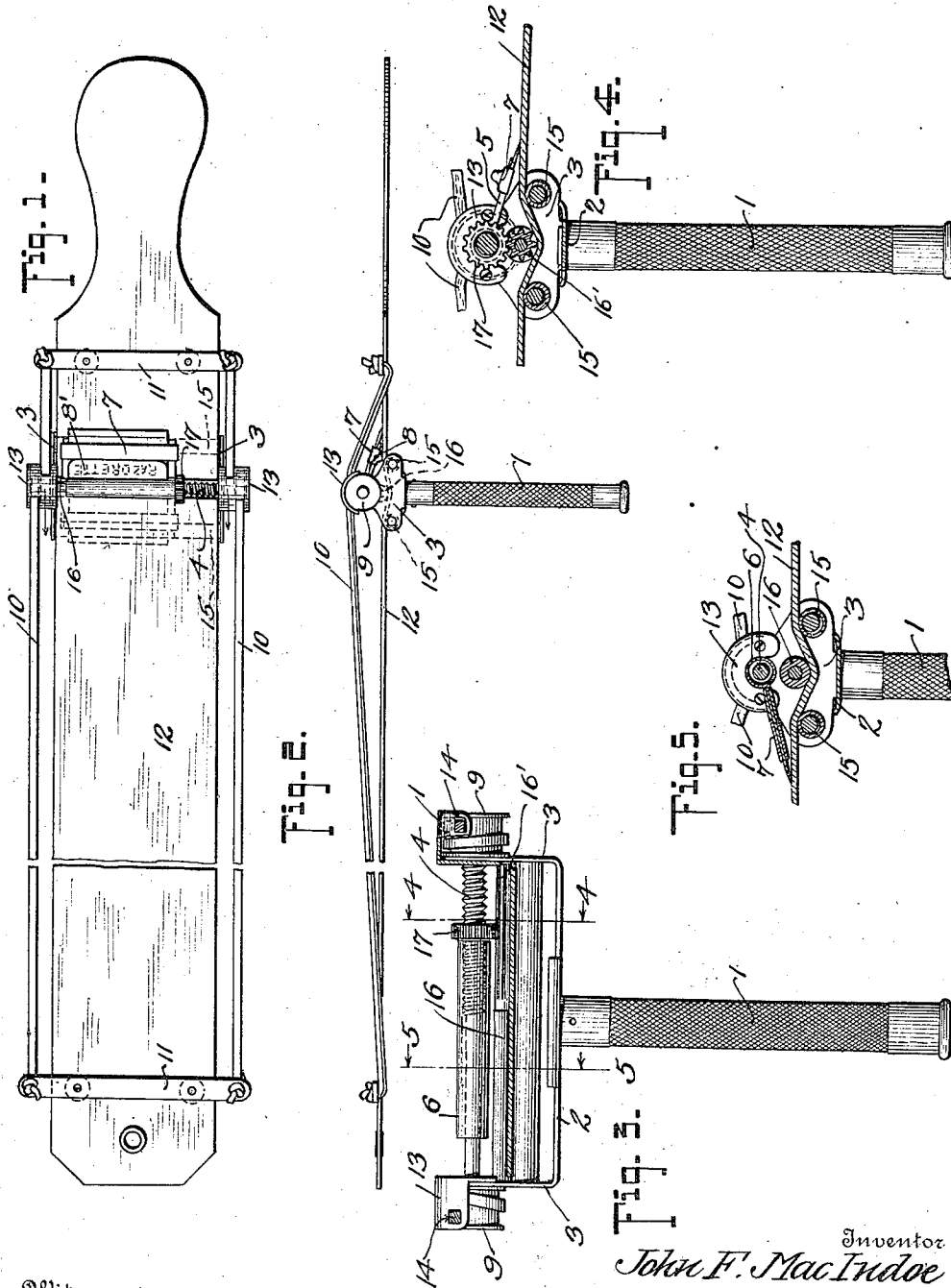


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MECHANICAL RAZOR STROPPING DEVICE.
APPLICATION FILED JAN. 9, 1912.

1,043,242.

Patented Nov. 5, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN FRANKLIN MACINDOE, OF PHILADELPHIA, PENNSYLVANIA.

MECHANICAL RAZOR-STROPPING DEVICE.

1,043,242.

Specification of Letters Patent.

Patented Nov. 5, 1912.

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To all whom it may concern:

Be it known that I, JOHN FRANKLIN MACINDOE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Mechanical Razor-Stropping Devices, of which the following is a specification.

10 This invention relates to improvements in razor stropping devices particularly adapted for sharpening blades of the safety razor type, and its primary object is to provide a novel and inexpensive device to mechanically strop said blades in a most efficient manner.

15 In sharpening razor blades, not only is the longitudinal movement thereof along the strop necessary, but simultaneously therewith lateral or transverse movement is very desirable and this advantageous feature is also subserved by my invention.

20 Still a further object of the device is to provide means for reversing the blade holder simultaneously with the reversal of the longitudinal movement of the device during the operation of sharpening.

25 It is also contemplated that the blade holder of my invention will be so constructed as to receive either raised or flat blades for resharpening.

30 For a full understanding of the present invention, reference is to be had to the following description and to the accompanying drawings, in which—

35 Figure 1 is a top plan view of my invention in position for stropping. Fig. 2 is a side elevation corresponding to Fig. 1. Fig. 3 is a front elevation partly in section. Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 3. Fig. 5 is a partial vertical sectional view on the line 5—5 of Fig. 3.

40 Throughout the following detail description and on the several figures of the drawings, similar parts are referred to by like reference characters.

45 Referring now to the drawings and specifically describing the invention, 1 denotes a handle suitably secured to a frame 2, said frame comprising the sides 3, in the upper portion of which is rotatably mounted a threaded shaft 4. On the shaft 4 is mounted a blade holder 5 which is provided with a sleeve 6 internally threaded and connected with the threaded portion of said shaft 4. The blade holder 5 consists further of a

suitable spring clamp member 7 secured to one side of the holder and having a downwardly bent catch 8 for engagement with the other side of the holder, the blade being received therebetween and held during the operation of the device. The holder is peculiarly adapted for the purpose of holding both flat and raised blades, or blades having an enlargement at one side, such as is designated by the numeral 8' in Fig. 1.

60 On the outer extremities of the shaft 4 which passes through the sides 3 of the frame 2, are rigidly secured flanged pulleys 9 about which pass the flexible operating members, such as cords 10, the ends of which are fastened in the transverse bar members 11 suitably secured at either end of the strop 12, said cords passing adjacent to and parallel with the edges of the strop, as most clearly shown in Fig. 1. Said members positively hold the cords 10 in proper relative position on the pulleys 9 and prevent any binding action which would likely occur on account of tendency of the cords to climb on the adjacent portions wound around said pulleys. Guide members 13 partially housing the pulleys 9 are preferably provided for the cords 10 which pass through openings 14 on either side of said members. Guide rollers 15 and a reversing roller 16 are mounted in suitable bearings in the lower portion of the frame 2 and the roller 16 is formed at one end with an elongated gear element 16' intermeshing with a pinion 17 carried by one end of the sleeve 6. As will be most clearly seen in Figs. 4 and 5, the roller 16 is arranged to engage with the upper side of the strop 12 which passed over the guide rollers 15, being positioned to frictionally contact with the strop and cause the roller 16 to be rotated as the device is reciprocated longitudinally on the strop.

85 The operation of the invention will be apparent from the foregoing description. By grasping the handle 1, the device may be moved back and forth along the strop in the ordinary manner of operation, the blade contacting with said strop. In this reciprocating movement of the frame, the threaded shaft 4 is turned by the cords 10 which pass around the pulleys 9, the holder 5 being caused to move transversely of the strop by reason of the threaded connection between the sleeve and said shaft. Thus, the desired diagonal movement is imparted to the blade in resharpening the same. Simul-

taneously with the reversal of the longitudinal movement of the frame along the strop, the blade holder is also caused to be reversed by reason of the frictional contact of the roller 16 and operative connection between said roller and the pinion 17. The elongated gear element permits the sleeve with its pinion to slide transversely of the frame, as will be apparent.

10 Having thus described the invention, what I claim as new is:

In a device for mechanically stropping razor blades, the combination with a strop, of a supporting frame movable lengthwise of the strop, a handle therefor, a threaded shaft mounted transversely in said frame, a blade holder comprising clamping means for the blade and a threaded sleeve mounted on said shaft, a pinion secured to the sleeve, means for actuating the shaft to move the holder transversely on the frame, said means comprising pulleys secured to the

shaft and operating cords connected with the strop and engaging over said pulleys, a reversing roller mounted in the frame and engaging the strop, an elongated gear element formed on the roller intermeshing with the pinion aforesaid and adapted to reverse the holder as the longitudinal movement of the frame along the strop is reversed, said gear element permitting sliding movement of the pinion with respect to the reversing roller, and guide members secured to the frame having openings therein through which the operating cords pass, said members positively holding the cords in proper relative position on the pulleys.

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

JOHN FRANKLIN MACINDOE.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."