No. 860,849. PATENTED JULY 23, 1907.

A. F. BRADSHAW.

SAFETY RAZOR.

APPLICATION FILED AUG. 7, 1906.

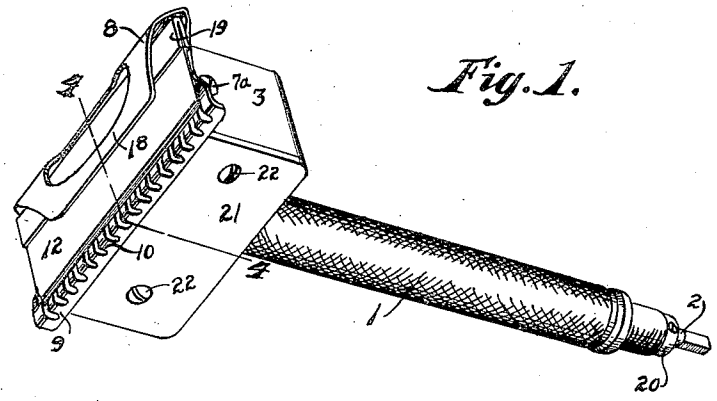

Fig. 1.

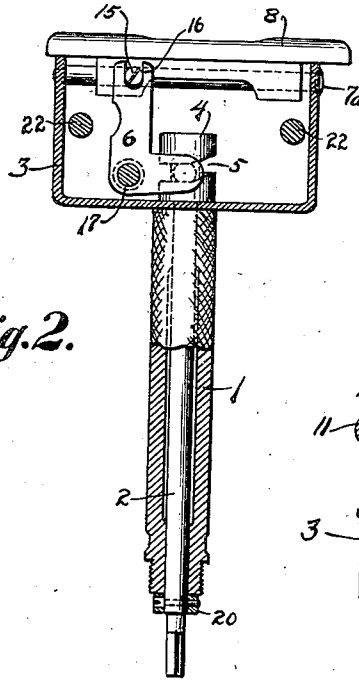

Fig. 2.

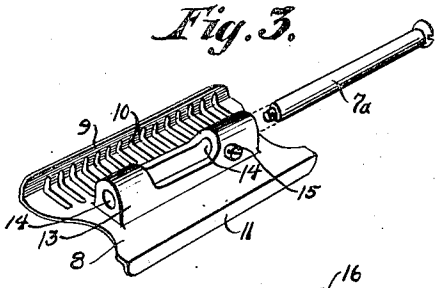

Fig. 3.

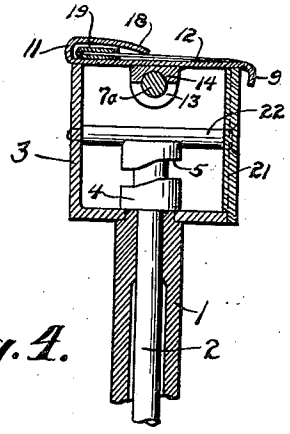

Fig. 4.

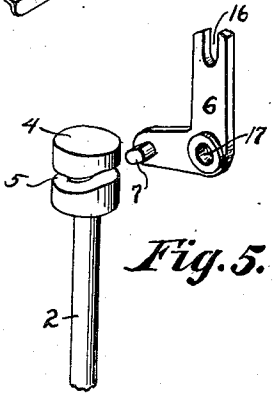

Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR F. BRADSHAW, OF SUSANVILLE, CALIFORNIA.

SAFETY-RAZOR.

No. 860,849. Specification of Letters Patent. Patented July 23, 1907.

Application filed August 7, 1906. Serial No. 329,546.

To all whom it may concern:

Be it known that I, ARTHUR F. BRADSHAW, a citizen of the United States, residing at Susanville, in the county of Lassen and State of California, have invented certain new and useful Improvements in Safety-Razors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the numerals and figures of reference marked thereon, in which—

Figure 1 is a perspective view showing all of the different parts of the razor properly assembled. Fig. 2 is a view showing the rear inclosing plate removed, and illustrating the internal arrangement of the different parts pertaining to the vibrating razor blade. Fig. 3 is a view showing the bottom or underside of the blade-head or plate, and illustrating its connecting pin or bar. Fig. 4 is a view taken on line 4—4, Fig. 1. Fig. 5 is a detached view of the rotating spindle and the blade actuating lever.

The present invention has relation to safety razors and it consists in the novel arrangement hereinafter described and particularly pointed out in the claims.

Similar numerals of reference indicate corresponding parts in all the figures of the drawing.

In the accompanying drawing 1, represents the handle, which is formed of any length desired, reference being had to convenience in applynig the razor to use. The handle 1 is formed hollow, and is so formed for the purpose of holding the spindle 2, which spindle is located with reference to the handle 1 as shown in Figs. 1, 2 and 4, or substantially so. To the handle 1 is attached the casing 3, which casing is substantially of the form shown in the drawings, and within the casing is located the head 4, which is formed integral with, or attached to the spindle 2 as desired. The head 4 is provided with the cam 5, which cam is for the purpose of actuating the L shaped lever 6, which L shaped lever is provided with the pin 7, which pin engages with the cam 5 as best illustrated in Fig. 2.

To the casing 3 is attached the bar 7^a, which bar is for the purpose of holding in proper position upon the casing 3, the guard plate 8 which guard plate is substantially of the form shown, and as shown it is provided with the face contact flange 9, said flange being provided with the openings or slots 10. At the ends of the guard plate are located the raised flanges 11, which raised flanges are for the purpose of holding the razor blade 12, in proper position, and preventing any end movement of the razor blade 12, as between said blade and the guard plate 8. The guard plate 8 is provided with the lug 13, which lug is provided with the apertures 14, which apertures are for the purpose of receiving the bar 7^a. The lug 13 is provided with the pin 15, which pin is for the purpose of engagement with the notch 16 formed in the L shaped lever 6.

It will be understood that when the spindle 2 is rotated the L shaped lever 6 will be vibrated upon its pivotal point 17, which in turn imparts a reciprocating movement to the guard plate 8 and the razor blade 12, said guard plate 8 sliding back and forth upon the bar 7^a.

For the purpose of causing the razor blade 12 to fit tightly upon the guard plate 8, the lip 18 is provided, which lip is extended over and on the top of the razor blade as illustrated in Fig. 1.

The razor blade is held up at its rear edge a short distance from the top of the casing 3 by means of the connected strip 19, which strip is securely attached in any convenient and well known manner to the razor blade 12. One object and purpose of providing the strip 19 is to elevate the rear edge of the blade so as to set the front edge in close contact with the upper face of the guard plate 8.

When it is desired to remove the blade, the front portion of the blade is sprung upward, which frees it from the raised flanges 11, after which it can be moved endwise and from under the lip 18.

For the purpose of preventing any end movement of the spindle 2 the collar 20 is provided, which collar is securely attached to the spindle and seated against the end of the handle 1. The housing 3 is provided with the detachable plate 21, which detachable plate is held in position by means of the lug-bolts 22. The purpose of providing a detachable plate is to afford means for easy access to the different parts located within the casing.

It will be understood that the spindle 2 is to be operated by a flexible shaft (not shown) as the shaft within itself forms no particular part of the invention, except that it is necessary for the transmission of power, by which arrangement the razor works automatically.

Having fully described my invention what I claim as new and desire to secure by Letters Patent, is—

1. In a safety razor of the class described, the combination of a handle, a rotatable spindle carried by the handle said spindle provided with a cam head, an L shaped lever adapted to be actuated by the cam head, a guard provided with a flange and a pin, and a razor blade located upon and in contact with the guard and a lip adapted to hold the razor head, substantially as and for the purpose specified.

2. In a safety razor, a handle having located therein a spindle, a housing carried by the handle, a guard plate located upon the housing, a razor blade removably secured to the guard plate, said spindle located through the handle and provided with a cam head, an L shaped lever provided with a pin adapted for engagement with the cam head, and said lever provided with a notch, a pin adapted for

engagement with the notch and the guard plate provided with a contact flange, said contact flange provided with slots, substantially as and for the purpose specified.

3. In a safety razor, a handle, a spindle located through the handle, a housing, a guard plate located upon the housing and provided with a detachable razor blade, a bar adapted to hold the guard plate, said guard plate provided with a contact flange, slots formed in the contact flange, an L shaped lever adapted to impart a reciprocating movement to the razor blade and a cam head adapted to impart movement to the L shaped lever, substantially as and for the purpose specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

ARTHUR F. BRADSHAW.

Witnesses:
ROBERT M. RANKIN,
ANNIE MACKENNA.