

W. WINTER.
SAFETY RAZOR.
APPLICATION FILED MAR. 30, 1911.

1,015,114.

Patented Jan. 16, 1912.

Fig - 1 -

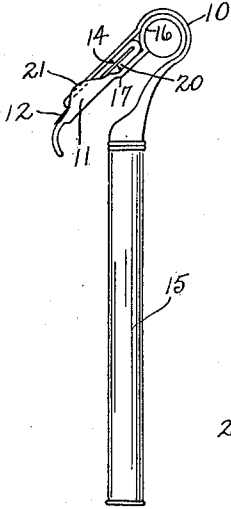


Fig - 2 -

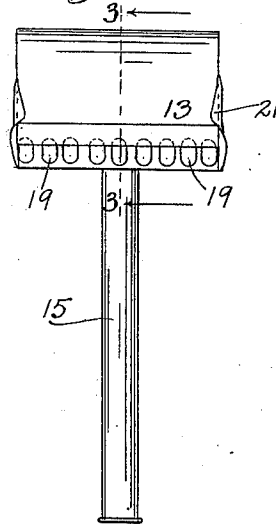


Fig - 6 -

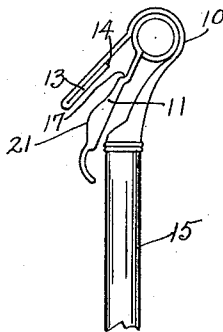


Fig - 3 -

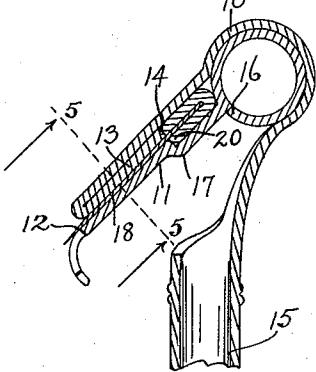


Fig - 4 -

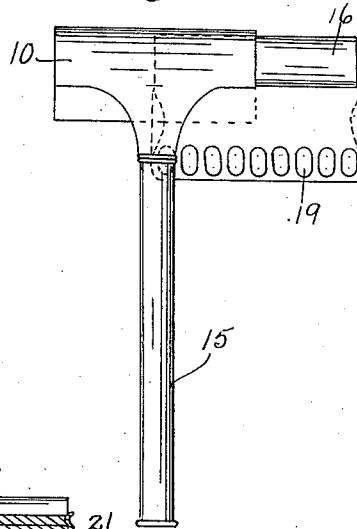
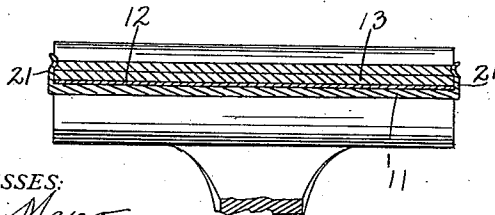


Fig - 5 -



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SAFETY-RAZOR.

1,015,114.

Specification of Letters Patent.

Patented Jan. 16, 1912.

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To all whom it may concern:

Be it known that I, WILLIAM WINTER, a citizen of the United States, and a resident of Indianapolis, county of Marion, and State

of Indiana, have invented a certain useful Safety-Razor; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings.

The object of this invention is to provide a safety razor of an improved type which will have a minimum number of parts, easily put together, capable of being easily cleaned without being taken apart, and presenting no danger of injury to the operator in mounting or removing the cutting blade and of such durable and yet simple construction as will render the manufacture thereof rapid and inexpensive.

The nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings Figure 1 is a side elevation of the safety razor with parts in place ready for use. Fig. 2 is a front elevation of the same. Fig. 3 is a section on the line 3—3 of Fig. 2, drawn to a larger scale. Fig. 4 is a rear elevation showing the blade holder partially withdrawn from the frame. Fig. 5 is a section on the line 5—5 of Fig. 3. Fig. 6 is a side elevation showing the blade holder disengaged from the frame and ready to have a new blade inserted.

In detail the device consists of a frame 10 surrounding and holding a blade holder 11 on which rests a thin cutting blade 12 which is held firmly between the frame 10 and the holder 11 when these two are brought together. The frame is made of thin sheet metal bent back upon itself 13 along the front edge to form the shoulder 14 and at the rear bent on the arc of a circle so as to leave an opening of about ninety degrees, and then in a downwardly direction to join a tubular handle 15. The connection between the handle and the frame being quite thin, a certain amount of play or spring is thus introduced into the connection.

The rear of the blade holder 11 is formed in a tubular shape 16 and then extends in a direction normal to the circumference of the tube to a point 17 where there is an offset or raised shoulder and then normally to the

tube again to form a resting place 18 for the cutting blade 12 and from a point just back of the cutting edge of the blade a downward and forward roll is made in which are cut a number of slotted holes 19. This downward roll is slightly longer than the blade and the ends serve as guards for the sharp corners of the blade. On each lateral edge of the blade holder there is an upwardly extending spring catch 21 which is adapted to engage the rigid portion 13 of the frame and hold the blade rigidly between the holder and the frame.

The cutting blade 12 is rectangular in shape with its length about twice its width and is made of thin tempered steel of a uniform thickness with one of the longer edges sharpened, while over the opposite edge is bent a piece of soft steel in U-shape to form the shoulders 20 on each side of the plate.

In assembling the parts for use, the blade 12 is placed on the blade holder 11 with one of the shoulders 20 resting against the shoulder 17 of the holder and with the flat part of the blade resting on the plate 18 of the holder after which the tubular portion 16 is slightly compressed, entered in the curved portion of the frame, and pressed in until the catches 21 are opposite the ends of the frame when the blade holder is raised and the catches engaged on the upper side of the plate 13 of the spring frame and the upper flat portion of the blade and the upper shoulder 20 thereof brought into contact with and held against movement with the plate 13 and the shoulder 17 respectively.

I claim as my invention:

1. A safety razor including a relatively fixed frame plate, a blade holding plate adapted to slip longitudinally into connection with said frame plate so as to be flexibly mounted with relation thereto, and means at each lateral edge of the blade holding plate for clamping said two plates together for holding the blade between them.

2. A safety razor including a handle, a loop-like frame of spring metal with one member of said frame secured to the handle and the other member forming a plate and said frame at the union between the members thereof being substantially more than semi-circular in form, and a blade holding plate with one edge formed substantially circular

and adapted to slip longitudinally into the circular part of the frame and be held thereby and pivotally movable therein, and spring catches at each side of said blade holding plate adapted to clasp the frame plate for holding the blade.

In witness whereof, I have hereunto affixed

my signature in the presence of the witnesses herein named.

WILLIAM WINTER.

Witnesses:

G. H. BOINK,

O. M. McLAUGHLIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
