

952,168.

Patented Mar. 15, 1910.

Fig. 1.

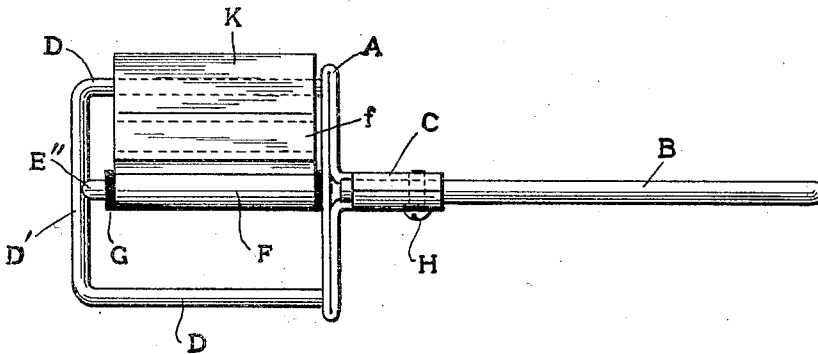


Fig. 2.

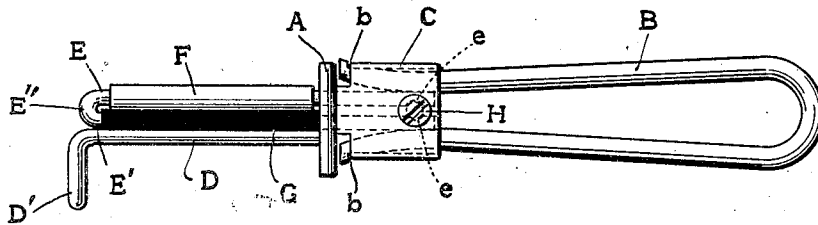


Fig. 3.

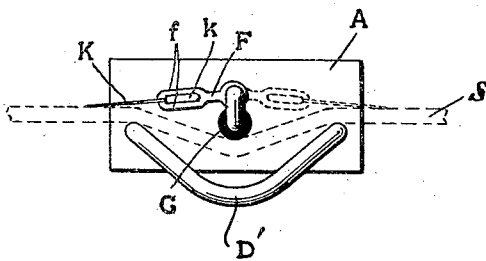
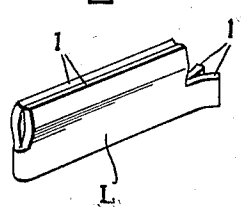


Fig. 4.



WITNESSES

*J. C. D. [Signature]*  
*Wm. F. Bissing*

Elmer I. Young INVENTOR

BY

*J. C. D. [Signature]* & *Elmer*  
 ATTORNEYS

# UNITED STATES PATENT OFFICE.

ELMER I. YOUNG, OF MONTCLAIR, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO Y. & B. MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

## RAZOR-STROPPING DEVICE.

952,168.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed January 27, 1909. Serial No. 474,405.

To all whom it may concern:

Be it known that I, ELMER I. YOUNG, a citizen of the United States, residing at Montclair, in the county of Essex and State of New Jersey, have invented a new and useful Razor-Stropping Device, of which the following is a specification.

My invention relates to improvements in razor-stropping devices, and more particularly to devices for stropping razor blades used in safety razors.

The objects of my invention are, first, to provide a stropping device simple in its construction, but positive in its action; second, a stropping device in which there is no mechanism intermediate of the friction-roller and the blade-holder; third, to provide a stropping-device adapted to strop blades of any thickness, with or without backs; fourth, to increase the surface of contact between the friction-roller and the strop; and fifth, a stropping device that can be quickly and easily taken apart or assembled.

Further and other objects will more definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a top view of my improved stropping-device, showing a razor-blade held in one stropping position by the blade-holder. Fig. 2 is a side view. Fig. 3 is an end view, showing a razor strop and blade *in situ*. Fig. 4 is an enlarged perspective view of an auxiliary blade-holder.

In the drawings, similar letters of reference refer to similar parts throughout the several views.

Referring to the drawings, the frame of my improved razor-stropping device consists of a base-plate A and parallel standards D D rigidly secured thereto, said standards D D being connected to each other by the member D' and adapted to support a strop S. The base-plate A is preferably formed from sheet metal, suitably shaped by bending the metal over upon itself and bringing the ends together at right angles thereto to

form a lug or clamping-member C to which the handle B is secured. This handle B is preferably formed U-shaped from spring wire, the ends having notches b b which will engage the clamping-member C when the handle B is placed therein. As shown in the drawings, the connecting-member D' is preferably made integral with the standards D D.

Removably secured to the base-plate A, and perpendicular thereto, are two parallel spindles E E' connected by a connecting piece E''. Upon the spindle E is revolubly mounted the blade-holder F while upon the spindle E' is revolubly mounted the friction-roller G, preferably made of rubber, though any other suitable material may be used. Suitable means are provided for actuating the blade-holder by the roller G. In the best embodiment of my invention, I arrange the spindles E E' adjacent to each other, so that the roller G will be in frictional contact with the blade-holder and the travel of the blade will be away from and on either side of the roller G. As shown in the drawings, I prefer to form the two spindles E E' integral with the connecting piece E'', and removably secured to the base-plate A in a plane perpendicular to the plane of the standards D D. The ends of the spindles E E' pass through the base-plate A into the clamping-member C, where they are held rigidly in place by a screw H which passes through C and engages the notches c c in the ends of the spindles E E'.

The standards D D are secured to the base-plate A at points above the plane of the lower surface of the roller G, so that when the strop S passes over the standards D D and under the roller G, it will tend to envelop the roller G and thus largely increase the surface of contact between the roller G and the strop. As the device is moved over the strop, the base plate A will act as a guide, thus keeping the roller and blade-holder transverse to the strop.

The blade-holder F may be of any desired construction adapted to firmly hold a razor blade K while being stropped. As shown, the blade-holder F is provided with two spring jaws f f which are adapted to receive and hold firmly the back k of the blade K. When it is desired to strop blades having no backs, I provide an auxiliary blade-holder L formed from a strip of

metal bent over upon itself and having edges *ll* to engage the blade, and lips *l' l'* for the entrance of the blade. This auxiliary blade-holder *L* is adapted to be inserted in the blade-holder *F* and to be held firmly by the jaws *f f*.

My improved stropping device is adapted to be used with the ordinary and well-known form of strop, which usually is a strip of leather. As indicated in Fig. 3, the strop *S* runs over the two standards *D D* and under the roller *G*. As the stropping-device is moved backward and forward, the friction of the strop upon the roller *G* causes the latter to rotate upon the spindle *E'* and directly actuate the blade-holder *F*, which will hold the blade *K* against the strop at the proper angle for stropping. As soon as the movement of the device over the strop is reversed, the roller *G* will reverse its rotation and cause the blade-holder *F* to oscillate or reverse and assume the dotted position shown in Fig. 3. By removing the screw *H*, the spindle *E E'* can be withdrawn from the base-plate, in order to receive a new blade-holder or a new friction-roller if desired, and the handle *B* can then be withdrawn. The parts can be re-assembled in the reverse order.

While I have shown and described a device embodying my invention in the form preferred by me, yet it is capable of considerable structural variation without, however, departing from the spirit of my invention. What I claim as new, and desire to secure by Letters Patent, is:

1. In a razor-stropping device, the combination of a base plate adapted to guide the strop, a handle secured thereto, for imparting bodily movement to the device, a friction member to engage the strop, and a bladeholder in frictional contact with the peripheral surface of said friction member.

2. In a razor-stropping device, the combination of a frame adapted to support and guide the strop, a handle secured to the frame for imparting bodily movement thereto, a roller to engage the strop, and a bladeholder in frictional contact with the peripheral surface of said roller.

3. In a razor-stropping device, the combination of a base plate formed from sheet metal bent over upon itself to form a lug, a handle secured to said lug, a roller to engage the strop, and a bladeholder in frictional contact with the peripheral surface of said roller.

4. In a razor-stropping device, the combination of a base plate, a handle, means for removably securing said handle to said base plate, a roller to engage the strop, and a bladeholder in frictional contact with the peripheral surface of said roller.

5. In a razor-stropping device, the combination of a base-plate formed from sheet

metal bent over upon itself to form a lug, a handle secured to said lug, and a plurality of standards to support the strop secured to said base-plate.

6. In a stropping device, the combination of a base plate, a handle secured thereto, a roller to engage the strop, a bladeholder in frictional contact with the peripheral surface of said roller, and means for increasing the surface of contact between said roller and the strop.

7. In a razor-stropping device, the combination of a base plate, a handle secured thereto, a blade-holder, a friction-member to engage the strop, and in frictional contact with said blade-holder, and means for increasing the surface of contact between said friction-member and the strop.

8. In a razor-stropping device, the combination of a frame, a handle secured thereto, a plurality of parallel spindles secured to said frame, means for removably securing said spindles to said frame, a blade-holder revolvably mounted on one of said spindles, and a friction-member mounted on another of said spindles in frictional contact with said blade-holder.

9. In a razor-stropping device, the combination of a frame provided with a handle for imparting bodily movement thereto, a plurality of spindles secured to said frame, means for removably securing said spindles to said frame, a blade-holder revolvably mounted on one of said spindles, and a roller mounted upon another of said spindles and in frictional contact with said blade-holder.

10. In a razor-stropping device, the combination of a base-plate, two parallel spindles removably secured to said base-plate, means for rigidly securing said spindles to said base plate, a blade-holder revolvably mounted on one of said spindles, a friction-member mounted on the other spindle in frictional contact with said blade-holder, and a plurality of standards rigidly secured to said base-plate for supporting the strop.

11. In a razor-stropping device, the combination of a frame, a handle removably secured thereto, two parallel spindles removably secured to said frame, a blade-holder revolvably mounted upon one of said spindles, and a friction-member revolvably mounted upon the other spindle and in frictional contact with said blade-holder.

12. In a razor-stropping device, the combination of a base-plate formed from sheet metal bent over upon itself to form a clamping-member, a handle secured thereto, a plurality of standards to support the strop secured to said base-plate, and means for holding and oscillating a razor blade secured to said base-plate.

13. In a razor-stropping device, the combination of a base plate formed of sheet metal bent over upon itself to form a clamp-

ing-member, a handle removably secured to  
said clamping-member, a pair of parallel  
spindles removably secured to said clamping-  
member, a blade-holder revolubly mounted  
5 on one of said spindles, a friction-roller in  
frictional contact with said blade-holder  
revolubly mounted on the other spindle, and  
standards secured to said base plate to sup-  
port the strop and to increase the surface of  
10 contact between the roller and the strop.  
14. In a razor-stropping device, the com-  
bination of a base plate, a handle, means for  
removably securing said handle to said base  
plate, a plurality of standards to support the  
15 strop rigidly secured to said base plate, and  
means secured to said base plate for holding

and actuating a razor blade to and from the  
strop.

15. In a razor-stropping device, the com-  
bination of a base plate, a handle secured 20  
thereto, a roller for engaging the strop, a  
bladeholder in frictional contact with the  
peripheral surface of said roller, and a pair  
of standards to support the strop secured to  
said base plate and arranged one on either 25  
side of said roller.

In testimony whereof, I sign this specifi-  
cation in the presence of two witnesses.

ELMER I. YOUNG.

Witnesses:

W. C. MARGESON,  
SARAH FLOCK.