No. 891,986. PATENTED JUNE 30, 1908.

L. B. GAYLOR.

SAFETY RAZOR STROPPING DEVICE.

APPLICATION FILED OCT. 4, 1907.

FIG: 1

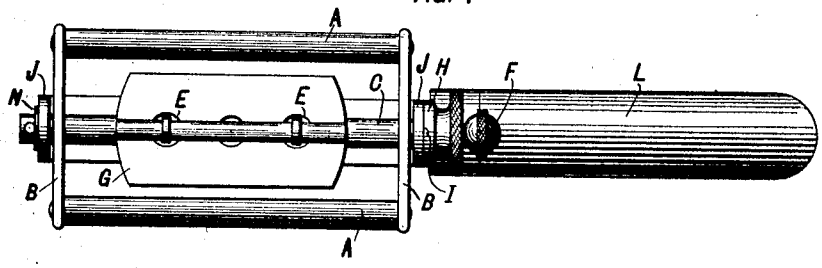


FIG: 2

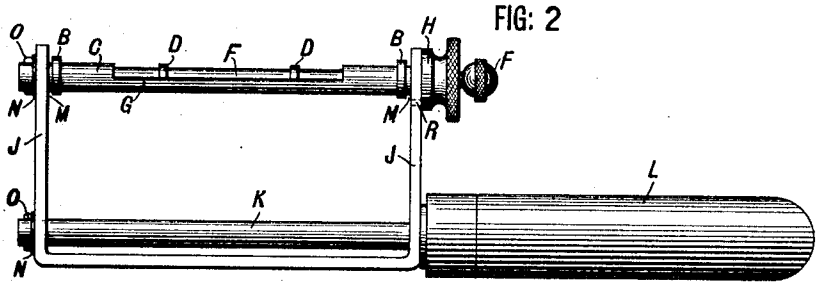


FIG: 3

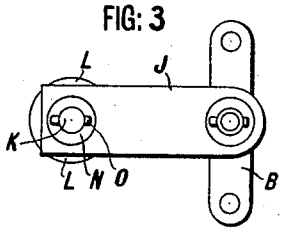
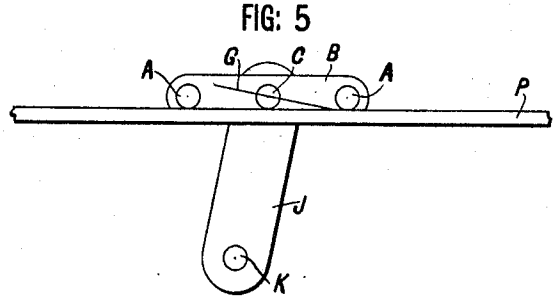


FIG: 4



FIG: 5



Witnesses:
Max B. A. Doring.
F. M. Donstack.

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By his Attorney Phillips Abbott

UNITED STATES PATENT OFFICE.

LEONARD B. GAYLOR, OF BOSTON, MASSACHUSETTS.

SAFETY-RAZOR-STROPPING DEVICE.

No. 891,986. Specification of Letters Patent. Patented June 30, 1908.

Application filed October 4, 1907. Serial No. 395,880.

To all whom it may concern:

Be it known that I, LEONARD B. GAYLOR, a citizen of the United States, and a resident of the city of Boston, county of Suffolk, State of Massachusetts, have invented a new and useful Safety-Razor-Stropping Device, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 illustrates a plan view; Fig. 2 illustrates a side view; Fig. 3 illustrates an end view; Fig. 4 illustrates a side view of the blade-holding pin; Fig. 5 illustrates the device in operation.

A, A, are round pins, preferably of brass. They are riveted into end plates, B, B, thus forming a cage, which is free to revolve on tube C, which passes through the plates B, B, and also passes through the handle frame J. A knurled nut H, is made fast permanently to the outwardly projecting end of the tube C, and is engaged with the frame J by means of recesses I, which fit over a pin K, which projects from the frame J. There are two of these notches or recesses I, directly opposite each other. Spaces M, M, are left between the plates B, B, and the frame J, so that by springing the frame J, slightly together, these spaces are closed, and the nut H, released from the pin R. Thus it can be turned one half revolution to the other notch presenting the other side of the razor blade towards the leather strop. The handle rod K turns freely in the frame J.

L is a handle fast on the handle rod K.

In Fig. 4 I show the blade holding pin F. It is merely a piece of wire milled a little more than half its length. Where it passes over the blade G, and through two or more loop-like portions D, D, of the tube C, it has a small knurled ball secured to the head for convenience in pushing it in or out, as the blades are fastened or released. The loops D, D, pass through holes made in the blades. In blades of the so-called "Gillette" safety razors, the holes made in the blades through which the clamping bolts pass, may be used for this purpose. N, N, are small washers and O, O, are pins which hold the tube C, and handle rod K respectively in place in the frame J.

The action of this device is shown in Fig. 5. The razor blade G is shown in the position of being drawn along the strop towards the left, the handle rod at K being held in the hand of the operator to effect this movement. It will be noticed that when the motion to the left is stopped, and a movement to the right begins, the first action is a rolling movement of the tube C on the strop leather P, which immediately lifts the right hand edge of the razor blade G away from the strop, and brings in contact the lefthand edge of the blade before any forward motion is given to the cage, A, A, B, B, thus rendering it impossible under any circumstances to cut the strop leather with the blade, no matter how carelessly the operator may work the handle. The device is absolutely automatic. It is simply necessary to work the handle back and forth, drawing the cage the length of the strop leather and back again as rapidly as desired.

The function of the cage is merely to steady and guide the blade as it is drawn along the strop leather. It may be omitted and the sharpening action still be performed satisfactorily. The cage rods A, A, also prevent the leather from being marred or roughened by the loops D, D, when the blade is turned over by the thumb nut H, so that they are turned towards the leather.

The device is extremely simple and has a very perfect action which is accomplished without any rollers, cog wheels, springs, or any destructible devices, and it is exceedingly neat in appearance, and it sharpens the blades so that they are better, if anything, than when they are new. It is a well known fact that these thin blades will only give two or three satisfactory shaves without sharpening.

Owing to the fact that the blades are held along their central line with equal projection laterally beyond the rock-shaft at either side, the edges of the blade are alternately presented to the strop leather at a determined and correct angle, which cannot vary; thus very true edges are imparted to the blade. The amount of pressure with which the edges of the blade are brought in contact with the strop depends upon the length of the lever or frame J. This has been calculated by practice and gives the best results in about the proportions shown in the drawings.

It will be obvious to those who are familiar with such matters that modifications may be made in the details of construction of the

device and still the essentials of the invention be retained. I therefore do not limit myself to the details illustrated.

I claim:

1. The combination of a cage embodying side plates and cross pins, a rock shaft journaled in the side plates, a handle frame supported on the rock shaft, means to connect said frame with the rock shaft and to disconnect it therefrom and means to clamp a razor blade upon the rock shaft.

2. The combination of a cage embodying side plates and cross pins, a rock shaft journaled in the side plates, a handle frame supported on the rock shaft, means on the handle frame adapted to engage co-acting and oppositely locating devices on the rock shaft, whereby the said frame and shaft may be connected with and disengaged from each other in directly reversed positions and means to clamp a razor blade upon the rock shaft.

3. In a device of the class stated, a rocking shaft having loops on one of its sides which are adapted to pass through perforations in a two-edged razor blade, means adapted to pass through the loops and clamp the blade to the shaft and means to rock the shaft.

4. In a device of the class stated, a hollow rocking shaft provided with laterally projecting parts adapted to pass through perforations in a two-edged razor blade, a holding pin adapted to enter the shaft and pass through said projecting parts above the blade and clamp it to the shaft, and means to rock the shaft.

5. In a device of the class stated, a hollow rocking shaft having parts removed for the reception of a two-edged razor blade, a pin adapted to enter the end of the shaft, pass above the blade and engage with other parts of the shaft, thus clamping the blade thereto.

6. The combination of a cage embodying side plates and cross pins, a rock shaft journaled in the side plates, the cross pins and rock shaft being in the same plane, a handle frame supported on the rock shaft, means to connect said frame with the rock shaft and disconnect it therefrom and means to clamp a razor blade on the rock shaft.

7. The combination of a cage embodying side plates and cross pins, a rock shaft journaled in the side plates, a handle frame supported on the rock shaft, means to connect said frame with the rock shaft and disconnect it therefrom, loop-like devices upon the rock shaft and a removable clamping pin adapted to pass through said loops and clamp a razor blade to the rock shaft.

8. In a device of the class stated, a rocking shaft, means to clamp a two-edged razor blade centrally on said shaft and a handle frame or support extending below the shaft adapted to rock the shaft and blade when pressed in opposite directions so as to alternately present the opposite edges of the blade to the strop.

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

LEONARD B. GAYLOR.

Witnesses:

NORMAN S. WAITE,

ANNIE B. HEUSTIS.