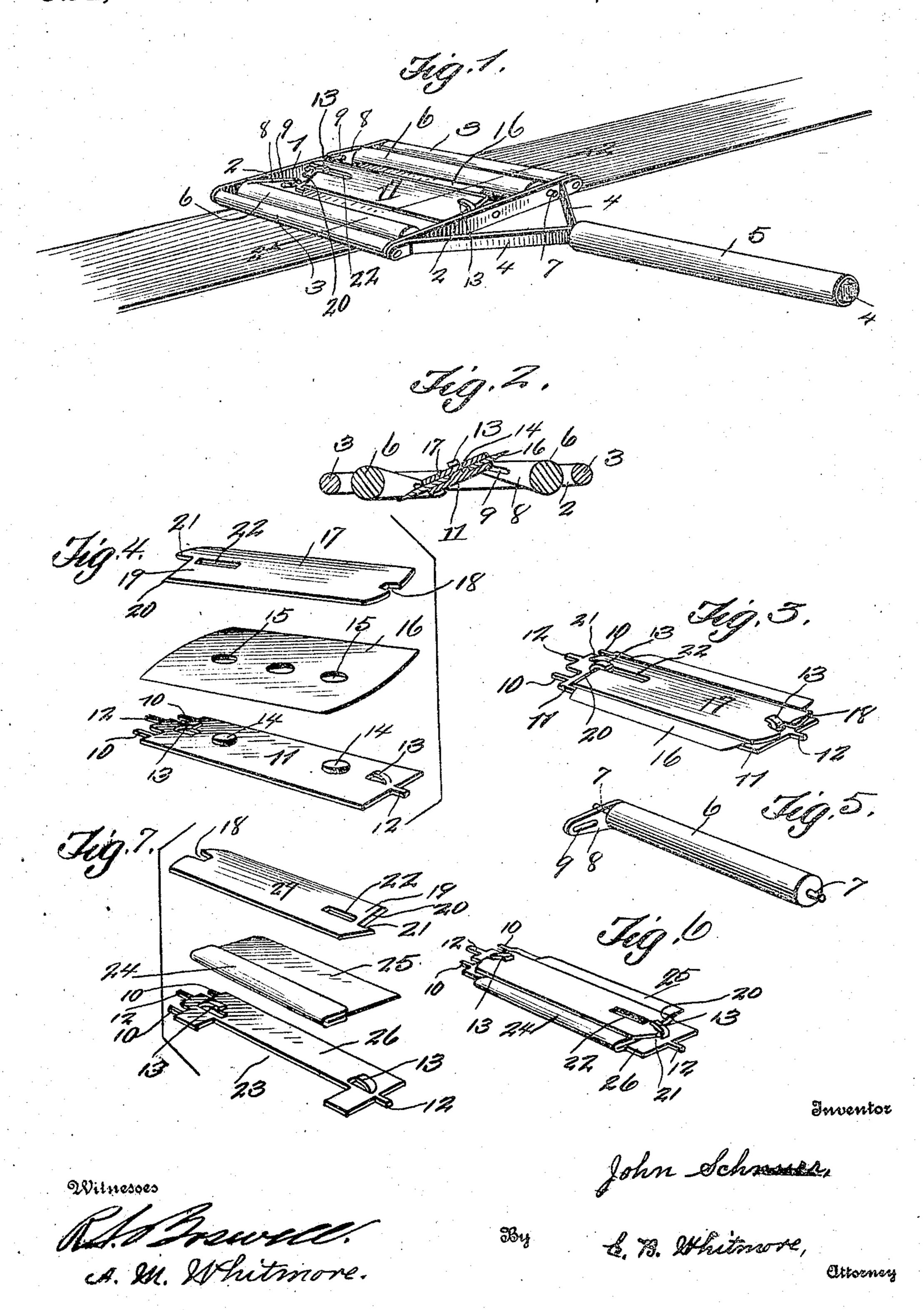
J. SCHNURR. STROPPING DEVICE. APPLICATION FILED AUG. 3, 1908.

924.278

Patented June 8, 1909.



UNITED STATES PATENT OFFICE.

JOHN SCHNURR, OF ROCHESTER, NEW YORK.

STROPPING DEVICE.

No. 924,278.

Specification of Letters Patent.

Patented June 8, 1909.

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To all whom it may concern:

Be it known that I, John Schnurr, of Rochester, in the county of Monroe and State of New York, have invented a new and 5 useful Improvement in Stropping Devices, which improvement is fully set forth in the following specification and shown in the ac-

companying drawings.

This invention relates to certain new and 10 useful improvements in stropping devices of that general character designed to hold the blade, such as the safety razor type, and by reciprocation of the device over a strop automatically turn the blade so that first 15 one edge and then the other is subjected to

abrasion and thereby sharpened.

The present invention has for its objects among others to provide a simple and improved device of this nature, of few parts, 20 those readily assembled, and efficient in operation and not liable to get out of order or injured. The construction is such that the blade being sharpened may be drawn slightly diagonally over the strop so as to give the 25 blade a sort of draw-slide along the strop, insuring a keen edge.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined

30 by the appended claims.

The invention, in its preferred form, is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this

35 specification, and in which—

Figure 1 is a perspective view showing the application of the invention. Fig. 2 is a substantially central longitudinal section through the stropping device, as on the line 40 2-2 of Fig. 1. Fig. 3 is a perspective view of the blade-holder removed with the blade therein. Fig. 4 is a perspective view showing the parts of the blade holder, and the blade, separated, but in their relative posi-45 tions. Fig. 5 is a perspective view of one of the tumblers. Fig. 6 is a perspective view of a holder for a one-edge blade, with a blade therein. Fig. 7 is a perspective of the parts in Fig. 6 separated, but in their ⁵⁰ relative positions.

Like numerals of reference indicate like

parts throughout the several views.

Referring to the drawings 1 designates the frame of the device; this may be of any

shown being but one of the many that may be found well adapted for the purpose and which has been found light, cheap and efficient. It is herein shown as composed of the two parallel members 2, 2 joined at their 60 ends by transverse bars or rods 3 connected

thereto in any suitable way.

A suitable handle is provided; in this instance it is shown as formed by the angularly disposed bars 4.4 secured at one end to 65 the ends of one of the frame members 2 in any suitable manner, as upon the ends of the transverse rods or bars 3, the ends of the two bars 4 then being brought together and parallel with each other and received and 70 securely held within a tubular portion 5 to be grasped by the hand in operating the device. The divergent members 4.4 may be in one piece doubled at the center and the doubled portion received within the tubular 75 member 5 if found more convenient or practicable. It is to be understood, however, that other forms of construction of frame and handle may be employed without affecting the operation of the other parts, now to be 80 described, and which constitute the gist of my present invention.

Near each end of the frame is a tumbler in the form of a roller 6, having at each end a pintle or pin 7 which are loosely received in 85 openings in the members 2 of the frame so as to turn freely therein. Each of these tumblers has at one end an arm 8 extending at right angles to the length of the tumbler as seen best in Fig. 5, and the free end of 90 this arm is provided with a longitudinal slot 9 for a purpose soon to be described. The arms on the two tumblers extend toward

each other as seen in Fig. 1.

As will be seen from Figs. 1 and 2 the 95 tumblers are somewhat larger in diameter than the two adjacent and rigid and cylindrical members 3 of the frame so that the tumblers press the strop and are actuated thereby while the said members 3 of the 100 frame do not necessarily touch the strop at all.

The slots 9 receive the projections 10, 10 on one end of the blade-holding plate 11, which is also provided at its center at each 105 end with a trunnion 12, which trunnions on end bearings are loosely fitted in holes in the members 2 of the frame, so as to have free motion therein. This is important, for suitable form of construction, that herein by thus having slight free motion in all 110

directions the edges of the blade may always | bear fairly against the strop so as to make the cutting edges straight and in line.

The plate 11 is formed near each end with a struck-up lug 13, said lugs extending toward each other as seen best in Fig. 4, and this plate is further shown as provided with the short projections 14, to engage in the

holes 15 in the blade 16.

In the form shown in Fig. 4 the bladeholder is designed for holding the double_ edged blades therein shown. The blade is placed in position upon the plate 11 with the holes in the blade receiving the projections 10 14, and then the securing plate 17 seen in Fig. 4 is placed upon the blade, one end being engaged under one of the lugs 13 by means of the open ended slot 18 at the end thereof, and then the other end of the plate 20 17 is swung around till its edge 19 which is slightly beveled as seen at 20 is engaged under the other lug 13, the shoulder 21 en gaging the lug serving as a stop to limit the movement of the plate 17. The blade will 25 then be firmly held in position. In order to facilitate the swinging of the plate 17 into or out of engagement with the lug with which it is locked the said plate may be provided with a slot or the like 22 into which may be engaged a suitable implement, as for instance, a knife blade, to move the plate to engage it or release it.

In the form of blade holder seen in Figs. 6 and 7 the construction is substantially the same as that above described except as to the form of the blade holding plate, which in this form shown as cut away at one side as seen at 23 to provide a space in which is received the thick back portion 24 of the single edged blade 25. The plate 26 is otherwise like that shown in Fig. 4, being provided with similar end lugs upon its upper face, trunnions at the ends and projections at one end for engagement in the 45 slots of the arms of the tumblers. The securing plate is of the same form as that shown in Fig. 4, having an open ended slot at one end and a shoulder at the other, and is applied and removed in the same way.

The mode of use will be apparent. The blade having been affixed in position in the holder the device is placed upon a strop 27 which is held at its ends in any suitable manner, and as the device is run over the 55 strop the two tumblers will be properly turned to bring the proper edge of the blade against the strop, and in proper position, the inwardly extending arms 8 of the tumblers being connected in the manner de-60 scribed with the blade holder, the holder is tilted and the blade brought into proper position whichever way the device may be moving along the strop. As the direction of the movement of the device upon the strop is 65 changed the blade holder is automatically

tilted into position to bring the other edge into operative position. After passing the device over the strop sufficiently to sharpen one of the two edges of the two-edged blade it is merely turned over in the hand and 70 applied to the strop as before to sharpen the other side of the edges of the blade. The blade does not have to be removed from the frame until both edges thereof have been sharpened. The one-edged blade is sharp- 75 ened by moving the device back and forth over the strop in the same manner. The device does not have to be moved parallel with the side edges of the strop but may be moved so as to give a diagonal stroke so that 80 the blade will always be held at a scientifically correct angle so as to give a keener edge.

It will be noted that whichever way the device is being moved upon the strop one or 85 the other edge of the blade is being abraded

to form a fine edge.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages. 90

What is claimed as new is;—

1. In a stropping device, a frame, a pivotally-mounted blade-holder mounted therein and having centrally-disposed trunnions at its ends and projections at one end, and 95 oppositely-disposed pivoted means connected

with said projections.

2. In a stropping device, a frame, a pivotally-mounted blade-holder mounted therein and having centrally disposed trunnions 100 at its ends and projections at one end, and oppositely-disposed pivoted means connected with said projections, said holder having blade-holding means adjacent said trunmons.

3. In a stropping device, a frame and a blade - holder mounted therein having centrally-disposed trunnions and projections upon opposite sides of one of the trunnions and connected with means on said frame for 110 tilting the holder as the device is moved backward and forward over a strop.

4. In a stropping device, a frame, a pivotally-mounted blade-holder therein having centrally-disposed trunnions at opposite ends 115 and projections at one end, and oppositelydisposed pivoted means connected with said projections, said holder having integral struck-up blade-holding means adjacent said trunnions and in line therewith.

5. In a stropping device, a frame, a bladeholder pivoted therein and having centrallydisposed trunnions at opposite ends and projections at one end upon opposite sides of the trunnions, tumblers mounted in said frame 125 and of greater diameter than the end portions of the frame, and means connecting said tumblers with the blade-holder, said means embodying pins and slots allowing limited play for the purpose specified.

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6. In a stropping device, a frame, a bladeholder pivoted therein and having centrallydisposed trunnions and projections upon opposite sides of one of said trunnions, tum-5 blers pivoted in the frame and loose pin and slot connections between the tumblers and

opposite sides of the blade-holder.

7. In a stropping device, a frame, a bladeholder pivoted therein, tumblers pivoted in 10 the frame and having each an arm at one end provided with a slot, with the arms of the one tumbler extending toward those of the other, and means on opposite sides of • the pivot on one end of the blade-holder en-15 gaged in said slots, said device being movable over a strop at an angle to the length of the latter.

8. In a stropping device, a frame, a bladeholder pivoted in said frame, tumblers 20 mounted in the frame for partial rotation by engagement with the strop, and projections on one end of and upon opposite sides of the trunnion of the blade-holder, and means connecting the tumblers and said projections

of the blade-holder, whereby the latter is 25 tilted alternately in opposite directions as the device is moved back and forth over the strop.

9. In a stropping device, a blade-holder comprising a pivotally-mounted plate for 30 supporting a blade and having lugs, and a securing plate having a slot at one end and at the other a shoulder for coöperation with

said lugs.

10. In a stropping device, a blade-holder 35 comprising a plate having lugs at the ends, and a securing plate having at one end an open-ended slot and at the other a shoulder, said securing plate being provided with a slot for the reception of means for moving 40 the plate.

In witness whereof, I have hereunto set my hand this 31st day of July, 1908, in the presence of two subscribing witnesses.

JOHN SCHNURR.

Witnesses:

E. B. WHITMORE, A. M. WHITMORE.