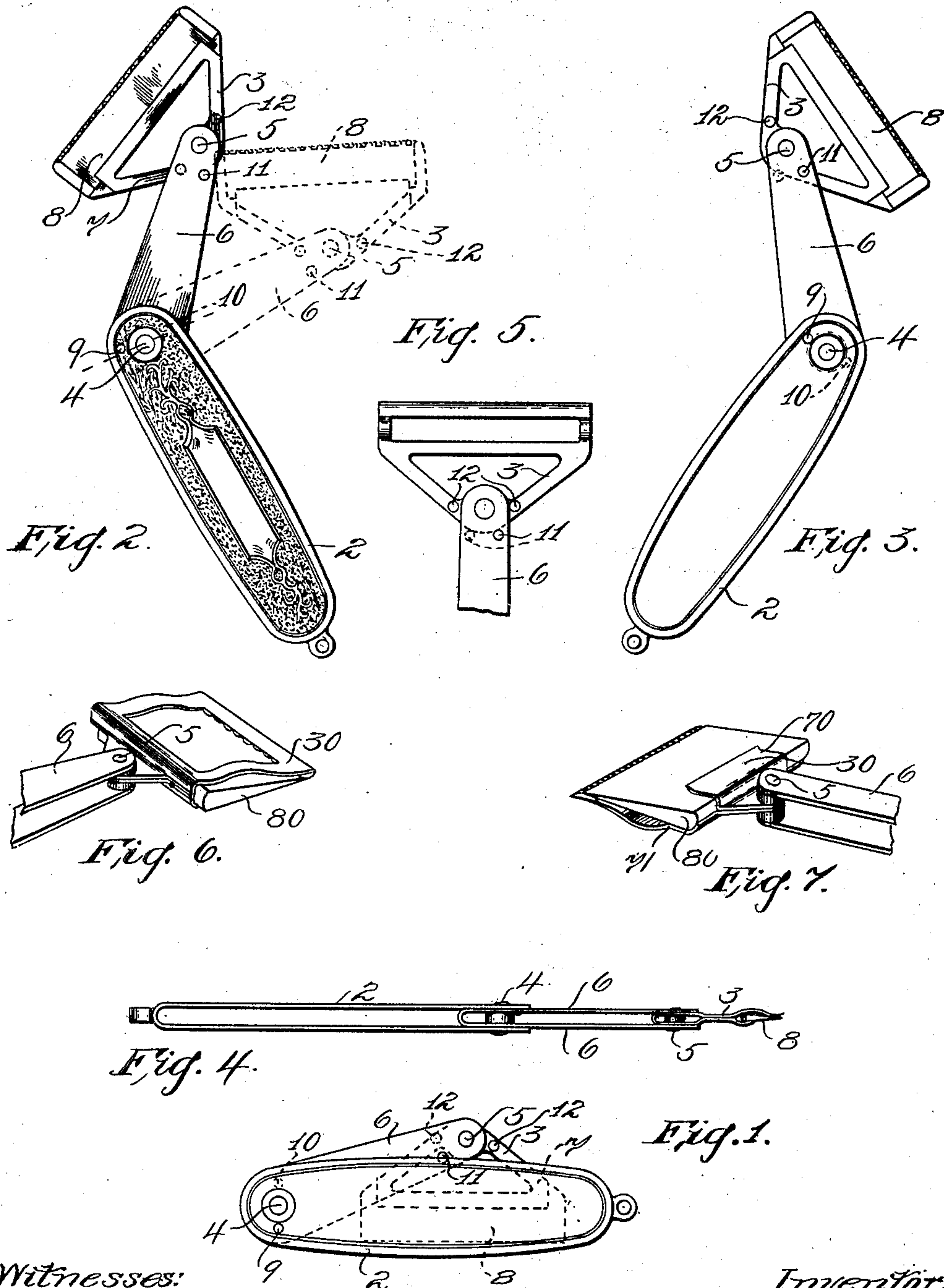


No. 756,615.

PATENTED APR. 5, 1904.

A. FORNANDER.
FOLDING SAFETY RAZOR.
APPLICATION FILED SEPT. 15, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALFRED FORNANDER, OF NEW YORK, N. Y.

FOLDING SAFETY-RAZOR.

SPECIFICATION forming part of Letters Patent No. 756,615, dated April 5, 1904.

Application filed September 15, 1903. Serial No. 173,241. (No model.)

To all whom it may concern:

Be it known that I, ALFRED FORNANDER, a subject of the King of Sweden and Norway, residing in New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Folding Safety-Razors, of which the following is a specification.

This invention provides a construction enabling a safety-razor and the handle therefrom extending to be closed up in small compass with the shaving-blade of the razor sheathed.

The present folding safety-razor comprises a suitable mounting for the reception and retention of the shaving-blade and a sheath or guard with which the mounting has a connection such that the latter, with its supported blade, may be readily withdrawn from or inserted within the sheath in adapting the razor for use or in closing up the same to occupy small space. In the embodiment disclosed in the present instance the blade-mounting has a hinged connection relatively to the sheath, there being interposed between the two a carrier for the mounting. This carrier in the form illustrated is in the nature of a tongue or link, to which both the blade-mounting and the sheath are pivoted, the tongue and the sheath constituting a handle for manipulating the shaving-blade. Preferably means are provided for holding the blade-mounting when inserted in the sheath, as well as when in one or more of its proper positions for shaving, from accidental displacement from those respective positions.

In the drawings accompanying the present specification, Figure 1 is an elevation illustrating the razor in its folded condition. Fig. 2 is a similar view illustrating the blade-mounting withdrawn from the sheath and the razor in proper condition for shaving. Fig. 3 is a view similar to Fig. 2, but shows the parts shifted to a relatively different position. Fig. 4 is an edge view of the extended razor. Fig. 5 is an elevation of the blade-mounting, a portion of the tongue to which it is hinged, and means for releasably locking the mounting in different angular positions relatively to the tongue being also indicated. Figs. 6 and 7 are perspective detail views from opposite

sides, illustrating a mounting adapted to hold a wider blade than is indicated in the preceding figures, the blade also being indicated and the supporting-tongue, friction being relied on in this construction to prevent accidental displacement.

Similar characters of reference designate like parts in all figures.

The embodiment of the folding safety-razor disclosed in the present drawings comprises a sheath with which the blade-mounting of the razor is so connected as to permit the folding down of the mounting into the sheath-opening, in which condition the instrument occupies a relatively very small space. From this sheath the blade-mounting may be withdrawn when the shaving-blade is wanted for use. The sheath is designated by 2, and I have interposed between one end of the sheath and the blade-mounting 3 of Figs. 2, 3, 4, and 5 and 30 of Figs. 6 and 7 a carrier in the nature of a link or tongue having at one end a pivotal connection 4 with the sheath. To the opposite end of this tongue the blade-mounting is pivoted, (see 5,) the parts being so related and organized that the tongue and the blade-mounting may be swung in with reference to the sheath until the parts assume substantially the position indicated in Fig. 1. The interposed tongue comprises in this instance opposed side pieces 6 6, and in the particular construction of the blade-mounting indicated in Figs. 1 to 5 the same comprises a frame 7, adapted for the reception of the shaving-blade 8. Obviously the form and proportions of this mounting may be different from that shown without departing from the spirit of this invention. Thus, for instance, there is illustrated in Figs. 6 and 7 a mounting adapted to hold a wider blade 80 than that of Figs. 1 to 5, the same comprising, as shown, side pieces 70 71, held together by the parts of the supporting-tongue. The sheath and the tongue extending therefrom constitute a handle for the manipulation of the shaving-blade.

In the preferred construction I provide some means for holding the parts against accidental displacement from the position which they may be caused to assume either with the blade-mounting in the sheath-opening or with the

parts of the razor folded out and in position for shaving. While such means suffices to maintain the parts in the positions to which they may be moved, it does not lock them
 5 against movement by a somewhat-increased pressure applied thereto. Such resistant means may consist of the friction between the relatively movable parts, as in the construction of Figs. 6 and 7. Other proper means
 10 may obviously be adopted. In the construction shown in Figs. 1 to 5, the parts 6 6 of the said interposed tongue being resiliently held together, I have provided on one of the sliding surfaces a raised portion adapted to register with a depression in the opposed sliding
 15 surface when the parts are in the position in which it is desired to temporarily retain them.

The sheath 2 has there a portion 9, extending inwardly toward the opposed sliding face of
 20 the part 6 of the tongue immediately adjacent thereto, and such part 6 is formed with counterpart depressions 10, with one of which the raised portion 9 registers when the parts are folded together, as in Fig. 1, and with others of
 25 which depressions the portion 9 respectively registers when the tongue is drawn out to substantially the positions indicated in Figs. 2 and 3, corresponding to the right and left hand position of the razor. Similarly parts 6 6 of the
 30 tongue are each provided with a raised portion 11, extending inwardly toward the frame of the blade-mounting, these raised portions 11 registering, respectively, with depressions 12 12 in the frame of the blade-mounting when
 35 the latter is in the relative positions. (Indicated in Figs. 2 and 3.)

In the particular construction illustrated the razor may be caused to assume the general angular relation of the ordinary razor and be
 40 used in a like manner to the latter.

Having thus described my invention, I claim—

1. In a folding razor, the combination of a sheath, a tongue pivoted to the sheath at one
 45 end thereof, and a blade-mounting pivoted to the outer end of the tongue and adapted to be swung from one side to the other of the latter, the pivotal axes of the joints between the tongue and the sheath and between the tongue
 50 and the blade-mounting being substantially parallel.

2. In a folding razor, the combination of a sheath, a tongue pivoted to the sheath at one

end thereof, a blade-mounting pivoted to the outer end of the tongue and adapted to be
 55 swung from one side to the other of the latter, and means for holding the parts in their adjusting positions, the pivotal axes of the joints between the tongue and sheath and between the tongue and blade-mounting being
 60 substantially parallel.

3. In a folding razor, the combination of a sheath, a pair of tongue-forming links pivoted to the sheath at one end thereof and foldable
 65 thereinto, and a blade-mounting pivoted between the tongue-forming links at the outer end of the tongue and adapted to be swung from one side to the other of the latter and into the space between the links, the pivotal
 70 axes of the joint between the tongue and the sheath and between the tongue and the blade-mounting being substantially parallel.

4. In a folding razor, the combination of a sheath, a pair of tongue-forming links pivoted to the sheath at one end thereof and foldable
 75 thereinto, a blade-mounting pivoted between the tongue-forming links at the outer end of the tongue and adapted to be swung from one side to the other of the latter and into the space between the links, and means for hold-
 80 ing the parts in their adjusted positions, the pivotal axes of the joints between the tongue and the sheath and between the tongue and the blade-mounting being substantially parallel.
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5. In a folding razor, the combination of a sheath, a pair of tongue-forming links pivoted to the sheath at one end thereof and foldable
 90 thereinto, a blade-mounting pivoted between the tongue-forming links at the outer end of the tongue and adapted to be swung from one side to the other of the latter and into the space between the links, and detent devices for holding the parts in their adjusted positions, the pivotal axes of the joints between
 95 the tongue and the sheath and between the tongue and the blade-mounting being substantially parallel.

Signed at Nos. 9 to 15 Murray street, New York, N. Y., on this 11th day of September, 100
 1903.

ALFRED FORNANDER.

Witnesses:

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 CHAS. LYON RUSSELL.