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PATENTED MAR. 10, 1908.

L. T. SNOW.
SAFETY RAZOR.

APPLICATION FILED SEPT. 15, 1905.

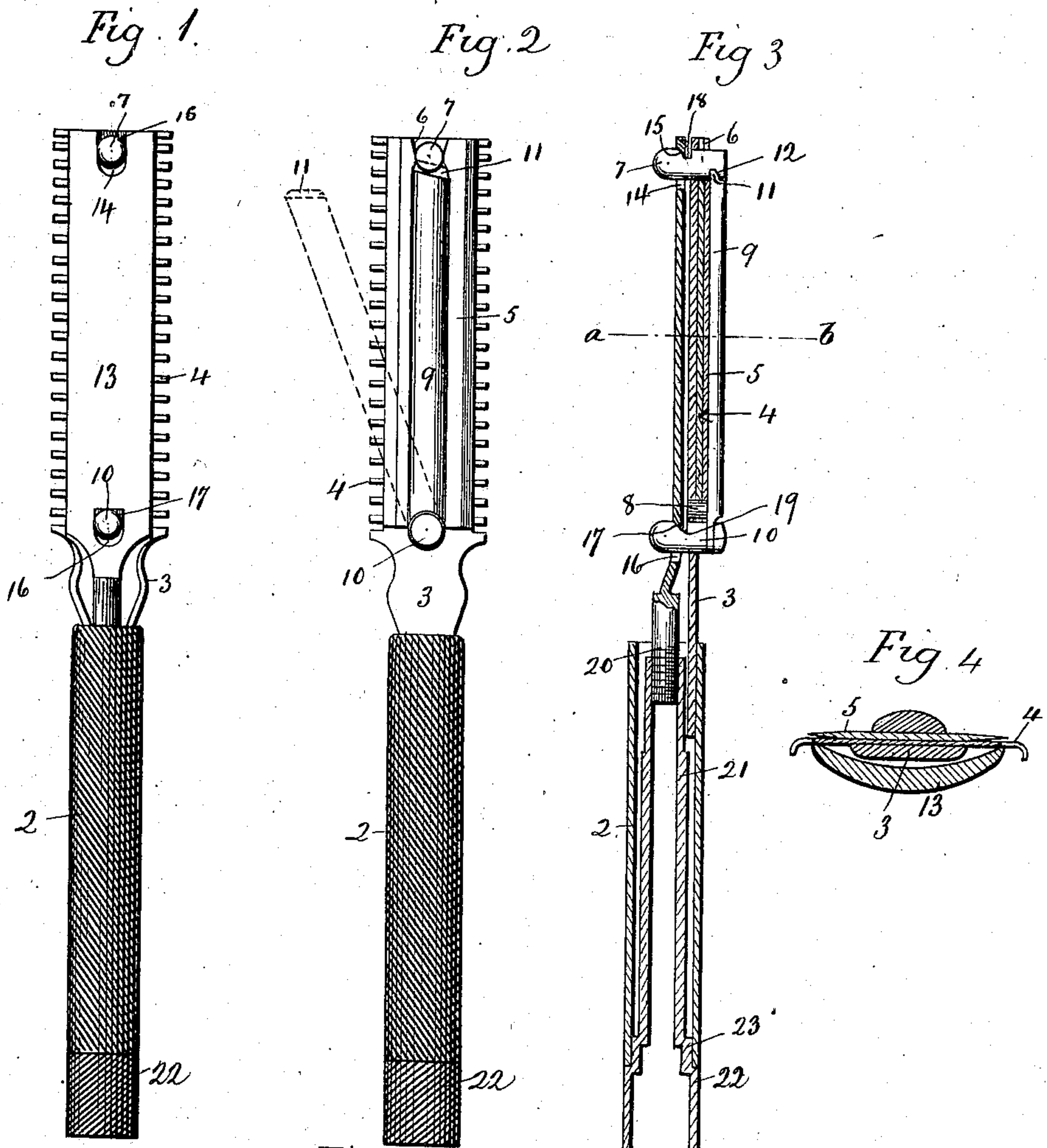


Fig. 7. Fig. 8

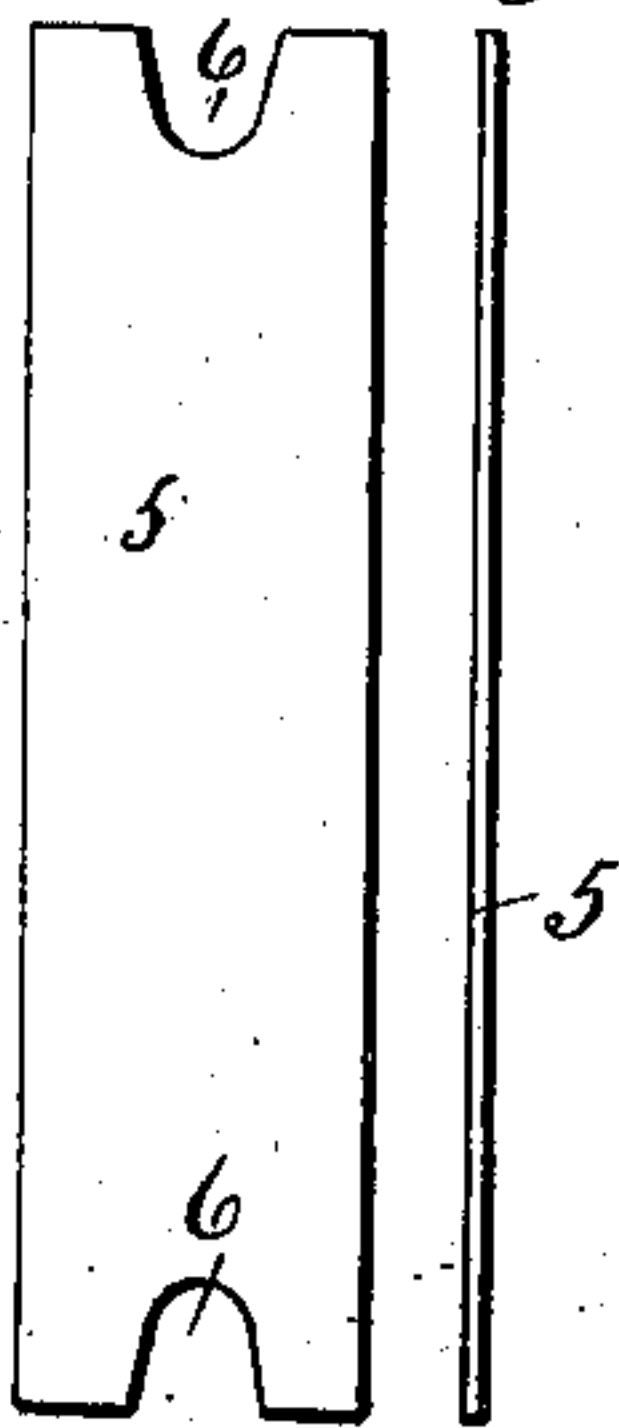


Fig. 6

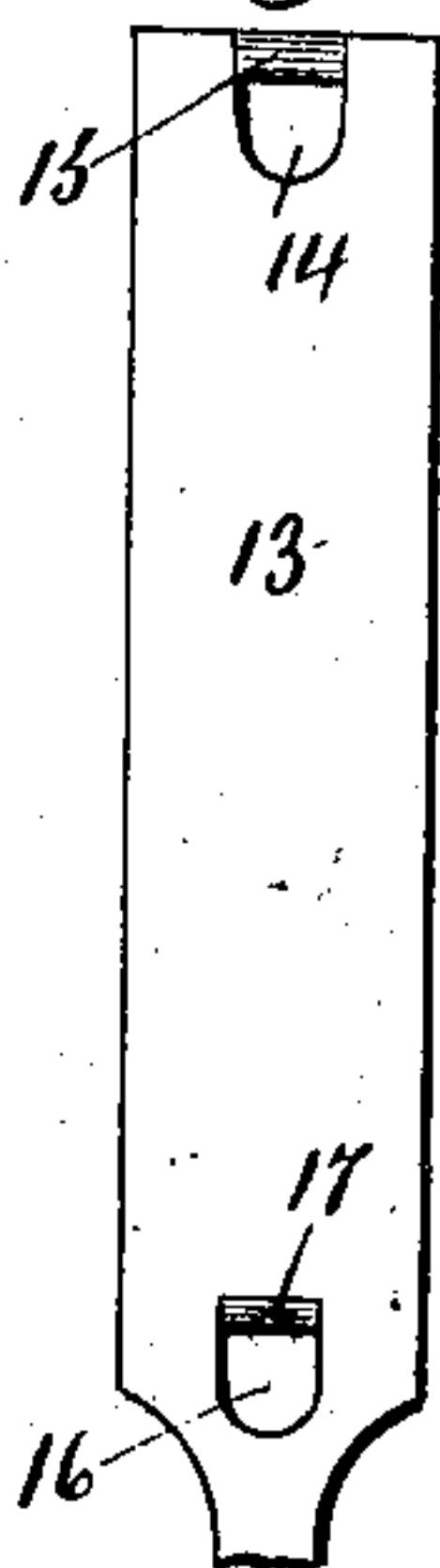
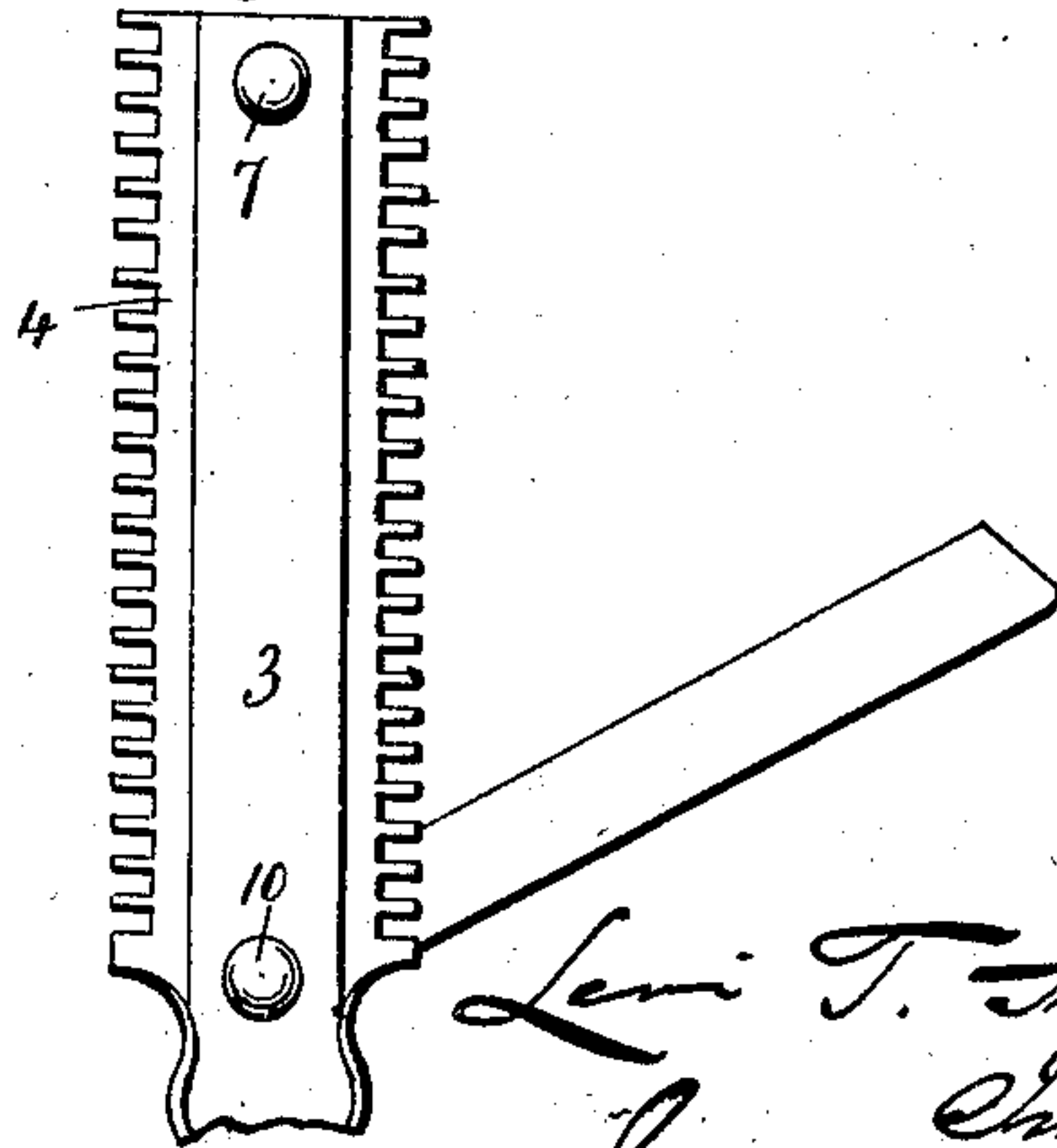


Fig. 5



Witnesses.
J. H. Hummer
Clara L. Reed.

Levi T. Snow.
Inventor.
By atty. Seymour Pearce

UNITED STATES PATENT OFFICE.

LEVI T. SNOW, OF NEW HAVEN, CONNECTICUT.

SAFETY-RAZOR.

No. 881,731.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed September 15, 1905. Serial No. 278,673.

To all whom it may concern:

Be it known that I, LEVI T. SNOW, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Safety-Razors; and I do declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a view in front elevation of a safety razor constructed in accordance with my invention. Fig. 2 a reverse view thereof with the pivotal locking-lever shown in its closed position by full lines, and in its partly open position by broken lines. Fig. 3 a view of the device in central longitudinal section. Fig. 4 a view in transverse section on the line *a—b* of Fig. 3, drawn to an enlarged scale. Fig. 5 a broken view of the device in front elevation with the operating-plate removed. Fig. 6 a view of the device in front elevation showing the bar-like backing-plate, the comb and the locking-lever, the operating-plate being removed and the lower end of the handle being broken away. Fig. 7 a detached view of the razor-blade. Fig. 8 an edge view thereof.

My invention relates to an improvement in safety razors, the object being to produce a simple and compact device constructed with particular reference to superior convenience and effectiveness in use.

With these ends in view my invention consists in a safety razor having certain details of construction as will be hereinafter described and pointed out in the claims.

As herein shown I use a tubular handle 2 provided at its outer end with a bar-like backing-plate 3 made rigid with it and extending in its axial line. To the back of the backing-piece 3 I apply a flexible sheet-metal comb 4 the toothed edges of which extend beyond its edges and are therefore free to be flexed to change their position with respect to the cutting edges of the rigid removable razor-blade 5, which is formed at its respective ends with notches 6 adapting either of its ends to be engaged with the projecting rear end of a stud 7 mounted in the outer end of the backing-piece 3 and with a short

stud 8 projecting a distance represented by the thickness of the blade, from the rear face of the lower end of the backing-piece. After engagement with the said studs 7 and 8 the razor blade is locked in place by a locking-lever 9 swinging upon the projecting rear end of a stud 10 mounted in the plate 3 near the inner end thereof.

The outer end of the lever 9 is formed with an inclined tongue 11 which shuts into a notch 12 in the lower face of the rear end of the stud 7, whereby the locking-lever is held firmly against the back of the blade the edges of which are rigid with respect to the teeth of the comb 4. Now instead of flexing the edges of the razor blade with respect to the teeth of the comb, the edges of the comb are flexed with respect to the edges of the blade. This is done by means of an operating-plate 13 concavo convex in cross-section and adapted in width for the engagement of its edges with the comb at points just within the bases of the teeth thereof. This plate is formed with an opening 14 having its outer wall formed with a bevel 15 and with an opening 16 having its outer wall formed with a bevel 17. The said openings 14 and 16 provide for the forward projection through them of the studs 7 and 10, the upper faces of these studs being formed with beveled notches 18 and 19 which respectively receive the bevels 15 and 17. For the operation of the blade 13, I provide it with a threaded stem 20 which enters the long tubular stem 21 of a finger-piece 22 which corresponds in diameter to the handle 2 and is formed with a hub 23 entering the outer end thereof. Now, when the finger-piece 22 is turned from left to right the bevels 15 and 17 coact with the bevels of the notches 18 and 19 and force the blade 13 laterally forward whereby the comb 4 has its edges deflected toward the edges of the razor-blade 5. Then when the finger-piece is turned reversely, the resiliency of the comb itself lifts it away from the edges of the razor-blade to the extent of the outward movement of the cams 15 and 17 with respect to the bevels of the notches 18 and 19.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I would therefore have it understood that I do not limit myself thereto but hold myself at liberty to make such departures therefrom

as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a safety razor, the combination with a handle, of an alined backing-piece rigid therewith, a flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, means for holding a double-edged razor blade against the back of the comb, and means placed over the front of the comb for engaging with the edges thereof for deflecting the said edges with respect to the edges of the blade.

2. In a safety razor, the combination with a handle, of an alined backing-piece rigid therewith, a flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, a locking-lever pivoted at one end for holding a double-edged razor blade against one face of the comb with which it is alined when it is in its closed position, and means applied to the opposite face of the comb for engaging with the edges thereof for deflecting the said edges with respect to the edges of the blade.

3. In a safety razor, the combination with a handle, of an alined backing-piece rigid therewith, a flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, means for holding a double-edged razor blade against the back of the comb, an operating-plate placed over the front of the comb and engaging with the edges thereof for flexing the same with respect to the edges of the blade, and means for connecting the said plate with the backing-piece for moving it laterally with respect thereto and for connecting it with the handle for its longitudinal movement.

4. In a safety razor, the combination with a handle, of an alined backing-piece rigid therewith, a longitudinally flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, a locking-lever pivoted at its inner end to the inner end of the backing-piece and adapted to hold a double-edged razor blade against the back of the backing-piece with the outer end of which its outer end is coupled when it is alined with the comb, and means coupled with the backing-piece and with the handle for engagement with the front of the comb for flexing the same with respect to the edges of the blade.

5. In a safety razor, the combination with a tubular handle, of an alined backing-piece rigid therewith, a longitudinally flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, means connected at its ends with the backing-piece for holding a double-edged razor blade against the back of the

comb, a laterally and longitudinally movable operating-plate engaging with the front of the comb for flexing the same with respect to the edges of the blade, and means for coupling the said plate with the backing-piece for its lateral movement with respect thereto and for coupling it with the handle for its longitudinal movement.

6. In a safety razor, the combination with a tubular handle, of an alined backing-piece rigid therewith, a longitudinally flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, means for holding a double-edged razor blade against the back of the backing-piece, a longitudinally arranged operating-plate for engagement with the front of the comb for flexing the same longitudinally with respect to the edges of the blade, the said plate having a shank extending into the tubular handle, means for coupling the operating-plate with the backing-piece for its lateral movement with respect thereto, and means located in the tubular handle and engaging with the shank of the operating-plate for moving the same longitudinally.

7. In a safety razor, the combination with a tubular handle, of an alined backing-piece rigid therewith, a longitudinally flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, means for holding a double-edged razor blade against the back of the comb, studs mounted in the backing-piece, an operating-plate coacting with the said studs for its lateral movement with respect to the said backing-piece and engaging with the front of the comb for flexing it with respect to the edges of the blade, and means mounted in the handle for moving the operating-plate longitudinally.

8. In a safety razor, the combination with a tubular handle, of an alined backing-piece rigid therewith, a longitudinally flexible double-edged comb applied to the back of the backing-piece, means for holding a double-edged razor-blade against the back of the comb, studs having beveled notches mounted in the backing-piece near the upper and lower ends thereof respectively, an operating-plate having openings receiving the said studs and bevels for coaction with the bevels thereof, the said plate engaging with the comb for its longitudinal flexure with respect to the edges of the said blade, and means located in the tubular handle and engaging with the inner end of the operating-plate for moving the same longitudinally.

9. In a safety razor, the combination with a handle, of an alined backing-piece rigid therewith, a flexible double-edged comb applied to the back of the backing-piece and projecting beyond the edges thereof, means for holding a double-edged razor blade against the

back of the comb, and a concave operating-plate placed over the front face of the comb and engaging with the edges thereof for flexing the same with respect to the edges of the razor, and means for moving the said plate laterally with respect to the blade and longitudinally with respect to the said handle.

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

LEVI T. SNOW.

Witnesses:

CLARA L. WEED,
GEORGE D. SEYMOUR.