard member for clamping both said handle and guard in position.

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

FLOYD D. JONES.

Witnesses:

ADELAIDE MIESSNER,

RANDALL CRAWFORD.