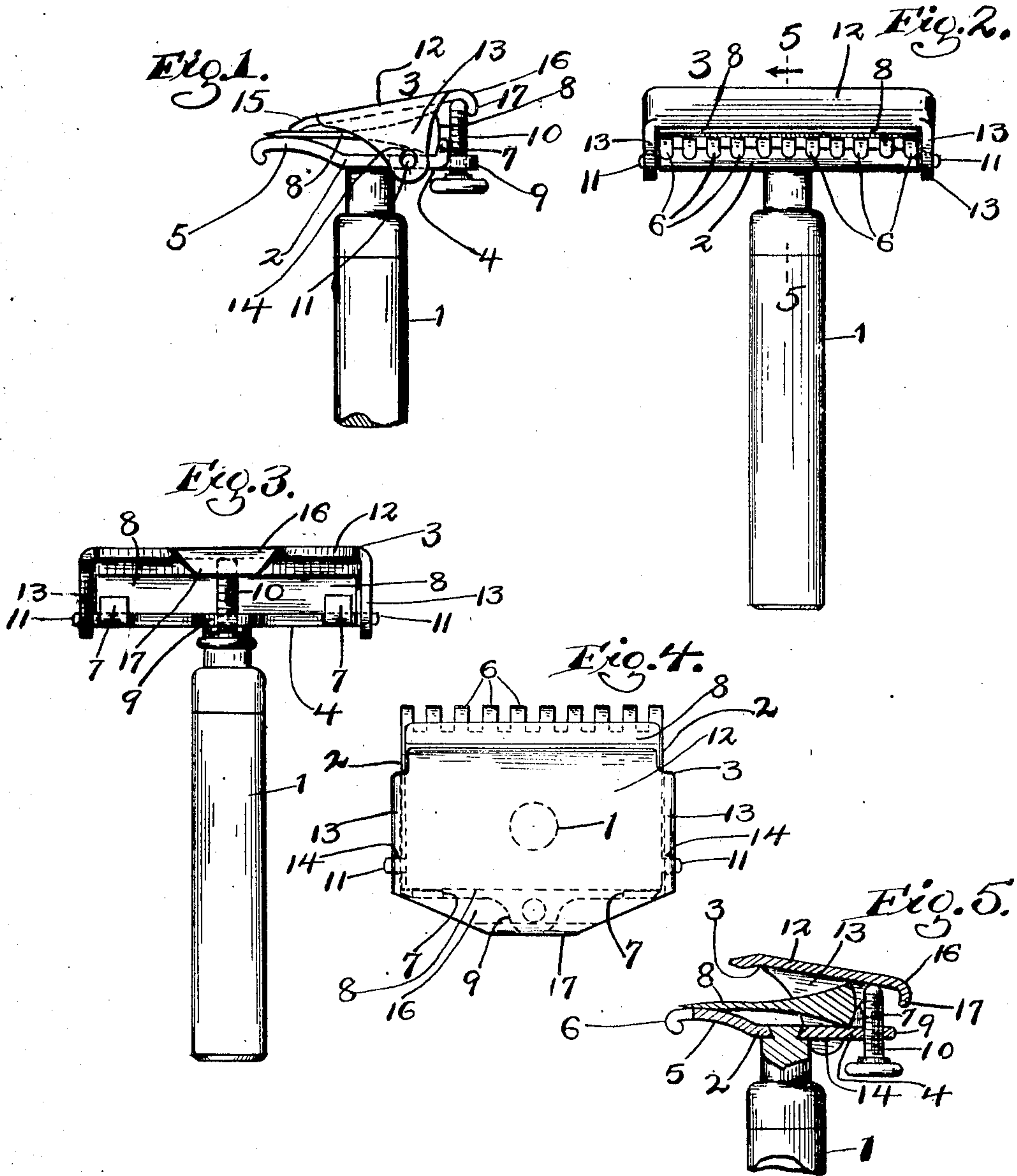


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PATENTED JULY 7, 1908

H. S. BUCKLAND.
SAFETY RAZOR.

APPLICATION FILED MAR. 4, 1907.



WITNESSES:
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UNITED STATES PATENT OFFICE.

HORACE S. BUCKLAND, OF FREMONT, OHIO.

SAFETY-RAZOR.

No. 892,708.

Specification of Letters Patent.

Patented July 7, 1908.

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To all whom it may concern:

Be it known that I, HORACE S. BUCKLAND, a citizen of the United States of America, residing at Fremont, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Safety-Razors; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to safety razors, and has for one of its objects to provide an exceedingly simple and effective construction and arrangement of parts whereby the holding and clamping means are adapted for blades of varying thickness, thus allowing the same clamp and holder to be employed with the thinnest blades as well as with blades of a thickness equal to that of the ordinary razor blade.

Further objects of the invention are to provide improved retaining and clamping means for the blades as well as means whereby blades may be easily and quickly inserted within and removed from the holder or carrier and further to provide a construction wherein, owing to the small number of parts, the simplicity of construction thereof and the manner of assembling, the said parts may be conveniently cleaned.

Generally speaking, the invention consists of the combinations of elements embodied in the claims hereto annexed.

In the drawings forming part hereof, Figure 1 represents a side elevation of a razor constructed in accordance with my invention, a portion of the handle being broken away; Fig. 2 represents a front elevation and Fig. 3 a rear elevation of said razor; Fig. 4 represents a top plan view of the same and Fig. 5 a transverse sectional view, showing the clamp in open position, a portion of the razor handle being shown in elevation.

1 denotes the handle, which may be of ordinary construction, having rigidly mounted thereon a guard plate 2. For convenience of description the parts will be assumed as occupying the positions shown in the drawing; that is to say, the handle will be considered as vertical and the guard plate as substantially horizontal.

The holder or carrier for the razor blade comprises generally the guard plate 2 and the clamp 3, which are adapted to engage the razor blade and firmly support at

the same. The guard plate is provided with a substantially flat rear portion 4 and with an upwardly curved front portion 5 terminating in rounded teeth or prongs 6. The guard plate is provided at the rear portion thereof with three integral lugs, two of which, 7, are adjacent opposite ends thereof and are turned upwardly to engage the rear of the razor blade 8 and hold said blade in proper relation to the teeth or prongs 6. The other lug 9 projects rearwardly from the central portion of the guard plate, preferably in the same plane with the rear portion 4 of said guard plate, and is provided with a threaded aperture for the reception of an adjusting screw 10. Guard plate 2 is also provided, on opposite sides thereof, with lugs 11 constituting pivots for the clamp 3. These pivots are preferably located at the rear of the connection between handle 1 and the guard plate.

The clamp 3 comprises a plate of sheet metal of the general shape shown in drawing. This plate comprises a main body portion 12 of substantially the same length and width as the guard plate 2. Depending from each side of body portion 12 is an integral ear 13 having an aperture 14 therein by means of which the clamp is pivoted to the lugs 11. The front edge portion of the clamp is bent or inclined downwardly at 15 to engage the razor blade at a point substantially opposite the highest point of the upwardly curved portion 5 of the guard plate 2. Projecting rearwardly from body portion 12 is the extension 16, said extension projecting from the central portion of 12 and having a down-turned end 17, said end being curved and being so positioned as to be engaged by the upper end of screw 10 at the time when the front end 15 has engaged the plate 8. It will be apparent that the clamp is in effect a lever pivoted to the guard plate and operated by the screw 10.

It will be observed that the construction hereinbefore described, while comprising a minimum number of parts, provides efficient and practical means for holding the razor blade in place. The elevation of the round end of the guard plate above the rear end thereof and the conformation of the clamp 3 provide a chamber or recess between the rear portions of the clamp and guard plate which is of sufficient width for the accommodation of razor blades of considerable thickness, while the fact that the clamping action is exerted upon the blade at a short distance to the rear of the edge thereof and only be-

tween the down-turned end 15 of the clamp and the subjacent portion of the guard enables the holder or carrier to be used equally well with thin blades, particularly as the manner of operating the clamp is in no wise dependent upon the thickness of the blade. Furthermore, there are but three parts, each of extremely simple construction, to the clamping and retaining means, namely; the combined base and guard plate 2, clamp 3, and adjusting screw 10. The small number of parts and the simplicity of construction thereof render the device extremely economical of production and easy of cleaning.

While, for convenience of description, I have assumed that the razor is in the position shown in Figs. 1, 2, 3, and 5 of the drawing, with the handle vertical and the guard plate substantially horizontal, and have employed the terms "front" and "rear" and "upwardly" and "downwardly" to describe the location of parts, it will be obvious that these terms are employed merely for convenience of description, and I do not propose to be precluded thereby from the employment of the razor in other positions.

Having described my invention I claim:

1. In a safety razor, the combination of a handle, a guard plate secured thereto and having an edge thereof provided with teeth, a clamp having depending ears pivoted to said guard plate and having a portion adapted to engage and to clamp a razor blade between itself and said guard plate, and a screw threaded in said guard plate and adapted to engage said clamp at a point to the rear of said ears, substantially as specified.

2. In a safety razor, the combination of a handle, a guard plate secured thereto, said guard plate having one edge thereof provided with teeth and having integral pivot lugs intermediate of the handle and the opposite edge thereof, a clamp having depending ears pivoted on said lugs or pins and having a clamping portion adapted to engage a razor blade between itself and the portion of the guard plate adjacent to the teeth, a blade between said clamp and plate, and means engaging the clamp at the rear of said pins or lugs for forcing said clamping portion into engagement with said blade, substantially as specified.

3. In a safety razor, the combination of a guard plate having at one edge thereof a plurality of teeth and having adjacent the opposite edge a pair of up-turned lugs constituting stops for the back of a razor blade, a lug intermediate of the former lugs and projecting rearwardly from said guard plate, a screw threaded through the last-mentioned lug, and a clamp pivoted to said guard plate and having a portion adapted to be engaged by said screw, substantially as specified.

4. In a safety razor, the combination of a guard plate having at one edge thereof a plurality of teeth, said plate being provided at a suitable distance from said teeth with one or more up-turned lugs constituting a positioning device for the back of the razor blade, a screw threaded through said plate, and a clamp pivoted to said guard plate and having a portion adapted to be engaged by said screw, substantially as specified.

5. In a safety razor, the combination of a guard plate having at one edge thereof a plurality of teeth and at the opposite edge thereof a pair of integral upwardly projecting lugs constituting stops for the back of the razor blade and also having at the latter edge a rearwardly projecting lug, a clamp comprising a plate having at one edge thereof a down-turned portion and at the opposite edge thereof a downwardly extending lug and having at opposite sides thereof a downwardly extending ear, means for pivoting said ears to said guard plate, and an adjusting screw extending through the rearward lug on the guard plate and adapted to engage the rearwardly extending lug on the clamp, substantially as specified.

6. In a safety razor, the combination of a guard plate having at one edge thereof a plurality of teeth and at the opposite edge thereof a pair of integral upwardly projecting lugs constituting stops for the back of the razor blade and also having at the latter edge a rearwardly projecting lug, pins or pivots projecting from opposite sides of said plate, a clamp comprising a plate having at one edge thereof a down-turned portion and at the opposite edge thereof a downwardly extending lug and having at opposite sides thereof a downwardly extending ear pivoted to said pins or pivots of said guard plate, and an adjusting screw extending through the rearward lug on the guard plate and adapted to engage the rearwardly extending lug on the clamp.

7. In a safety razor, the combination of a guard plate having at one edge thereof a plurality of teeth, a clamp pivoted thereto and having a portion adapted to engage a razor blade interposed between itself and the subjacent portion of the plate, said clamp having a rearwardly and downwardly extending portion at the rear edge thereof, and a screw extending through the guard plate and adapted to engage said rearwardly and downwardly extending portion of the clamp, substantially as specified.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses

HORACE S. BUCKLAND.

Witnesses:

S. C. GARVER,
CHAS. H. GRAVES.