R. E. BROWN.

SAFETY RAZOR.

APPLICATION FILED AUG. 14, 1919.

1,337,435. Patented Apr. 20, 1920.

Fig. 1.

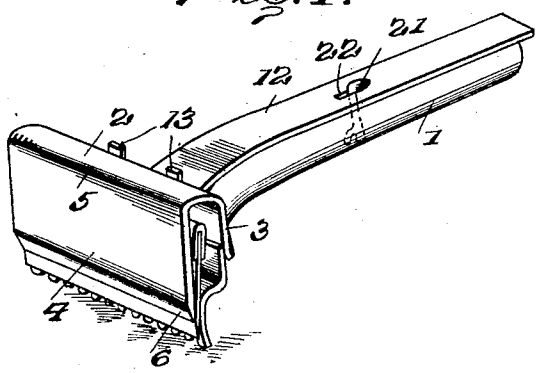



Fig. 2.

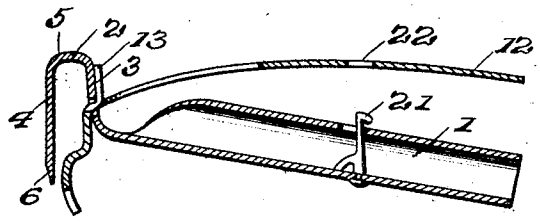
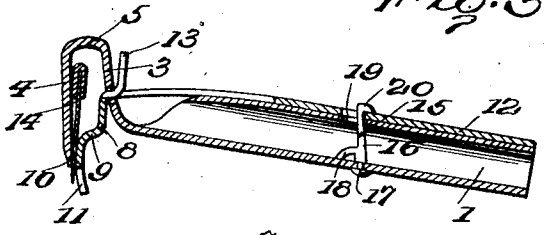



Fig. 3.



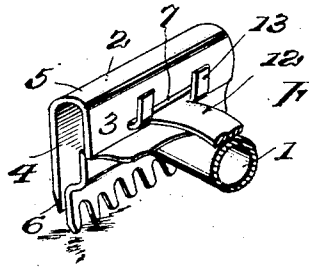




Fig. 4.

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# UNITED STATES PATENT OFFICE.

ROBERT E. BROWN, OF OLEAN, NEW YORK.

## SAFETY-RAZOR.

1,337,435. Specification of Letters Patent. Patented Apr. 20, 1920.

Application filed August 14, 1919. Serial No. 317,554.

*To all whom it may concern:*

Be it known that I, ROBERT E. BROWN, a citizen of the United States, residing at Olean, in the county of Cattaraugus and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

This invention relates to safety razors and has as one of its objects to provide a razor in connection with which any of the ordinary and well-known types of safety razor blades may be employed so that the purchaser of the razor is not restricted to the use of any particular construction of blade and may, therefore, make use of any particular make of blade which he prefers or any blade which he happens to have at hand or can most conveniently purchase.

Another object of the invention is to provide a safety razor having its blade holding head so constructed that it will be adapted to clamp and securely hold any of the ordinary types of safety razor blades without dependence upon perforations or lugs, false backs, or any other mechanical contrivances such as have heretofore been considered necessary in order to securely hold such a blade in place in its holder.

Another object of the invention is to so construct the head of the razor that the blade may be conveniently adjusted therein so as to adapt the razor to shave more or less closely as desired.

It is a further object of the invention to so construct the razor that the blade may be readily and quickly assembled therewith and clamped in place, and may likewise be readily and quickly released.

A still further object of the invention is to so construct the razor that the blade holding head thereof may be thoroughly cleansed when open and to also so construct the same that the parts thereof will not be liable to become separated with consequent likelihood of loss.

In the accompanying drawings:

Figure 1 is a perspective view of the razor embodying the present invention;

Fig. 2 is a vertical longitudinal sectional view through the same, the blade holding head being open;

Fig. 3 is a view similar to Fig. 2 illustrating the head closed and clamping a blade therein;

Fig. 4 is a sectional perspective view looking at the rear side of the blade holding head.

In the drawings the numeral 1 indicates the handle of the razor which handle is preferably of hollow tubular form and this handle is provided at its forward end with a blade clamping head indicated in general by the numeral 2. This head in the illustrated embodiment of the invention is integral with the handle and includes a portion 3 which constitutes the back of the head, a portion 4 which constitutes the fixed clamping jaw of the razor, and a connecting portion 5 which is preferably integral with the portions 3 and 4 and serves to connect and space the same in the relation shown in the drawings. The fixed jaw 4 preferably has its forward face beveled at its lower edge as indicated by the numeral 6 so as to present a smooth surface to the face, and this jaw, if desired, may possess a greater or less degree of resiliency, being, however, sufficiently rigid to serve its purpose, namely, that of a fixed clamping jaw. For a purpose to be presently explained, the back 3 of the head 2 is formed with a transversely extending slot indicated by the numeral 7. The said back 3 in the present form of the invention extends approximately perpendicularly to the axis of the handle 1, and the fixed jaw 4 preferably occupies a plane substantially parallel to the plane of the said back 3, the connecting portion 5 being preferably slightly rounded and connecting the upper portions of the back and jaw. Also the back 3 is integral with the lower side of the forward end of the handle 1, and the lower edge 6 of the jaw 4 extends on a transverse line below the plane of the lower side of the said handle.

The razor also comprises a movable clamping jaw member which is indicated in general by the numeral 8 and this member comprises a head 9 having a transverse clamping portion 10 terminating at its lower edge in a series of guard teeth 11. The head 9 is of substantially the same width as the head 2 of the handle 1 and in the coaction of the jaw 8 with the jaw 4, the clamping portion 10 will directly oppose the lower edge portion of the said jaw 4 so that a razor blade disposed between these parts will be securely clamped in place. In order that the head 9 may be rocked so as to cause its clamping portion 10 to coact with the jaw 4, and also in order to provide means for holding the

members 2 and 8 assembled, the head 9 is provided at its upper edge with an integral lever 12 which, if desired, may possess a certain degree of resiliency and which extends rearwardly approximately at right angles from the general plane of the movable clamping jaw. At its juncture with the upper edge of the clamping jaw, the lever 12 is pivotally fitted through the slot 7, and the said upper edge of the jaw is formed at opposite sides of the lever with upwardly projecting lugs indicated by the numeral 13. From an inspection of Figs. 2 and 3 of the drawings it will be understood that the upper edge of the head 9 of the movable clamping jaw will fulcrum against the forward side of the back 3 of the head 2 and that the lugs 13 will coact with the rear face of the said back so as to prevent forward displacement of the movable clamping jaw and retain the same permanently assembled with the head 2. Thus when the lever 12 is swung upwardly, as shown in Fig. 2 of the drawings, the movable clamping jaw will be swung rearwardly away from the jaw 4 of the head 2 so as to adapt the razor to receive the blade, one type of which blade is illustrated in the drawings and indicated in general by the numeral 14. On the other hand, when the said lever is swung downwardly, the clamping portion 10 of the jaw 9 will be brought to bear against the rear side of the blade 14 thus binding the forward side of the blade against the inner face of the lower edge portion of the jaw 4, the blade being in this manner firmly clamped in position between the fixed and movable jaws with its cutting edge projecting a greater or less distance depending upon the adjustment which has been given the said blade and which will, of course, depend upon the closeness of cut which it is desired the razor shall be capable of effecting in use.

Due to the inherent resiliency of the parts comprising the razor, a thin blade will be clamped equally as firmly as a thicker blade, and the space between the jaw 4 and back 3 of the head 2 is sufficient to accommodate the portion of a blade disposed between the fixed and movable jaws, whether or not the blade be provided with a false back, projecting studs, or other projecting or thickened portions.

In order to clamp the handle in its inwardly swung position as shown in Figs. 1 and 3 of the drawings, it is preferable that a latch device of the form shown in the drawings be provided, the said device being indicated in general by the numeral 15. This latch device comprises a spring finger 16 which is riveted at its lower end as at 17 through the lower side of the handle 1 and is provided near its lower end with a forwardly curved bracing finger 18 which at its end engages against the inner side of the said handle. The finger 16 extends diametrically upwardly within the handle and through an opening or slot 19, formed in the upper side of the said handle, and at its upper end this finger is provided with a latch head indicated by the numeral 20 and having a rearwardly directed nose 21 the upper side of which is preferably beveled or rounded. The lever 12 is formed with a slot 22 suitably positioned, and when the said lever is swung inwardly toward the handle 1, the head 20 of the latch will engage through the said slot 22, the end wall of the slot nearest the free extremity of the lever riding over the rounded end of the nose 21 and engaging beneath the said nose as shown in Fig. 3 of the drawings. In this manner the lever is automatically locked in position when swung to close the movable jaw in the direction of the fixed jaw, and the parts will be retained in this clamping relation until released by a forward movement of the latch head 20 which may be accomplished by pressing forwardly upon the head with the thumb or finger and at the same time preferably pressing inwardly upon the lever 12.

It will be understood that in the fulcruming movement of the movable jaw to closing position, the clamping portion 10 thereof will ride upwardly as it moves into engagement with the razor blade.

Having thus described the invention, what is claimed as new is:

1. In a safety razor, a member comprising a handle and a fixed clamping jaw carried thereby, a clamping jaw fulcrumed upon the said member for coaction with the clamping jaw thereof, a lever extending from the fulcrumed jaw opposite the handle, and means upon the handle for coaction with the said lever for locking the same into position to close the fulcrumed jaw, the said means comprising a latch finger secured within the handle and having a bracing portion engaging the inner side of the handle and extending in the direction of unlatching movement of the said finger, the finger having latch head for coaction with the said lever.

2. In a safety razor, a handle, a head carried thereby and comprising a relatively fixed clamping jaw and a back connected therewith and spaced opposite the same, a jaw member fulcrumed upon the back and confronting the fixed jaw, and means for closing the said fulcrumed jaw member.

3. In a safety razor, a handle, a head carried thereby and comprising a back connected with the handle and extending transversely thereof and a relatively fixed clamping jaw connected with the back and spaced opposite the same, a resilient jaw member fulcrumed upon the said back and confronting the fixed jaw, and means for closing the said fulcrumed jaw member.

4. In a safety razor, a handle, a head carried thereby and comprising a back connected with the handle and extending transversely with relation thereto, and a relatively fixed clamping jaw connected with the said back and spaced opposite the same, the said back having a transverse slot, and a resilient jaw member having a shank portion fulcrumed through the slot and confronting the fixed jaw.

5. In a safety razor, a handle, a head carried thereby and comprising a back connected with the handle and extending transversely with relation thereto and a relatively fixed clamping jaw connected with the said back and spaced opposite the same, the said back having a transverse slot, and a resilient jaw member having a shank portion fulcrumed through the slot and confronting the fixed jaw, the said fulcrumed jaw being provided with an upstanding projection for coaction with the back to maintain the fulcrumed connection between the parts.

In testimony whereof I affix my signature.

ROBERT E. BROWN. [L.S.]