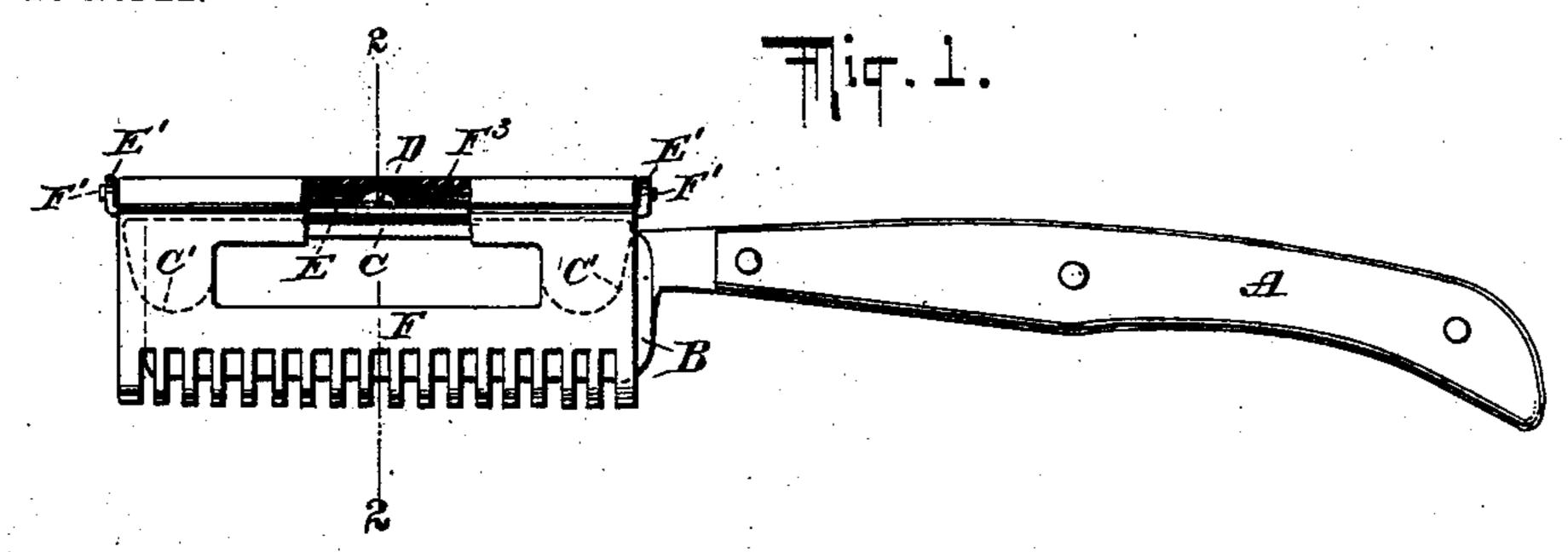
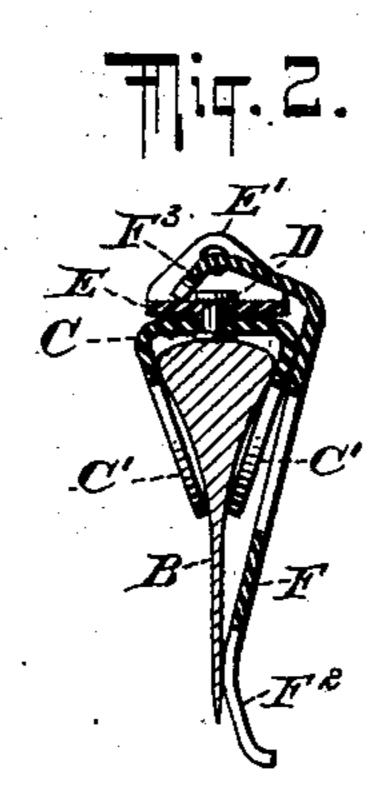
G. W. KORN.

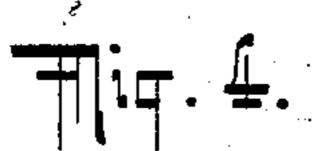
SAFETY RAZOR.

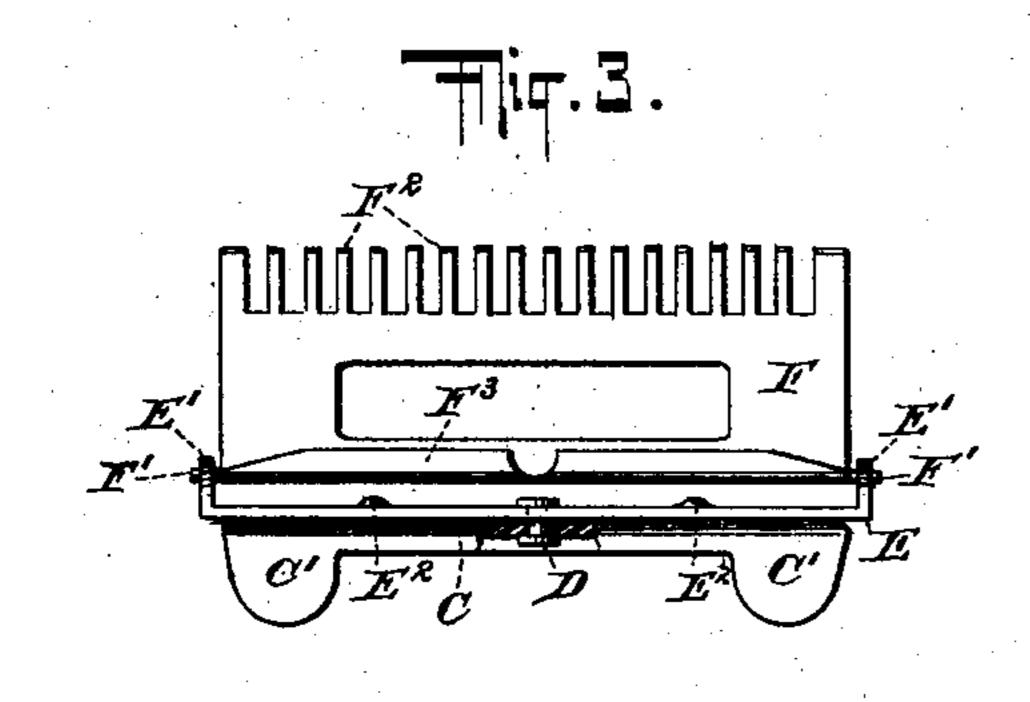
APPLICATION FILED JUNE 10, 1902.

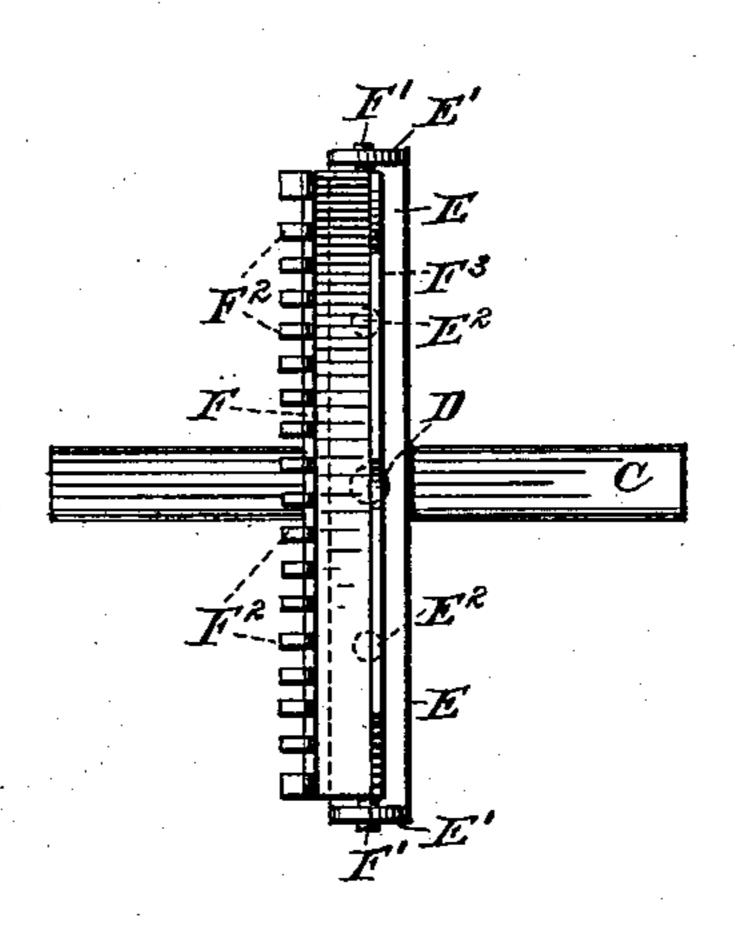
NO MODEL.











WITNESSES:

INVENTOR M. Kann

United States Patent Office.

GEORGE W. KORN, OF LITTLE VALLEY, NEW YORK.

SAFETY-RAZOR.

SPECIFICATION forming part of Letters Patent No. 720,360, dated February 10, 1903.

Application filed June 10, 1902. Serial No. 110,953. (No model.)

To all whom it may concern:

Be it known that I, George W. Korn, a citizen of the United States, residing in Little Valley, Cattaraugus county, and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

My invention relates to safety-razors, and particularly to that class of safety-razors in which the blade is of substantially the usual form and in which an attachment or guard is provided which lies adjacent to the cutting edge.

The object of my present invention is to provide a razor of the above-indicated class which the user may firmly hold in his hand and in which the guard will be so arranged as to avoid injury to the cutting edge and as to be capable of being readily applied to one side of the blade or the other.

In the accompanying drawings I have shown what I consider the best embodiment of my invention; but I desire it to be understood that various modifications may be made without departing from the nature of the invention as defined in the appended claims.

Figure 1 is a side view of a razor provided with my improvements. Fig. 2 is a cross-section on line 2 2 of Fig. 1. Fig. 3 is a detail 30 side elevation of the guard and its carrier; and Fig. 4 is a plan of the guard and the carrier, showing the guard turned to stand transversely of the carrier.

The razor proper comprises a handle A, to 35 which is secured the blade B, the connection of these parts being a rigid one—that is, the usual hinge is omitted. On the back of the blade B is adapted to be slipped the carrier C, provided with converging clips C', 40 which are adapted to engage the sides of the blade, as shown best in Fig. 2. The carrier itself is made somewhat U-shaped, so that it will embrace the back of the blade. At or near the center of the carrier is arranged a 45 pivot D, by means of which the carrier C is connected with a swinging plate E, provided at its ends with lugs E', in which is journaled, by means of trunnions F', the guard F. The line of the trunnions or the axis about which 50 the guard swings is transverse with respect to the pivot D. At its free end the guard has fingers F2, which are concave on the side which | dicular to said pivot.

faces the blade, and the dimensions of the parts are such that the point of engagement of the guard with the blade will be at a distance from 55 the free or cutting edge of the blade, thus avoiding contact of the guard with the delicate cutting edge and any injury to such edge. At its pivot end the guard is provided with a lip E³, which is adapted to be sprung 60 over projections E² on the plate E. This holds the guard firmly against the blade. The carrier C is slipped on and off the blade B endwise, and the guard may be thrown against one side of the blade or the other, owing to 65 the provision of the pivot D and of the trunnions F', without detaching the carrier from the blade. For this purpose the guard is first turned on its trunnions until it stands away from the razor-blade, so as to take the 70 position shown in Fig. 3, and then the guard, together with the plate E, is turned on the pivot D (see Fig. 4) until it is reversed—that is, that end of the guard which previously was at the free end of the blade now comes 75 nearest to the handle A. The guard F is then again swung down and now engages the side of the blade opposite to that which it engaged previously. Owing to the rigid connection of the blade with the handle a very 80 firm hold of the razor is obtained, which is a great convenience in use.

What I claim, and desire to secure by Letters Patent, is—

1. The combination with the blade, of a 85 guard mounted to turn about an axis substantially in the plane of the blade, and also mounted to turn about an axis at right angles to the first-named axis, to permit of applying the guard on one side of the blade or 90 the other.

2. The combination with the blade, of a plate or support pivoted at the back of the blade about an axis substantially in the plane of the blade, and a guard pivoted to said support about an axis at right angles to the first-named axis.

3. A safety attachment for cutting-blades, comprising a carrier adapted for connection with the blade, and a guard connected with 100 the carrier so as to swing about a pivot substantially in the plane of the blade, and also capable of swinging about an axis perpendicular to said pivot.

4. A safety attachment for cutting-blades, comprising a carrier adapted for attachment to the blade, a plate pivotally connected with the carrier, and a guard pivoted to the plate about an axis perpendicular to that of the first-named pivot.

5. The combination with the blade and a handle, of a carrier mounted to slide on the blade toward and from the handle, and a so guard movably connected with the carrier so

as to be reversible thereon from one side of the blade to the other.

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

GEORGE W. KORN.

Witnesses:

JOHN LOTKA, HENRY M. TURK.