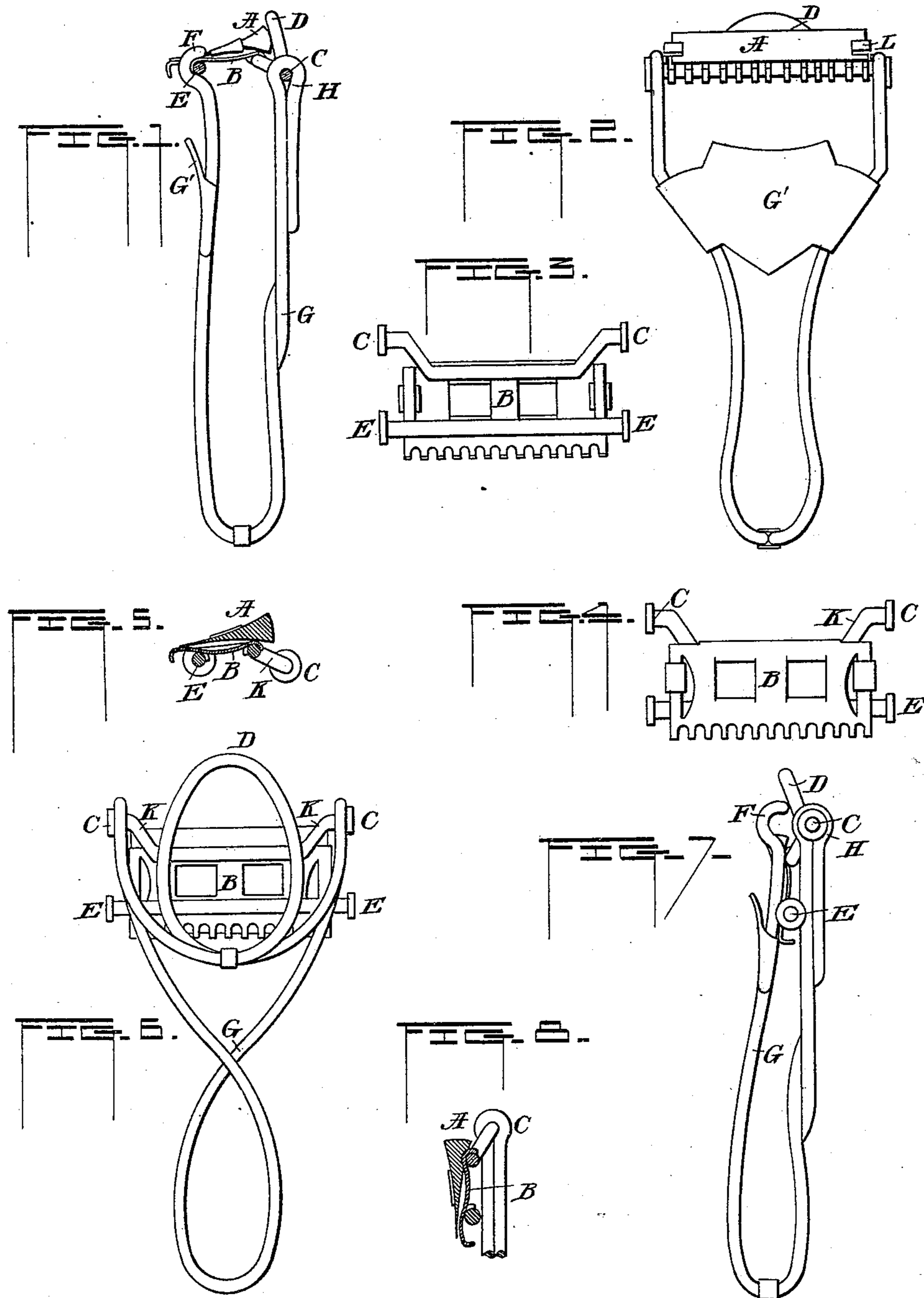


(Model.)

E. & G. A. SCHARFF.
SAFETY RAZOR.

No. 471,070.

Patented Mar. 15, 1892.



Witnesses

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UNITED STATES PATENT OFFICE.

ERNST SCHARFF AND GOTTFRIED ALEXANDER SCHARFF, OF FRANKFORT-ON-THE-MAIN, GERMANY.

SAFETY-RAZOR.

SPECIFICATION forming part of Letters Patent No. 471,070, dated March 15, 1892.

Application filed May 5, 1891. Serial No. 391,694. (Model.)

To all whom it may concern:

Be it known that we, ERNST SCHARFF and GOTTFRIED ALEXANDER SCHARFF, both subjects of the Emperor of Germany, and resident at Frankfort-on-the-Main, Germany, have invented new and useful Improvements in Safety-Razors, of which the following is a specification.

This invention relates, mainly, to safety-razors in which the blade is held removably in a frame carrying a toothed guard by the blade.

The main objects of our invention are to facilitate the adjustment of the razor for use and increase the security of the blade when so adjusted, to provide for safely, quickly, and compactly folding the razor when not required for use, and to simplify and generally improve the construction.

The invention comprises various novel features, which will hereinafter be described in detail, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a safety-razor embodying our invention, adjusted for use. Fig. 2 is a front view of the same. Fig. 3 is a detail inside view of the blade-holder and guard of the same. Fig. 4 is a detail outside view of the said blade-holder and guard. Fig. 5 is a cross-sectional view of the blade-holder and guard. Fig. 6 is a rear view of said razor when folded. Fig. 7 is a side view of the same when folded. Fig. 8 is a cross-sectional view of part of the same when folded.

Like letters of reference designate corresponding parts in the various figures.

We make the frame G of our safety-razor of spring (preferably steel) wire, which is bent in double bifurcated form, the lower portion thereof being formed into a handle. The two front limbs of the frame G diverge upward from the handle and terminate in hook-like catches F. The two rear limbs of the frame G continue from the lower ends of the front limbs thereof upward, are crossed, and thence diverge like the front limbs, and are formed into eye-bearings H behind and preferably slightly below the front catches F. From the eye-bearings H the rear limbs are

returned downward upon themselves and converge, forming a guard, pass each other, and thence extend oppositely outward and upward until they meet in a bow D behind and projecting above the eye-bearings H. Where the rear limbs thus pass each other they are preferably bound together, as shown in Fig. 6, and the front and rear limbs are also preferably bound together where they meet at the end of the handle. The rear eye-bearings H are adjusted to receive loosely opposite-headed pivots C, formed in opposite ends of the blade-holder K, back of the toothed plate or guard B, on opposite ends of which guard are wedge-shaped clips L, in which the blade A is removably received, so that its edge will extend along the guard-teeth in a well-known manner. Thus the blade-holder K and guard B can, when not in use, be swung on the pivots C downward and inward against the rear portion of the frame G, as best shown in Figs. 6, 7, and 8, in which position they are restrained by the elastic pressure of the front limbs of the frame G. A shield G', connecting the said front limbs of the frame G, and the guard formed by the crossed rear limbs thereof cover and protect the blade A when thus closed.

On opposite ends of the front portion of the toothed guard B are headed studs E, by which the holder H and blade A, when required for use, can be swung outward and upward against the pressure of the front limbs of the frame G to a position, roughly, at right angles with the handle, in which position the studs E are engaged automatically by the hook-catches F before referred to. The tension of the front limbs holds the said hook-catches securely in engagement with the studs E, so that the blade A and guard B will be held firmly in position for use, as shown in Figs. 1, 2, and 3. The spring-bowed arm D, before mentioned, bears upon the back of the blade A and presses the same forward in the clips L, so as to automatically take up play, wear, &c., of the blade.

The razor is easily closed up by simply drawing the hook-catches F out of engagement with the studs E and turning the blade and holder inward, so that the front limbs close against the same.

We claim as our invention—

1. In a safety-razor, the combination, substantially as hereinbefore set forth, of a bifurcated resilient frame, the branches of which
5 open or spring together, with a blade-holder and connections on one branch of the said frame to engage the front of the blade-holder at opposite ends thereof, and connections on
10 the other branch to engage the back of the blade-holder.

2. The bifurcated self-folding frame for a safety-razor, formed of resilient wire, bent, as described, to form the two branches, rigidly
15 connected at their lower ends, the wire forming each branch being formed at its lower part into a long loop, which said loops form the handle, and at its upper part into spread
limbs, which are adapted to engage the blade-holder at opposite ends, as set forth.

20 3. The combination, substantially as hereinbefore set forth, with the blade-holder and the blade, of a bifurcated frame, to one branch of which the back of the blade-holder is pivoted to fold thereupon, which said branch is
25 formed with a resilient arm to press upon the back of the blade when opened, and devices on the other branch to engage the front of the blade-holder.

30 4. In a safety-razor, the combination, substantially as hereinbefore set forth, with a bi-

furcated folding frame, of a blade-holder pivoted at its back to one branch, so that it will fold between the branches with the edge of the inserted blade directed inward, and devices on the other branch to engage the front
35 of the blade-holder.

5. In a safety-razor, the combination, substantially as hereinbefore set forth, with a bifurcated folding frame formed of wire, each
40 branch having two limbs, and a blade-holder pivoted to fold between the branches, of a blade-shield spanning the limbs of one branch to cover the unprotected edge of the blade when folded.

6. In a safety-razor, the combination, substantially as hereinbefore set forth, of a bifurcated frame provided with a handle, the rear
45 limbs of the frame having bearings and the front limbs having catches, of a transverse blade-holder pivoted to said rear bearings and
50 having studs or means to engage said catches.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

ERNST SCHARFF.

GOTTFRIED ALEXANDER SCHARFF.

Witnesses:

ALVESTO S. HOGUE,
JEAN GRUND.