

E. KESSLER.

SAFETY RAZOR.

APPLICATION FILED NOV. 19, 1909.

985,759.

Patented Feb. 28, 1911.

Fig. 1.

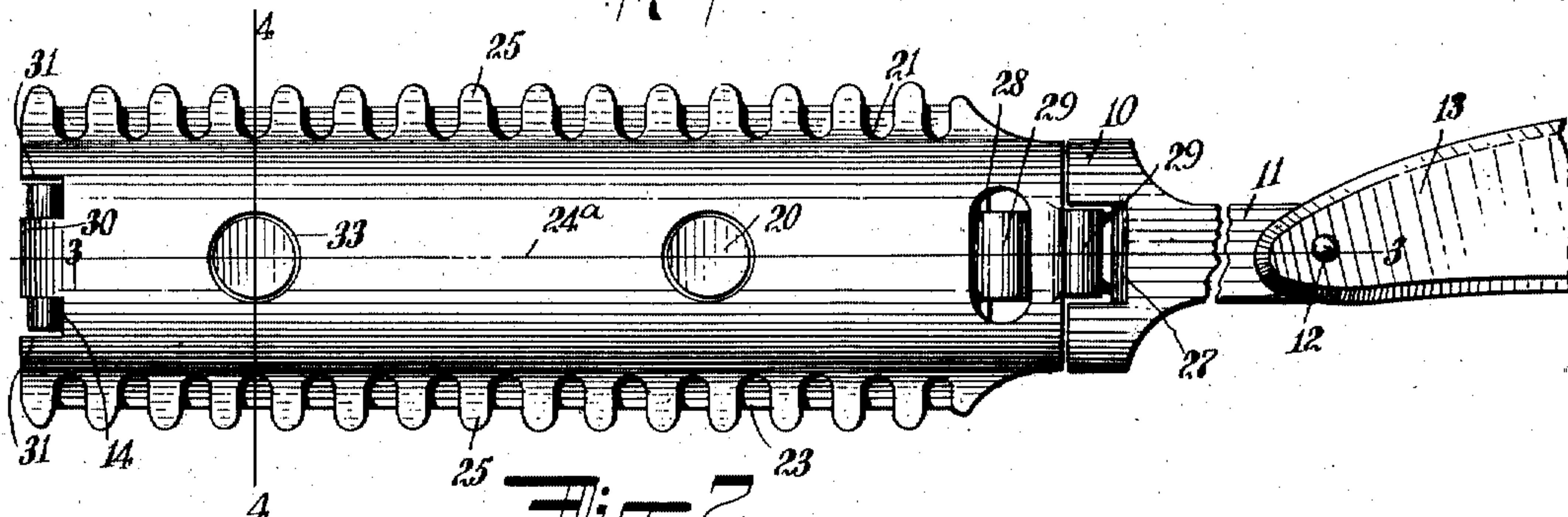


Fig. 2.

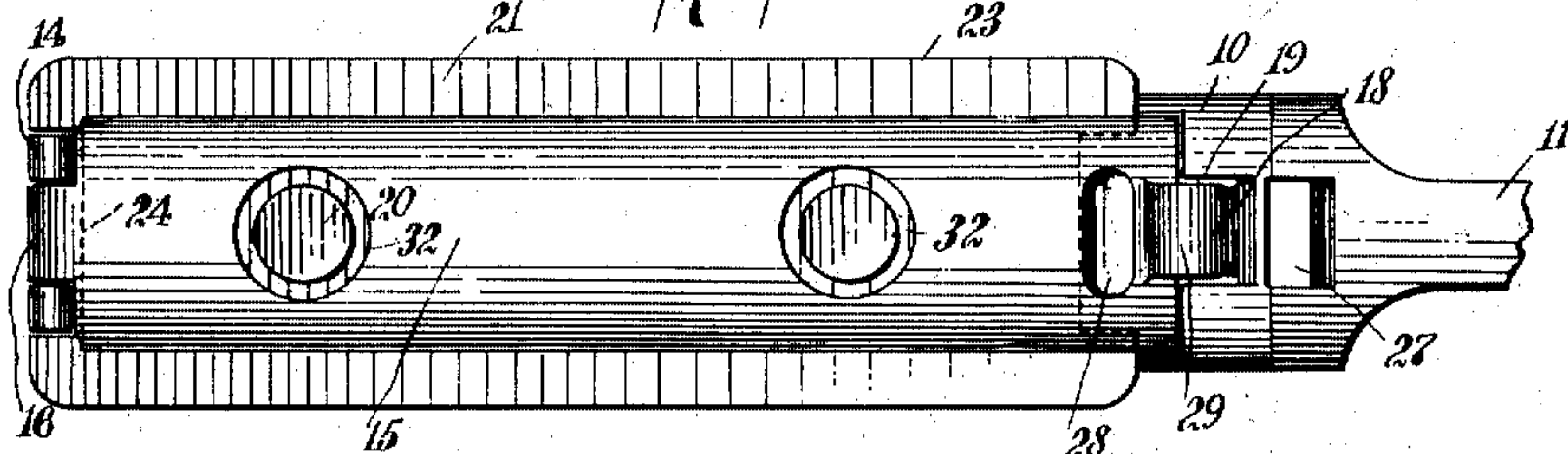


Fig. 3.

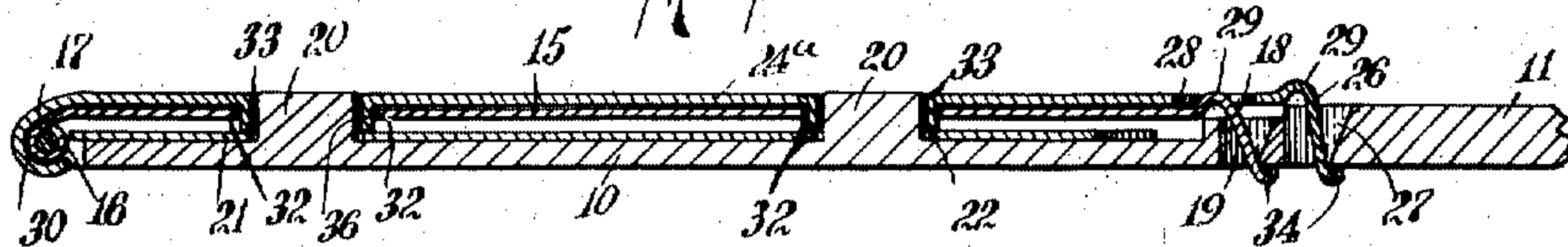


Fig. 4.

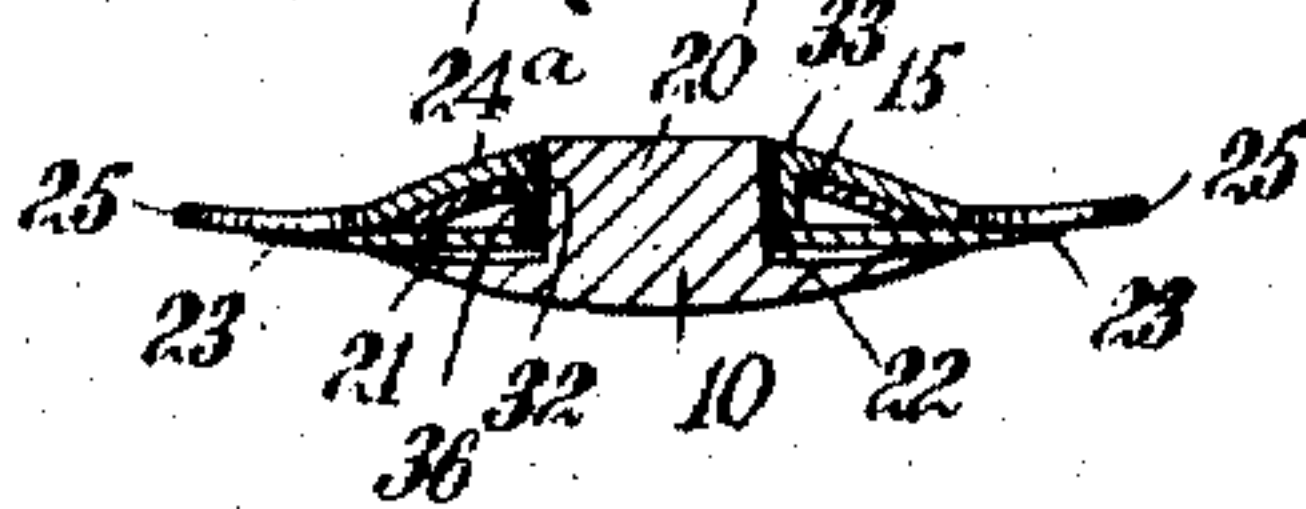
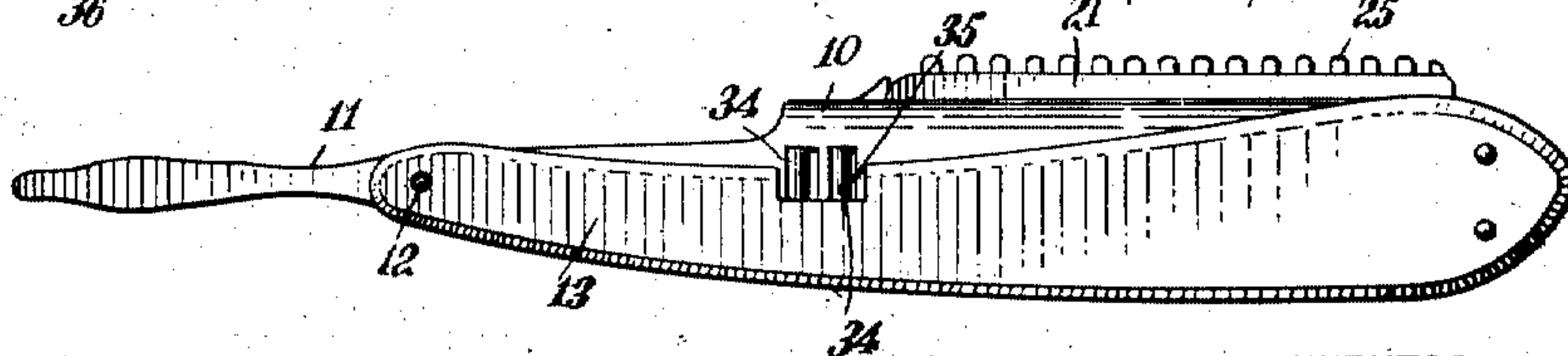


Fig. 5.



WITNESSES

George Barnaby.
John K. Buchholz

INVENTOR

Emil Kessler

BY

Munroe

ATTORNEYS

UNITED STATES PATENT OFFICE.

EMIL KESSLER, OF NEW YORK, N. Y.

SAFETY-RAZOR.

985,759.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed November 19, 1909. Serial No. 528,869.

To all whom it may concern:

Be it known that I, EMIL KESSLER, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Safety-Razor, of which the following is a full, clear, and exact description.

This invention relates to safety razors, and more particularly to a device of this class comprising a blade carrier adapted to have a removable blade mounted thereon, a blade holder movably associated with the carrier and serving to secure the blade in place, and a guard for the blade, the guard assisting in securing the blade holder.

The object of the invention is to provide a simple, strong and durable safety razor by means of which the operation of shaving can be expeditiously and comfortably executed, in which the parts are releasably associated so that the device can be easily cleaned and can be manipulated without difficulty, to permit the removing and replacing of the blade, and which can be employed with a handle such as is customarily associated with the ordinary razor.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a plan view of an embodiment of my invention, having parts broken away; Fig. 2 is a similar view having the guard removed, and with parts broken away; Fig. 3 is a longitudinal section on the line 3—3 of Fig. 1, showing the blade carrier, the blade, the blade holder, and the guard; Fig. 4 is a transverse section on the line 4—4 of Fig. 1; and Fig. 5 is a side elevation of the razor, showing the same closed.

Before proceeding to a more detailed explanation of my invention, it should be clearly understood that while, as illustrated for example, in the accompanying drawings, I prefer to employ the ordinary razor handle with the device, any other suitable handle permitting the convenient manipulation of the razor can be employed. This and other details of construction form no part of the invention and can be varied in ac-

cordance with individual preference and special conditions, without departing from the underlying spirit of the invention.

The device is preferably fashioned from steel, and the blades, as shown in the drawings, have double cutting edges, to lengthen the life of each blade, to render the device more serviceable in use, and to facilitate the operation of shaving both sides of the face with equal ease.

Referring more particularly to the drawings, I employ a blade carrier 10 of suitable width, and terminating at one end in a shank 11 which is pivotally mounted by means of a rivet 12 or the like between the sides 13 of a handle. At the free ends, the blade holder has spaced extensions 14 constituting hinge sleeves. A blade holder 15 having at one end a sleeve extension 16 is pivotally mounted by means of the latter, between the hinge sleeves 14, a suitable hinge pin 17 being located within the sleeves to hold the part 15 pivotally in place.

As is shown most clearly in Fig. 4, the blade carrier and the blade holder are concave in opposite directions. The blade holder 15 at the free end has a spring catch 18 which is adapted to engage within a catch opening 19 of the carrier. The catch opening is beveled, so that when the spring catch is forced into the opening it is displaced until it passes through the opening, to engage at the opposite sides of the carrier to lock the holder in position as is shown most clearly in Fig. 3. The blade carrier has spaced studs 20 aligned longitudinally of the carrier and adapted to hold in position the blade 21 which is provided with suitable openings 22 to receive the studs. The blade may be of any suitable form, and preferably has the opposite longitudinal edges 23 sharpened to constitute the cutting edges. At the ends, the blade has recesses 24 each adapted to receive the hinge connection between the holder and the carrier, so that the blade is reversible, end for end. I employ a guard 24* having the opposite, longitudinal edges provided with the usual guard serrations or teeth 25, and provided at one end with a spring catch 26 similar to the catch 18, and adapted to cooperate in like manner with a catch opening 27 of the carrier, similar to the opening 19. The guard has an opening 28 adapted to receive an offset or bend of the catch 19 as is shown most clearly in Fig. 3. At the end remote from the catch

26, the guard has a curved pivot hook 30 adapted partly to encompass the hinge sleeve 16 so that the guard is removably and pivotally mounted in position. It has adjacent to the hook, cut away parts 31. The cut away part of the carrier between the hinge sleeve extensions 14, permits an initial, pivotal movement on the part of the guard. The guard is preferably transversely curved between its serrated edges, to conform to the curvature of the blade holder, as is shown most clearly in Fig. 4. It will be understood that as the guard extends over the blade holder, when it is locked in position it serves to assist in securing the blade holder in place. It also has openings 33 therethrough, registering with openings 32 of the blade holder, and like the latter, serving to receive the studs 20. In this way, the studs also assist in securing in place the blade holder and the guard, as well as the blade.

As is seen most clearly in Fig. 3, the projections or bends 29 of the spring catches, and the rolled extremities 34 of the same parts, extend laterally at the opposite sides of the device. The sides 13 of the handle are provided with edge recesses 35 which, respectively, receive the parts 29 and 34, and thus serve as stops to limit the closing of the razor. The guard surrounding the openings 33 has sleeves 36 adapted to extend through the openings 32 of the blade holder to engage the blade. The sleeves assist in securing the parts in their relative positions and in rigidly holding the blade.

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

1. A safety razor, comprising a blade carrier adapted to support a blade, a blade holder having a removable connection with said carrier, and provided with means for securing the blade in place, and a blade guard extending over said holder and having means for attaching to said carrier whereby it serves to secure said blade holder in position.

2. A safety razor, comprising a blade carrier, a blade removably mounted thereon, a blade holder having a releasable connection with said carrier and provided with means for securing said blade in place, and a guard having a removable connection with said carrier and extending over said blade holder, and having means whereby said guard assists in securing said holder in place.

3. A safety razor, comprising a blade carrier having a stud, a blade removably mounted upon said carrier and having an opening receiving said stud, a blade holder having a pivotal connection at one end with said carrier and having a catch for locking it in position against said carrier and upon said blade, and a guard removably mounted

upon said carrier over said holder and having means for locking it in position with respect to said carrier.

4. A safety razor, comprising a blade carrier having a stud, a blade removably mounted upon said carrier and having an opening receiving said stud, a blade holder having a pivotal connection at one end with said carrier and having a catch for locking it in position on said carrier over said blade, and a guard having a removable connection with said carrier and having means for locking it in position with respect to said carrier, and extending over said holder, said blade holder and said guard having openings registering and to receive said stud.

5. A safety razor, comprising a blade carrier, a blade removably mounted upon said carrier, a blade holder pivoted on said carrier and extending over said blade, and a guard having a removable connection with said carrier and said holder and extending over the latter, said blade carrier having beveled openings, said holder and said guard each having a spring catch removably received by one of said beveled openings and locked in place within the same.

6. A safety razor, comprising a carrier, said carrier having at one end a hinge sleeve, a blade holder having a hinge sleeve, means for pivotally associating said hinge sleeves to secure said holder pivotally to said carrier, a removable blade provided at each end with a cutaway part receiving therein the hinge connection between said blade and said holder, means for locking said holder with respect to said carrier, a guard having a removable connection with said carrier and said holder, and a handle associated with said carrier.

7. A safety razor, comprising a carrier having spaced hinge sleeves at one end, a blade holder having a hinge sleeve positioned between said hinge sleeves of said carrier, a hinge pin in said sleeve, said carrier having studs, a removable blade having openings receiving said studs and having at each end a part cut away and receiving therein said hinge sleeves, a guard having a recessed part receiving one of said hinge sleeves, means for locking said holder with respect to said carrier, and means for locking said guard with respect to said carrier.

8. A safety razor, comprising a carrier having spaced hinge sleeves at one end, a blade holder having a hinge sleeve positioned between said hinge sleeves of said carrier, a hinge pin in said sleeves, said carrier having studs, a removable blade having openings receiving said studs and having at each end a part cut away receiving therein said hinge sleeves, and a guard having one end curved whereby it can embrace one of said hinge sleeves, said carrier having beveled openings, said holder and said guard

each having a spring catch locked removably within one of said beveled openings.

- 5 9. A safety razor, comprising a blade carrier, a blade mounted thereon, a blade holder pivotally secured to said carrier and extending over said blade, and a guard having a removable connection with said carrier and said holder and extending over said holder, said carrier having beveled openings, said
10 holder and said guard each having a spring catch, said catches having bends adjacent to their junctions with said holder and said guard, said guard having an opening receiving said bend of said catch of said holder.
- 15 10. A safety razor having a blade carrier and a blade mounted thereon, a blade holder mounted upon said carrier, and a guard connected with said holder and said carrier, said holder and said carrier having catches for
20 securing them with respect to said carrier, said catches projecting at the sides of said carrier, and a handle pivotally associated with said carrier and having spaced sides receiving said carrier therebetween, said
25 sides having recesses receiving therein said

extensions of said catches and constituting stops to limit the closing of said handle.

11. A safety razor, comprising a blade carrier having a stud, a blade removably mounted upon said carrier and having an opening receiving said stud, a blade holder removably associated with said carrier and having means for locking it in position on said carrier over said blade, and a guard having a removable connection with said
35 carrier and having means for locking it in position over said carrier, said blade holder and said guard having registering openings receiving said stud, said guard, adjacent to its opening having a sleeve extending
40 through said opening of said holder and engaging said blade.

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

EMIL KESSLER.

Witnesses:

JAMES S. MILNER,
PHILIPP DEGEN.