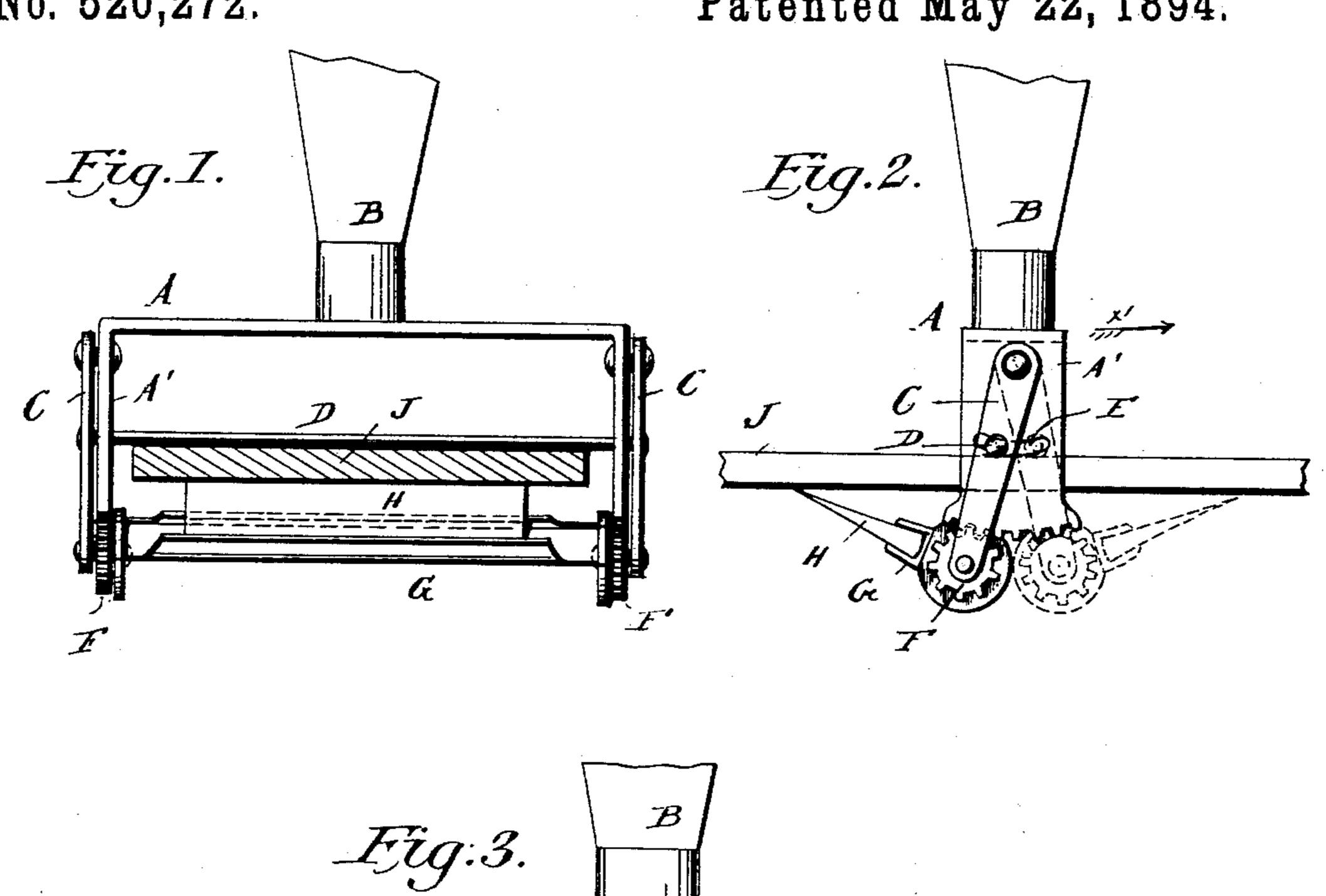
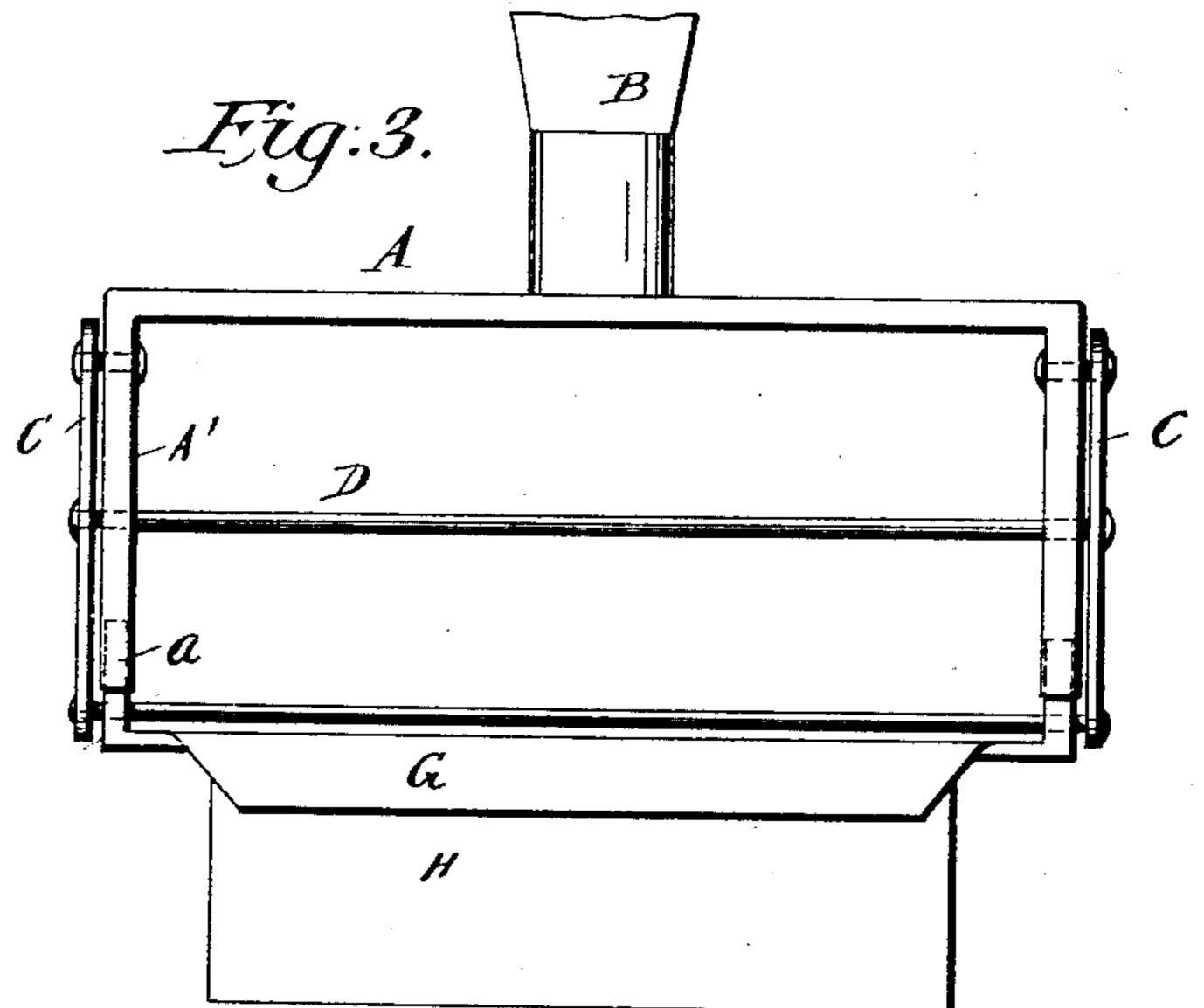
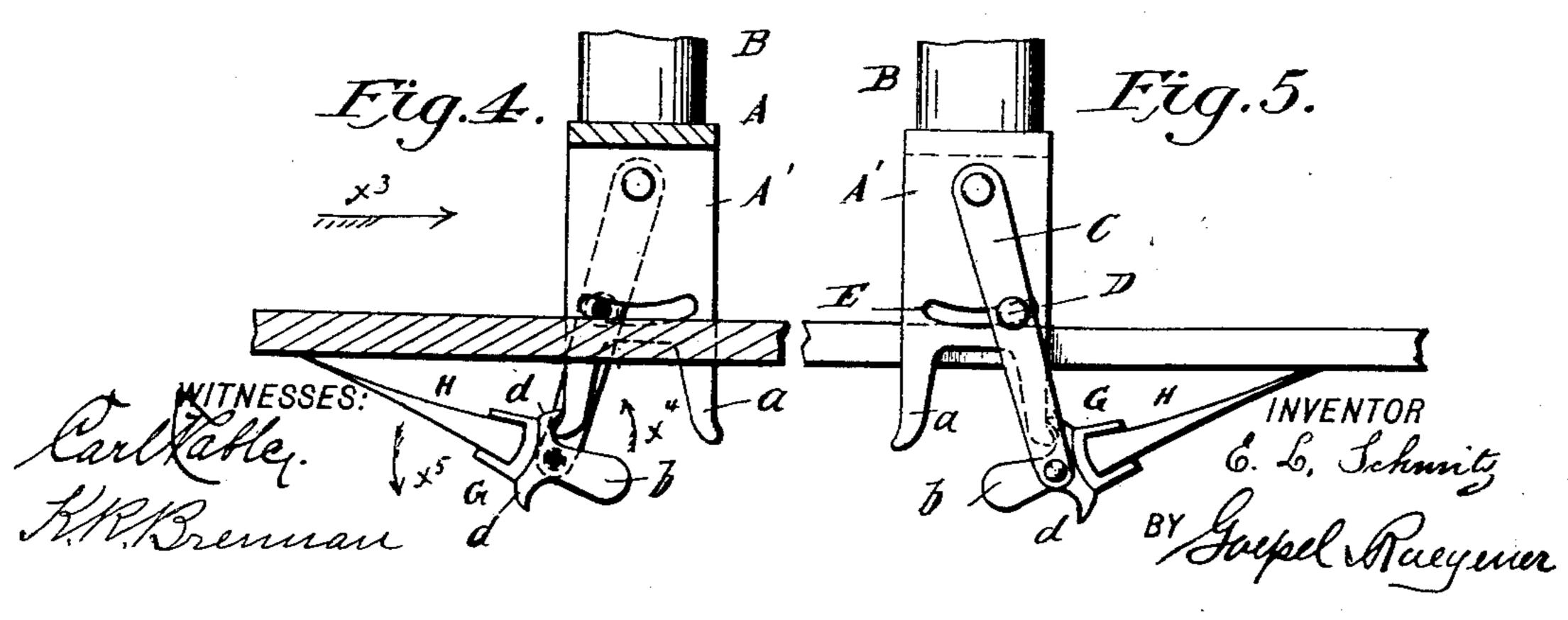
## E. L. SCHMITZ. RAZOR STROPPING DEVICE.

No. 520,272.

Patented May 22, 1894.







ATTORNEYS.

## United States Patent Office.

EGON LOTHAR SCHMITZ, OF NEW YORK, N. Y.

## RAZOR-STROPPING DEVICE.

Securion forming part of Letters Patent No. 520,272, dated May 22, 1894.

Application filed February 19, 1894. Serial No. 500, 732. (Model.)

To all whom it may concern:

Be it known that I, EGON LOTHAR SCHMITZ, a subject of the Emperor of Germany, and a resident of the city of New York, in the county 5 of New York and State of New York, have invented certain new and useful Improvements in Razor-Stropping Devices, of which the following is a specification.

This invention relates to certain new and 10 useful improvements in that class of devices that are used for automatically reversing a razor blade at the end of each stroke while stropping the same and especially to devices for stropping the blades of safety razors.

The object of my invention is to provide a device of this kind which is simple in construction, and effective and reliable in use.

The invention consists in the combination with a U-shaped frame, having projections 20 on the ends of its shanks, rocking arms on the shanks of the frame, a blade-holder pivoted on the ends of said arms and having projections engaging the projections on the shanks, whereby the blade-holder is swung when the 25 arms are rocked and a rod uniting said arms.

The invention also consists in the construction and combination of parts and details as will be fully described hereinafter and finally

pointed out in the claims.

10 In the accompanying drawings—Figure 1 is a side-view of my improved razor-blade stropping device, the strop being shown in section. Fig. 2 is an end-view of the same. Fig. 3 is a side-view of a modified construc-35 tion on a larger scale. Figs. 4 and 5 are endviews of the same, showing the parts in different positions.

Similar letters of reference indicate corre-

sponding parts.

The U-shaped frame A is provided with a handle B secured to and projecting upward from the cross-piece. To each shank A' of the U-shaped frame an arm C is pivoted, which arms are connected by a rod D at about 45 one-half of their length, said rod passing through the segmental slots E in the shanks of the frame A. The ends of the shanks are cut to form toothed segments and said segments engage the pinions F mounted to turn 50 on pivots in the lower swinging ends of the arms C, which pinions are connected by a U- | Patent-

shaped blade-holder G for receiving the blade H to be stropped.

J represents the strop.

The blade H is placed into the holder G and 55 the strop J is passed through the apparatus in such a manner that the cross-rod D rests upon the same. When the apparatus is moved on the strop in the direction of the arrow x', Fig. 2, the arms C are swung to the left and the 60 blade is in the position shown in full lines in said figure. When the apparatus is reversed at the end of the stroke, the arms C are swung in the direction of the arrow x', Fig. 2, on account of the friction between the rod D 65 and the upper surface of the strop and thereby the blade is reversed as the pinion F and with it the blade-holder are turned in the direction of the arrow  $x^2$ , Fig. 2, by the rolling movement of the pinion over the toothed seg- 70 ment. In this manner the blade is automatically reversed every time the direction of the movement of the apparatus is reversed, and the blade is at all times held in such a manner that it traverses behind the apparatus.

In the construction shown in Figs. 2, 3 and 4, the ends of the shanks are not toothed and the pinions are omitted. In this construction each shank is provided with two spurs a, and the blade-holder is provided at each 80 end with a lug b and two curved arms d at

the inner end of said lug.

Fig. 4 shows the position of the parts when the device is moved in the direction of the arrow  $x^3$ . When the direction of the move- 85 ment is reversed the arms C swing in the direction of the arrow  $x^3$ , and as the lugs b strike against the inner edges of the right-hand spurs a, said lugs b are swung in the direction of the arrow  $x^4$ , whereby the blade is 90 swung in the direction of the arrow  $x^5$ . The arms d serve as stops to prevent swinging the edge of the blade too far toward the under side of the strop, that is, to prevent pressing the edge of the blade with too much force 95 against the strop. With this modified construction the blade is likewise reversed every time the direction of the movement of the stropping device is reversed.

Having thus described my invention, I 100 claim as new and desire to secure by Letters

1. In a razor stropping device, the combination with a frame having its ends bent at right-angles to the body of the frame, of rocking arms pivoted on said ends of the frame, a swinging blade-holder pivoted to the free ends of said arms, a rod connecting the swinging-arms at a point between the pivots of said arms and the free ends of the arms and means for swinging the blade-holder by the action of the ends of the frame on said blade-holder when said arms are rocked, substantially as set forth.

2. In a razor stropping device, the combination with a U-shaped frame having segmental slots in its end shanks and projections on the ends of the shanks, of a rocking-arm

pivoted to each end shank and connecting said arms below the pivots of the arm and passing through the slots in the shanks of the frame, and a blade-holder pivoted on the free ends of the rocking-arms, and having end projections engaging the end projections of the shaft to swing the blade-holder, substantially as set forth.

In testimony that I claim the foregoing as 25 my invention I have signed my name in pres-

ence of two subscribing witnesses.

EGON LOTHAR SCHMITZ.

Witnesses:
OSCAR F. GUNZ,
K. R. BRENNAN.