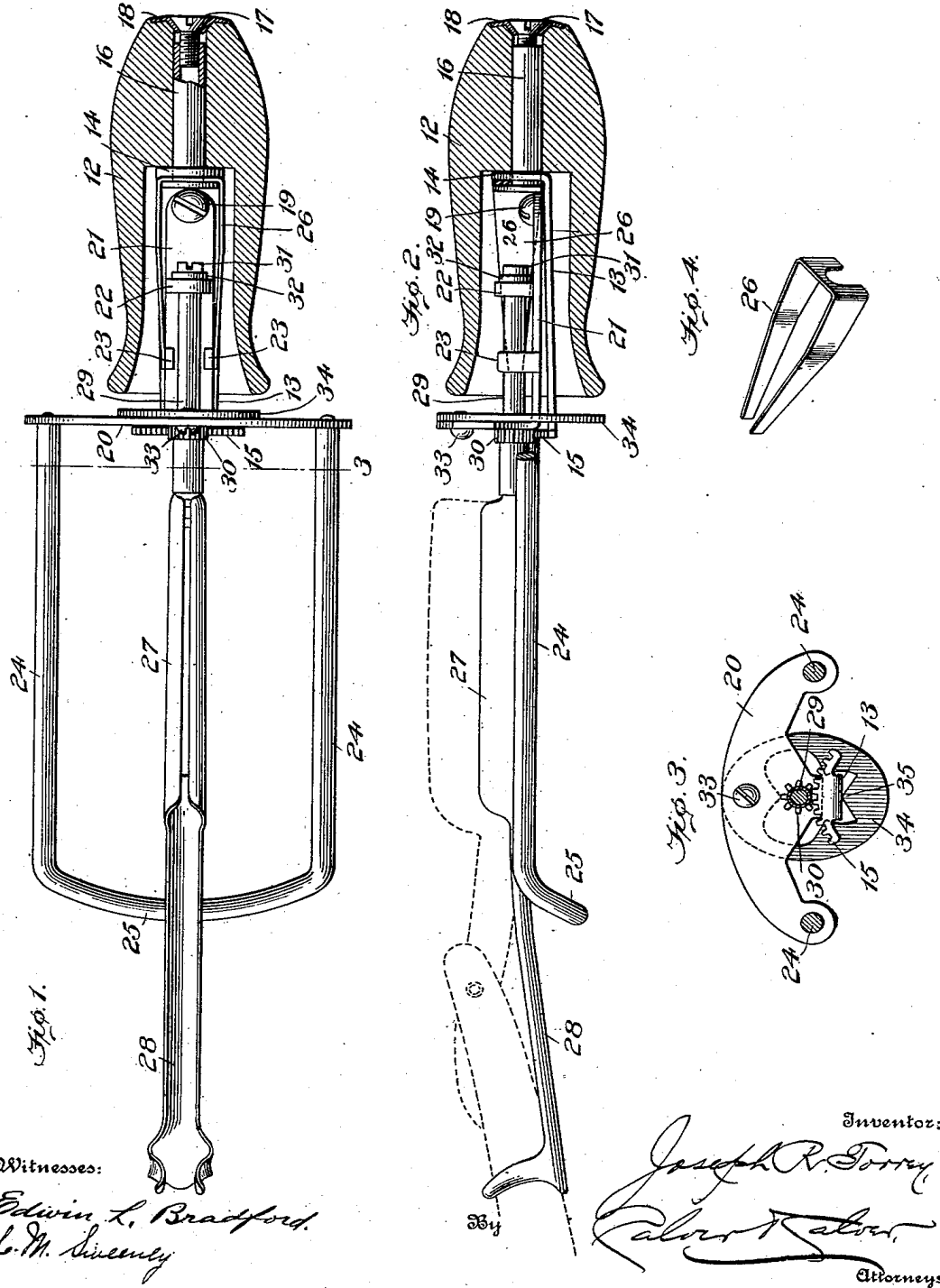


J. R. TORREY.
 RAZOR STROPPING DEVICE.
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898,705.

Patented Sept. 15, 1908.



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UNITED STATES PATENT OFFICE.

JOSEPH R. TORREY, OF WORCESTER, MASSACHUSETTS.

RAZOR-STROPPING DEVICE.

No. 898,705.

Specification of Letters Patent.

Patented Sept. 15, 1908.

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To all whom it may concern:

Be it known that I, JOSEPH R. TORREY, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented or discovered certain new and useful Improvements in Razor-Stropping Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that class of razor stropping devices in which a razor is held in proper position for stropping, and in the manipulation of which the razor will be automatically reversed at each stropping stroke as the stropping device is moved back and forth over the strop, and thus, no matter how unskillful the user may be, the razor will always be maintained in correct position relative to the strop, so that it will be properly sharpened.

The invention has for its object to provide a stropping device, of the class referred to, which will be of improved construction so that it may be manufactured at a minimum cost, while being efficient and convenient in use.

In the accompanying drawings, Figures 1 and 2 are plan and side views, respectively, of the improved stropping device, with some parts in section. Fig. 3 is a sectional elevation on line 3—3, Fig. 1, looking in the direction of the arrows adjacent to said line, and Fig. 4 is a detail view of the U-spring.

Referring to the drawings, 12 denotes a hollow handle in the chamber of which is located a stationary frame or bar 13 provided at its rear end with an upwardly projecting lug 14 and at its forward end with a curved rack 15. The said frame or bar is secured to the said handle by means of a bolt 16 passing through the said lug 14, the outer end of said bolt being tapped for the reception of a screw 17 between the head of which and the outer end of said handle is interposed a washer 18, so that the said frame or bar may be securely and preferably rigidly attached to the said handle.

Pivotally mounted on the frame or bar 13, by means of a rivet screw 19, is a swinging frame comprising a plate 20 having a shank 21 through which the said rivet screw passes, the said shank being provided with a bearing lug 22 and with side lugs 23, which are preferably struck up from, and thus integral with, said shank; but in place of which pins in-

serted in said shank may be used. The said swinging frame also comprises the wire arms 24 riveted or otherwise suitably attached to said plate and connected at their outer ends by the loop 25. For the purpose of retaining the swinging frame in a central position relative to the stationary frame or bar 12, and for returning said frame to such position when displaced therefrom, a U-spring 26 is provided, the free ends of said U-spring pressing against the said side lugs 23 on the shank 21, and the neck or loop portion of said spring being clamped between the head of the bolt 16 and the upwardly projecting lug 14 on the said frame or bar 13.

The razor or blade-holder 27 is, or may be, of usual form, bent up from sheet metal, and between the adjacent lips of which holder a razor to be sharpened may be held as denoted in dotted lines in Fig. 2; or if the device is to be used for the purpose of stropping safety razor blades, or other like devices, the extension 28 of the said holder, and which receives the handle of an ordinary razor, may be omitted. This razor holder is attached to a rotary shank 29 provided with a pinion 30 meshing with the curved rack or sector 15, and the rear end of said shank is journaled in the lug 22 on the shank 21 of the swinging frame. To properly journal or swivel the said shank in the said lug the said shank is preferably provided with a reduced portion passing through said lug, but loosely retained therein, for free rotation, by means of a screw 31 and washer 32.

Pivotally attached to the plate 20 forming part of the swinging frame, by means of a rivet-screw 33, is an oscillating plate 34 having an opening through which the rotary shank 29 of the blade-holder passes, and through which opening also passes the stationary frame or bar 13, the opening in said plate below said bar being cut away to provide a point 35 bearing against said bar to permit the said plate to oscillate freely, and the said opening is preferably of such width as to permit the plate to have a limited rocking movement relative to said bar, but the side walls of the said opening, on each side of said bar, may serve as stops to limit the sidewise movement of the swinging frame relative to the stationary frame or bar 13, and to which swinging frame said oscillating plate is pivotally connected by the screw or rivet 33. The said oscillating plate serves,

as its principal function, to hold the pinion 30 in mesh with the rack 15, and may also serve to limit the sidewise movements of the swinging frame, as just stated.

5 In the operation of the device the razor or blade to be sharpened is placed in the holder in the usual manner, and by drawing the stropping device back and forth on the strop the frictional contact of the wire arms 24
10 with the strop will cause the swinging frame to rock on the pivot afforded by the rivet screw 19, and such rocking movement, carrying the pinion 30 back and forth over the stationary rack 15, will cause the razor holder
15 or blade holder to oscillate or partially rotate reversely, so as to bring first one side and then the other of the razor blade held therein into contact with the strop, to sharpen the same in the manner usual with such stropping devices.
20

The improved stropping device, made as herein shown and described, may be made at a minimum cost, while the construction thereof is such that the device is simple and
25 can be easily operated by an inexperienced person in an efficient manner for the purpose of sharpening razors or razor blades, or blades of other kinds.

Having thus described my invention I claim and desire to secure by Letters Patent:—

1. In a razor sharpening device, the combination with a suitable frame or support, of a swinging frame mounted thereon, a razor
35 holder, a rack and pinion device for reversely rotating said razor holder as the swinging frame is moved back and forth, and an oscillating plate pivotally connected with said swinging frame and serving to hold the parts
40 of said rack and pinion device in mesh.

2. In a razor sharpening device, the combination with a suitable frame or support, of a swinging frame mounted thereon and the shank of which is provided with side lugs, a
45 U-spring the free ends of which bear against

said lugs, and an oscillating blade-holder mounted in said swinging frame.

3. In a razor-sharpening device, the combination with a frame or holder 13 provided with an upwardly projecting lug 14 and a
50 curved rack 15, of a swinging frame comprising a shank having side lugs and a bearing lug, an oscillating blade holder having a shank provided with a pinion meshing with
55 said rack, and which shank is swiveled or journaled in said bearing lug, and a U-spring attached to said stationary frame and having free ends bearing against said side lugs.

4. In a razor-sharpening device, the combination with a frame or holder 13 provided
60 with an upwardly projecting lug 14 and a curved rack 15, of a swinging frame comprising a shank having side lugs and a bearing lug, an oscillating blade holder having a
65 shank provided with a pinion meshing with said rack, and which shank is swiveled or journaled in said bearing lug, an oscillating plate serving to hold said pinion in mesh with said rack, and a U-spring attached to
70 said stationary frame and having free ends bearing against said side lugs.

5. In a razor sharpening device, the combination with the stationary frame 13 provided with the upwardly projecting lug 14,
75 of an oscillating or reversely rotating blade-holder, a swinging frame in which said blade-holder is mounted, and the shank of which is provided with side lugs, a U-spring the free ends of which bear against the outer sides of
80 said lugs, and the bolt 16 between the head of which and the said upwardly projecting lug 14 the loop or neck portion of said spring is clamped.

In testimony whereof I affix my signature, in presence of two witnesses.

JOSEPH R. TORREY.

Witnesses:

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