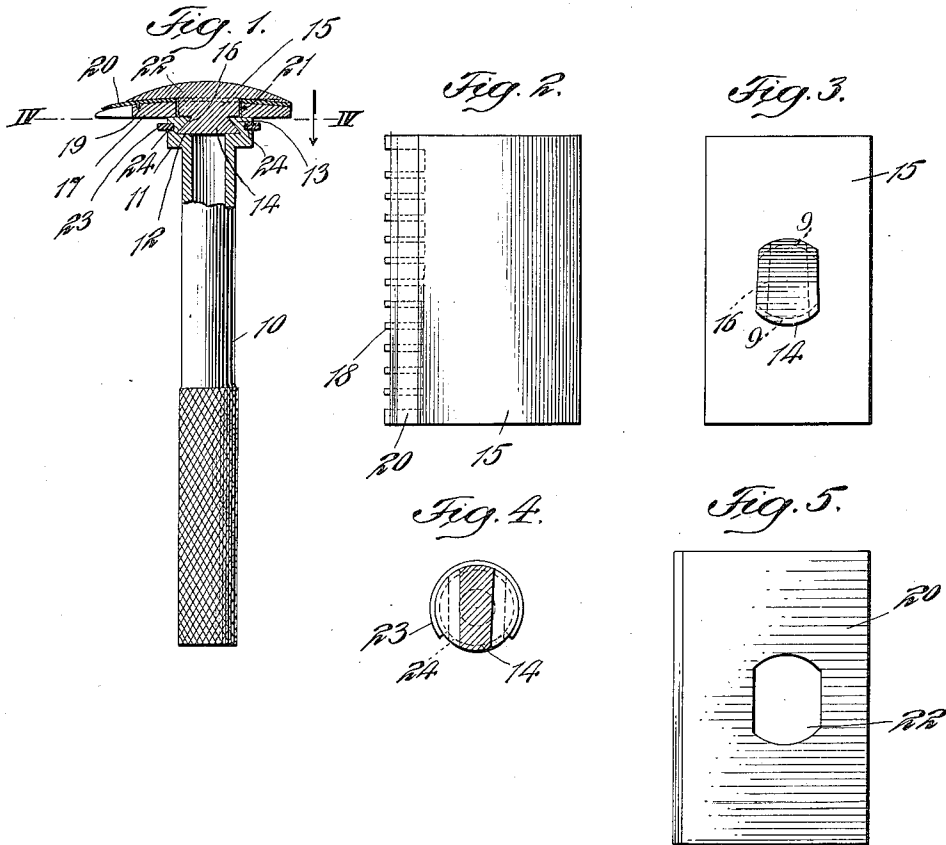


J. P. PADDINGTON.
SAFETY RAZOR.
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SAFETY-RAZOR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN P. PADDINGTON, a subject of the Emperor of Austria-Hungary, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a full, clear, and exact description.

This invention relates more particularly to means for detachably holding the razor blade to the head and to means for holding the head to the handle.

The primary object of the invention is to provide a safety razor in which the blade is adapted to have a single cutting edge and the blade so made and held that after shaving the parts may be readily cleaned, and at the same time provide means whereby the members forming the blade head may be detachably held to a handle member in such a way that it may be readily attached to or detached therefrom.

Another object of the invention is to provide a device which is inexpensive to manufacture and in which the blade head cannot be detached without the separate movement of a locking or holding member.

A further object of the invention is to provide a simple and efficient ring-like locking device which is attached to the handle in such a way that it will lock the blade head detachably thereto.

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is a vertical section through the blade head, the handle portion being shown partly in elevation. Fig. 2 is a plan view. Fig. 3 is an inverted detail plan of one of the blade-holding members. Fig. 4 is a sectional plan view taken on the line IV-IV of Fig. 1. Fig. 5 is a detail plan of one form of blade that may be used.

The handle 10 may be tubular or solid as preferred and is provided with an enlarged end or collar portion 11. A groove 12 having bevel sides 13 is formed across the handle collar 11 so that its ends will be open, and adapted to fit said groove is a dove-tailed projection 14 of a blade-clamping member 15. This dove-tailed part or projection 14 has a stem portion 16 and said stem portion, as well as the dove-tailed por-

tion 14, is of substantially the same length as the diameter of the handle collar 11. The part 14 is elongated somewhat and may have its sides slightly tapered to adapt the part to bind when in position, or the said part 14 may be made straight so as to be slipped in from either side of the groove 12, and owing to its length will be prevented from having any rotary movement whatever.

A comb member 17 having teeth 18 at one edge is provided, and this comb member may be substantially rectangular in shape and is provided with a flat surface adapted to rest against the collar 11 of the handle, and an upper curved part 19 on which the blade 20 is adapted to rest. The members 15 and 17 form a head and the member 17 is provided with an elongated opening 21 to adapt the dove-tailed part 14 to pass therethrough and the blade 17 is also provided with a similar opening, as at 22, for the passage of the stem portion 16. This stem portion is adapted to fit the opening in the member 17 and also the opening 22 in the blade so that the said blade and member will not have a relative movement with respect to each other. The blade 20 is of thin sheet steel and normally flat so that it can be flexed when clamped in position. It will be seen that when the bevel portion 14 is forced along the groove 12 in the handle portion with a sliding movement, and as the members 15 and 16 are pulled toward each other to flex the blade, the tendency of the member 14 will be to force the dove-tailed part 14 outward and will assist in binding the part 14 to the handle 10.

To positively lock the blade head to the handle and at the same time permit it to be readily detached, I provide a locking ring 23. This ring 23 is open for part of its length corresponding to the width of the part 14, and said ring is adapted to fit in a groove 24 in the enlarged part or collar 11 of the handle, the said ring being of spring or other metal to permit it to be sprung over the handle and into the groove. The end of the portion 14 each contains a groove 9 that registers with the groove 24 in the collar as clearly shown in Figs. 3 and 4. The open ring will always engage one of these grooved portions and provide additional securing means that will prevent endwise removal of the head, were the dove-tailed portion and channel made in the form of a simple mor-

tise and tenon. If the ring is in the position shown in Fig. 4, the blade head may be detached from the handle by sliding it endwise, but when the head is in position and a partial rotary movement is given to the ring so as to bring a solid part of the ring opposite the open ends or ends of the groove 12, the said ring will serve to positively hold the head against accidental detachment. By providing the blade with a single opening and by forming the clamping and holding means in the manner shown, the parts may be readily cleaned as well as detached or placed in position as there is only a single projecting part to the clamping member of the blade head, and simply an opening in the other clamping member as well as in the blade.

While I show the blade as having a single edge, it will be understood that the blade may be made with a double cutting edge and the member 17 constructed accordingly. It will be further understood that the form of the projection 14 and the groove may be changed instead of both being dove-tailed as shown.

From the foregoing, it will be seen that simple and efficient means is provided for detachably holding and clamping a razor blade to a handle; that said holding means permits the device to be readily cleaned; that the parts of the razor may be cheaply made; that a simple and efficient locking device is provided for the razor clamping members to hold the same against accidental detachment from the handle.

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

1. A safety razor comprising a blade-holding head having two members, one of which has a stem portion provided with a dove-tailed part, and the other an opening through which said part may project, a handle provided with an enlarged part and having a groove extending entirely across

the same through which the dove-tailed part of the head may fit, and a split ring adapted to close the open end or ends of said groove.

2. A safety razor comprising a blade-holding head having two members, one of which has a stem portion provided with a dove-tailed part, and the other an opening through which said part may project, a handle provided with an enlarged part and having a groove extending entirely across the same through which the dove-tailed part of the clamping device may fit with a sliding movement, and means to prevent or permit detachment of the head from the handle.

3. A safety razor comprising, a handle having an enlarged part provided with an annular groove, a split ring fitting said groove, a comb member having one surface thereof curved, and a clamping member having a curved under surface adapted to clamp a blade between the same and the comb member and provided with a projecting part, said handle having a dove-tailed groove to receive the projecting part of the clamping member.

4. A safety razor comprising a handle provided with an enlarged part and having a groove extending across the same, a plate holding head provided with a dove-tailed part adapted to fit in said groove and a split ring rotatably held to the handle and adapted to close the open end of said groove.

5. A safety razor comprising a handle provided with an enlarged part and having a groove extending across said enlarged part, a plate holding head provided with a tenon adapted to fit in said groove, and a split ring rotatably held to the handle and adapted to close the open end of said groove.

This specification signed and witnessed this 27th day of December, A. D. 1910.

JOHN P. PADDINGTON.

Witnesses:

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