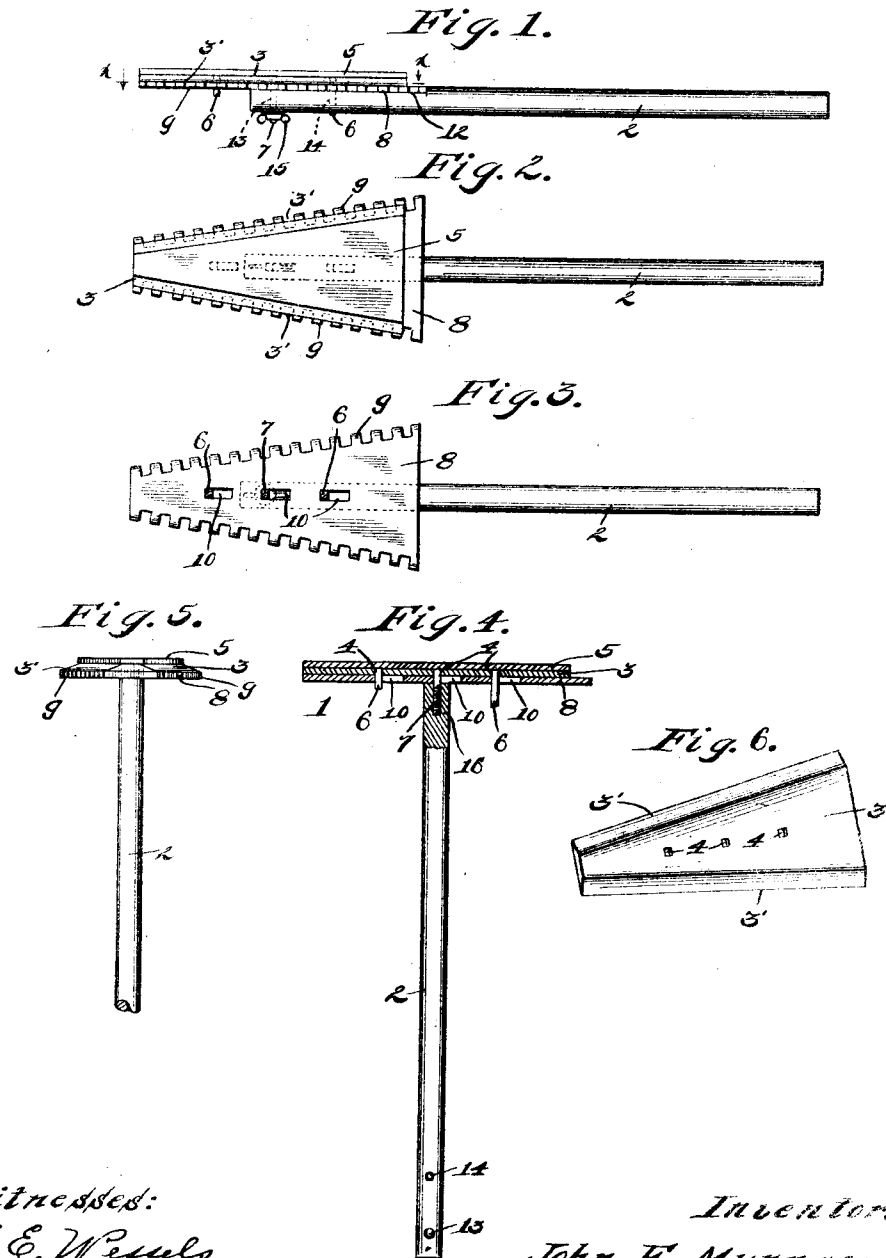


J. F. MURRAY.
SAFETY RAZOR.
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1,046,005.

Patented Dec. 3, 1912.



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UNITED STATES PATENT OFFICE.

JOHN F. MURRAY, OF CHICAGO, ILLINOIS.

SAFETY-RAZOR.

1,046,005.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN F. MURRAY, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

My invention relates to razors and more specifically to that class thereof known as safety razors.

The object of my invention is the provision of a razor of the character mentioned in which the razor blade may be readily adjusted relative to the guard which coacts therewith to effect the regulation of the closeness of the shave.

A further object is the provision of a razor as mentioned which may be arranged for cross-stroke or sliding-diagonal-stroke shaving.

A further object is the provision of a safety razor which will be of durable and economical construction and efficient in operation.

Other objects will appear hereinafter.

With these objects in view my invention consists in a safety razor characterized as above mentioned and in certain details of construction and arrangement of parts all as will be hereinafter fully described and more particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which—

Figure 1 is a side elevation of a razor embodying the preferred form of my invention, Fig. 2 is a top plan view thereof, Fig. 3 is a section taken on line $\alpha-\alpha$ of Fig. 1, Fig. 4 is a sectional side elevation of the razor assembled in a manner slightly different from that shown in Figs. 1, 2 and 3, Fig. 5 is an end elevation of the upper end portion thereof, and Fig. 6 is a perspective view of the blade detached.

Referring now to the drawing 1 indicates the head of the razor and 2 the handle thereof. Arranged in the head 1 is the blade 3. Said blade is thin and flat in form, the longitudinal or cutting edges 3' thereof being angularly or divergently disposed and preferably beveled as indicated. Provided substantially centrally in the blade 1 are a plurality of slots or openings 4, there being preferably three in number, said slots

being arranged in a line coincident with or parallel to the center line of said blade. Arranged upon the upper side of said blade is a flat cover plate 5 of a shape similar to that of said blade, the same being of a length substantially the same as that of the latter, but of a width such that, when said plate is properly arranged centrally upon said blade, the longitudinal edges thereof will be slightly spaced from the edges 3' of the blade, as clearly shown in Figs. 2 and 5. Formed centrally upon the under side of the plate 5 are spaced projecting studs 6 and intermediate the latter a threaded stud 7. Said studs are positioned for registration with and for snug engagement of the slots 4 formed in the blade 3, said slots being square in order to conform with the shape of the studs 6 and the base portion of the stud 7 which, together with the studs 6, is square in cross-section, as clearly shown in Fig. 8. Arranged upon the under side of the blade 1 is a guard plate 8 of a shape similar to that of the plate 5 and the blade 8, the same being of a length slightly greater than that of said parts, and of a width such that the longitudinal edges 9 thereof project slightly beyond the cutting edges of said blade to constitute a guard for the skin, when shaving. Said longitudinal edges 9 of said guard plate are toothed as indicated for a purpose well known.

Provided centrally in the plate 8 is a plurality of slots 10 elongated in a direction longitudinally extending of said plate. Said slots are positioned for engagement by studs 6 and 7, the same being of a width substantially the same as that of said studs permitting of longitudinal movement of the latter therein, but preventing relative transverse movement. With this construction it will be seen that longitudinal adjustment of the blade and cover plate upon the guard plate is permitted and whereby the adjacency of the cutting edges of the blade to the guard edges of the guard plate may be varied as desired in order to regulate the closeness of the shave desired without exposing the blade.

One end of the handle 2 of the razor is flattened as at 12 at one side, the same being provided with two spaced transversely extending openings 13 and 14. Said openings 13 and 14 are formed and spaced for the snug reception of the stud 7 and one of said studs 6 respectively, and whereby,

through the medium of a thumb nut 15 threaded upon the outer end of the stud 7 for engagement of the outer side of said end portion of the handle, the head 1 of the razor may be rigidly secured to said handle. When so arranged, it is evident, the razor may be manipulated as an ordinary razor for sliding-diagonal-stroke shaving.

The opposite end of the handle is provided with a longitudinally extending tapped recess 16 which is adapted to receive and be threaded upon the stud 7, as shown in Figs. 5 and 6. When so arranged the device may evidently be used as safety razors now generally in use, for cross-stroke shaving. In the former employment the nut 15, and in the latter, the handle itself, serves to clampingly lock the parts of the razor head in operative position, so that, in order to adjust said parts, it is only required to slightly rotate said nut or handle, as the case may be, whereupon free adjustment of said parts will be permitted.

A razor of a construction as set forth presents a durable and economical construction of low cost to manufacture, all parts thereof may be readily detached for cleaning, and the same permits of ready and expeditious adjustment for regulation of the closeness of the shave.

While I have shown what I deem to be the preferred form of my device I do not wish to be limited thereto as there might be various changes made in the details of construction and arrangement of parts described without departing from the spirit of the invention comprehended within the scope of the appended claims.

Having described my invention what I

claim as new and desire to secure by Letters Patent is:

1. A safety razor comprising a flat blade having angularly disposed cutting edges and centrally arranged openings; a guard plate and a cover plate on opposite sides of said blade, there being elongated slots in said guard plate registering with said openings; studs upon the inner surface of said cover plate projecting therefrom through said openings and slots in said blade and guard plate; and means cooperating with said studs for clamping said blade and cover plate in operative relationship, substantially as described.

2. A safety razor comprising a flat blade having a cutting edge and centrally arranged openings; a guard plate and a cover plate on opposite sides of said blade, there being elongated slots in said guard plate registering with said openings; studs upon the inner surface of said cover plate projecting therefrom through said openings and slots in said blade and guard plate, said slots being so positioned that sliding of said cover plate and said blade upon said guard plate adjusts the adjacency of the cutting edge of said blade with the guarding edge of said guard plate; and a handle cooperating with said studs to clamp said blade and guard plate in operative relationship, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN F. MURRAY.

Witnesses:

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