G. W. CONROW.

SAFETY RAZOR.

APPLICATION FILED JUNE 22, 1909.

967,501. Patented Aug. 16, 1910.

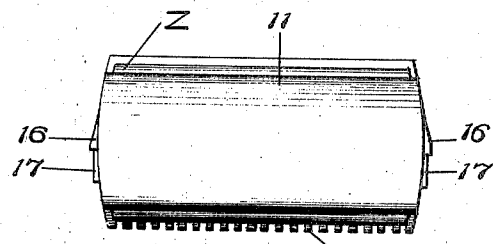

Fig. 1.

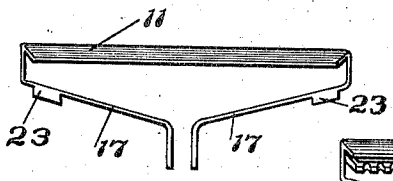

Fig. 3.

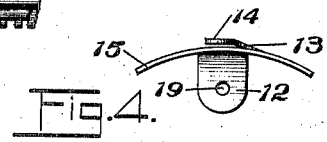

Fig. 4.

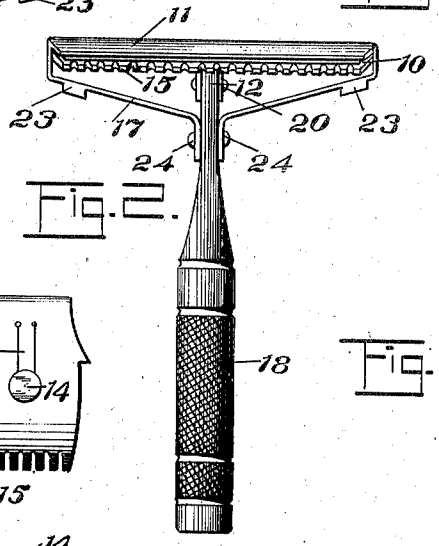

Fig. 2.

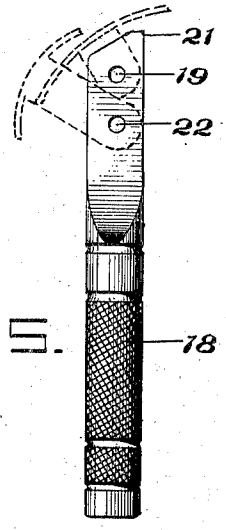

Fig. 5.

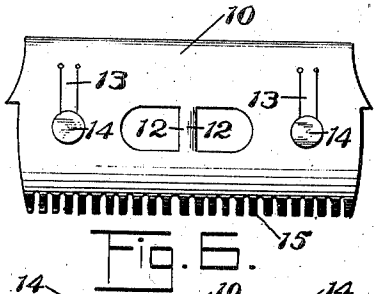

Fig. 6.

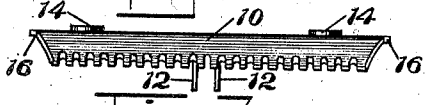

Fig. 7.

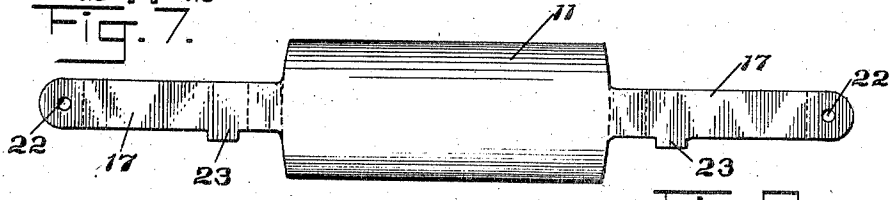

Fig. 8.

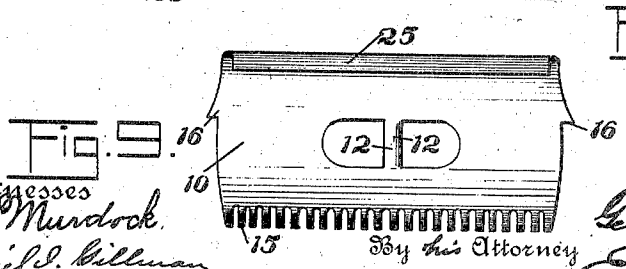

Fig. 9.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. CONROW, OF NEW YORK, N. Y.

SAFETY-RAZOR.

967,501. Specification of Letters Patent. **Patented Aug. 16, 1910.**

Application filed June 22, 1909. Serial No. 503,619.

To all whom it may concern:

Be it known that I, GEORGE W. CONROW, a citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Safety-Razors, of which the following is a specification.

This invention relates to improvements in safety razors.

In the drawings: Figure 1 is a top view of the blade holder and guard. Fig. 2 is a side view of the blade holder, guard and handle. Fig. 3 is a front edge view of the blade clamp, detached. Fig. 4 is a side edge view of the blade holder, detached. Fig. 5 is a side view of the handle, detached. Fig. 6 is a top view of the blade holder, detached. Fig. 7 is a front edge view of the blade holder, detached. Fig. 8 is a plan view of the blank from which the blade clamp is formed. Fig. 9 is a top view of the blade holder constructed in a modified form.

The holder —10— and clamp —11— are formed from sheet metal of suitable thickness. The ears —12— —12— forming the pivoted connection between the holder and handle, are partly severed from, and turned down on the same piece which forms the body of the holder. Struck up from the same piece to protrude above the body of the holder are the dogs —13— —13—, the heads —14— —14— whereof, are rounded in the forms of thin pads adapted to extend into round perforations formed in the razor blades. The shanks of these dogs are extended backward away from the guard edge —15— of the holder. The disposition of the shanks forms resisting members to receive and hold the blade on the holder, while the clamp —11— is being adjusted. Set out from the sides of the holder are the lugs —16— —16— against which the clamping arms —17— —17— of the clamp impinge and are arrested. The blade holder —10— is hingedly mounted on the handle —18— at —19— by the rivet headed pin —20—. To limit the backward throw of the holder —10— the handle has formed thereon the extension —21— against which the holder strikes and rests. The upper surface of the holder —10— is curved transversely to its longest dimension, it being the desire to hold the blade in a rigid bended shape on said holder. As stated, the blade is perforated to receive the pads —14— —14—.

To maintain the blade —Z— on the holder, and to bend it on the same, I have provided the clamp —11—. The clamp is curved to conform substantially to the holder —10— and is hingedly mounted at —22— upon the handle —18— the hinge being formed by a rivet headed pin —24—. The arms —17— are formed as shown, and are provided with the flat bent lugs —23— —23— whereby the arms and clamp are forced into position. The hinge mountings —20— and —22— are separated to produce a longer radius for the movement of the clamp —11— than that produced by the shorter ears —12— —12— by which the movement of the holder —10— is regulated. The distance of the hinge at —22— from the body of the clamp —11— is less than the distance from the said hinge —22— to the upper surface of the holder —10— when measured through the hinge at —19—. This causes the clamp to be drawn upon to bear against the upper surface of the holder —10— to hold any interposed blade thereon. It is by this eccentric movement of the holder and clamp that they are drawn together as the arms —17— —17— and the ears —12— —12— approach alinement.

In the operation of inserting or removing a blade from the holder, the following acts are performed: The clamp —17— and the holder —10— are forced forward to the positions shown in dotted lines at Fig. 5 of drawings. The blade —Z— is now adjusted on the holder —10— in such manner that the pads —14— —14— are held in the perforations formed in the blade. The clamp —11— is then swung back until it strikes upon the blade on the holder —10—. From this point the clamp and holder move in unison, assuming the final position as shown in Fig. 1 and Fig. 2 of drawings. In this final position the lines of the ears —12— —12— and the arms —17— —17— from the hinge mountings —19— and —22— coincide, clamping the blade firmly in position and being locked against disadjustment.

The blade which it is desired to use is the usual two-edged blade. When employing such, the blade is reversed in the holder during use. When it is desired to use the straight single edged blade, the form of holder employed is that shown at Fig. 9 of drawings wherein the dogs —13— —13— are dispensed with. The back —25— is upturned at the rear edge of the holder

—10—. Against this back —25— the blade is adjusted and held when the clamp —11— is swung into position.

Having thus described this invention, what is claimed is:

1. A safety razor comprising a handle having a blade holder hingedly mounted thereon, at one end thereof, said holder being curved in the direction of the line of cut; a thin flexible razor blade and a clamp convexly curved transversely to its longest dimension, hinged to the said handle at a point thereon below the hinge of the blade holder thereon so that the clamp is adapted to move over the blade holder eccentrically to the movement of the blade holder.

2. A safety razor comprising a handle having a blade holder hingedly mounted thereon at one end thereof, said holder being curved in the direction of the line of cut and having hinge wings formed integrally from the body of said holder; a thin flexible razor blade, and a clamp convexly curved transversely to its longest dimension and provided with bended arms formed integrally with said clamp and pivotally connected with said handle at a point below the hinge of the said holder.

3. A safety razor comprising a handle with a stop formed integrally therefrom at one end thereof, having a blade holder with stops formed integrally therefrom at the ends and back thereof, and a clamp member each hingedly mounted on said handle the one above the other at one end thereof by hinge arms of different lengths so that the clamp is adapted to move over the razor blade member positioned on the blade holder, eccentrically to the movement of the blade holder as they swing to the clamping position against stops.

4. A safety razor comprising a handle having a blade holder member and a clamp member each hingedly mounted thereon, at one end thereof, by hinge arms of different lengths, the pivots of said arms separated a distance greater than the difference in the length of said hinge arms to draw the said members together as they swing to the clamping position, thereby holding clamped a thin flexible razor blade firmly in position for use.

Signed at New York in the county of New York and State of New York, this 21st day of June, A. D. 1909.

GEORGE W. CONROW.

Witnesses:
E. F. MURDOCK,
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