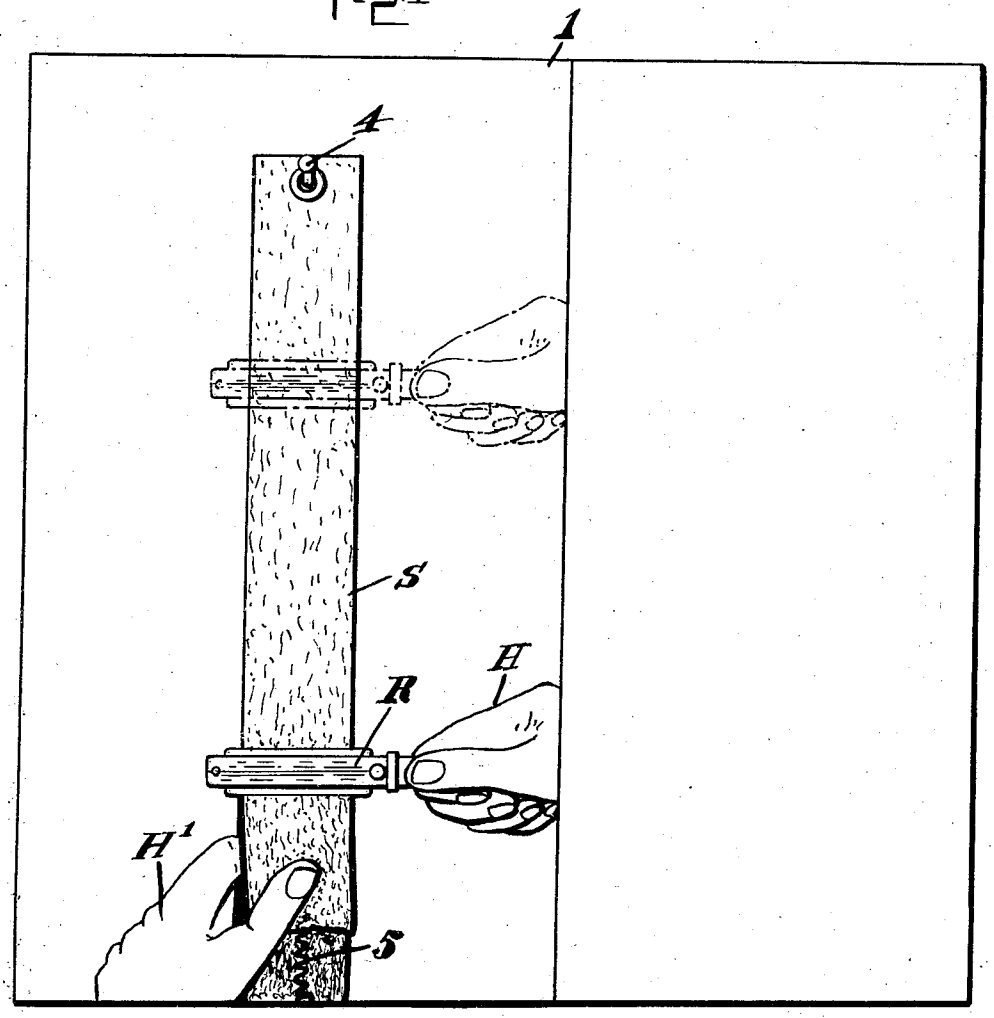
Aug. 9, 1927. 1,638,406

P. W. MOWRY

DEMONSTRATING MACHINE

Filed Feb. 27, 1926 3 Sheets-Sheet 1

Fig. 1



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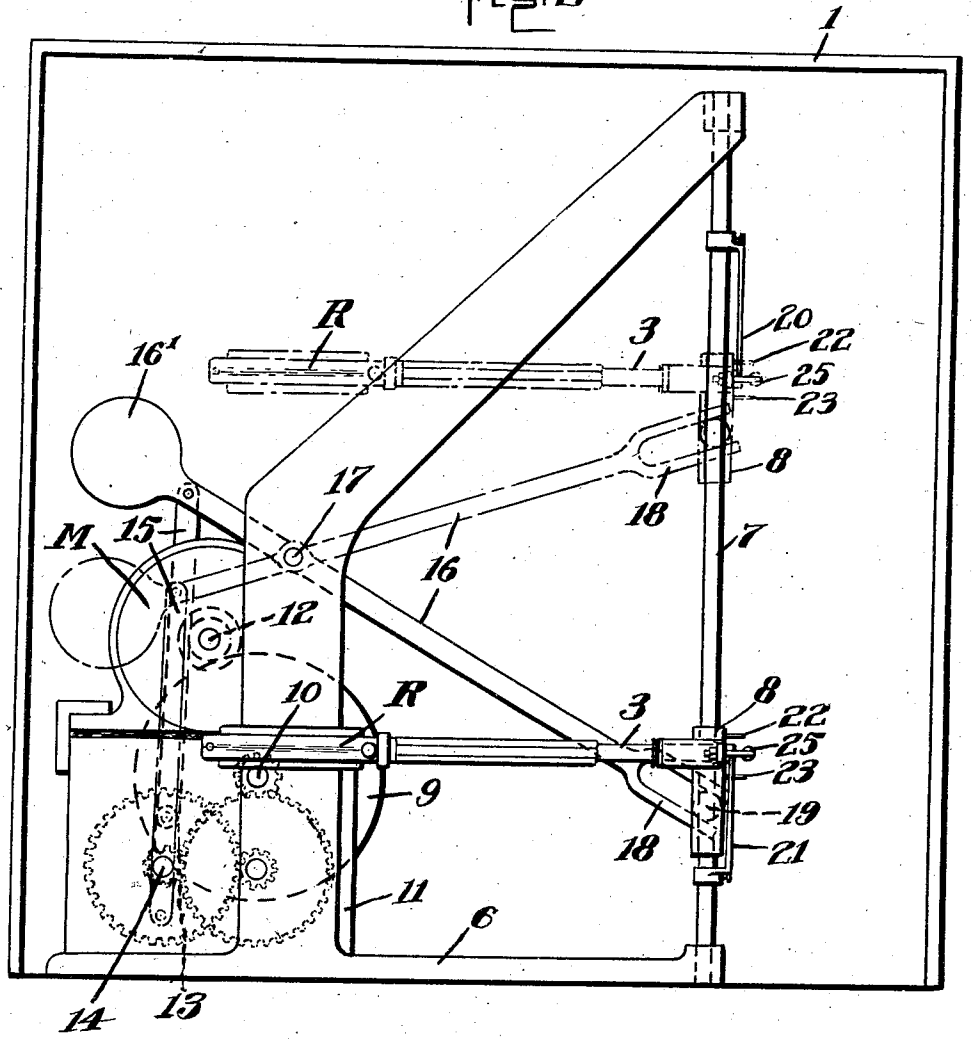
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DEMONSTRATING MACHINE

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Fig. 2



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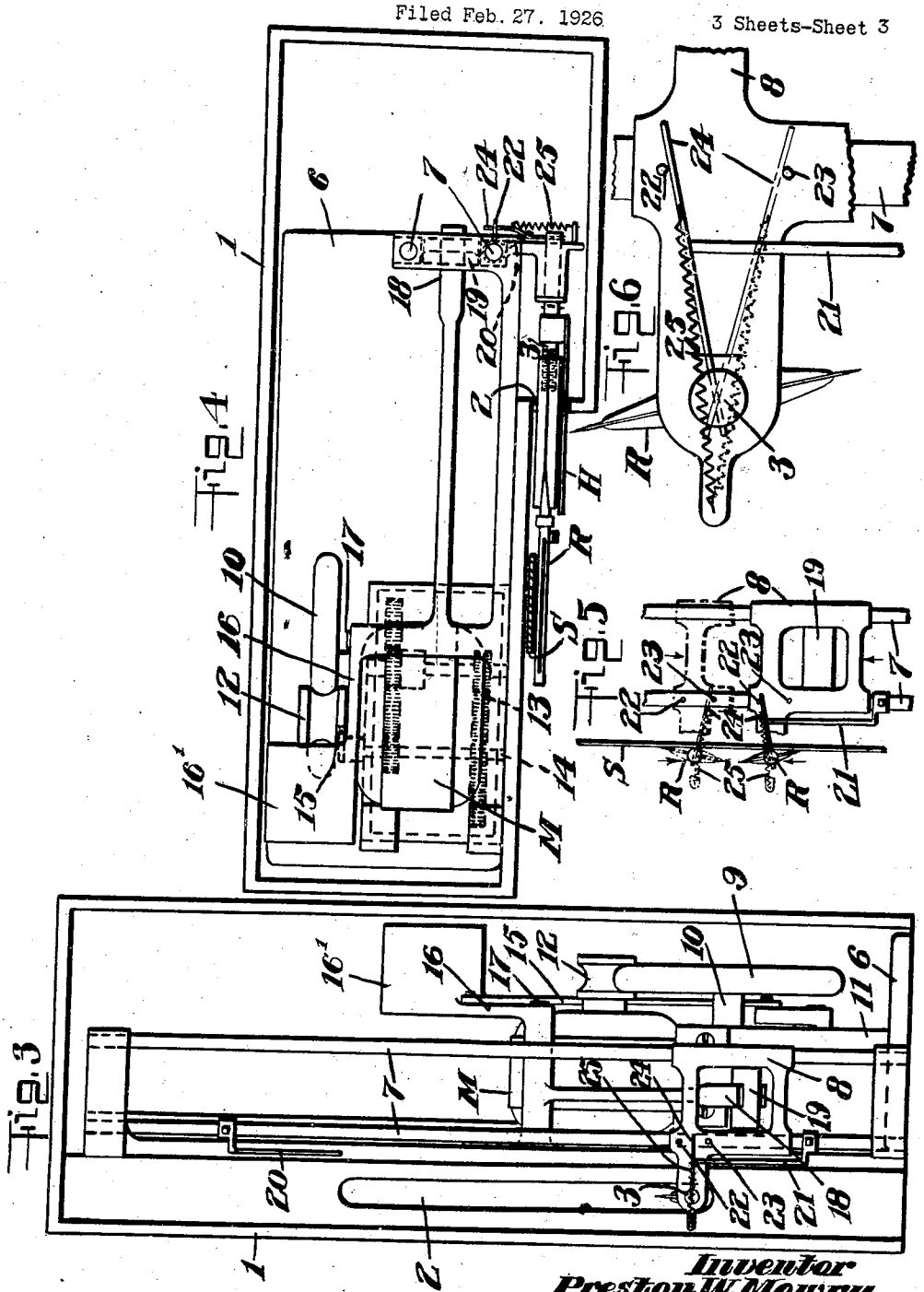
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1,638,406

DEMONSTRATING MACHINE

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3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE.

PRESTON W. MOWRY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE NU-IDEA COMPANY, INC., OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

DEMONSTRATING MACHINE.

Application filed February 27, 1926. Serial No. 91,276.

In the merchandising of many articles of general use, it is customary to provide window or counter displays and human demonstrators for demonstrating the advantages and uses of such articles. My invention contemplates a mechanical demonstration of such conventional articles as are usually displayed and sold by window or counter display with human demonstrators.

For the purpose of this application, I shall show and discuss my invention as a demonstrating machine adapted for window or counter display in the merchandising of a safety razor blade stropper. It is to be understood, however, that such treatment is purely illustrative and in no way limiting, and that I reserve the right to use the principles of my invention in connection with the demonstration of other suitable articles commonly sold by window or counter display.

In the specific embodiment of my invention selected as illustrative of the principles involved, I provide for mechanically reproducing the movement of the human hand in stropping a razor blade. According to my invention, a razor blade stropper, such for example as that shown in my pending application for Patent Serial No. 86,180 filed February 5, 1926, is mechanically and automatically moved along a stationary strop and is automatically rocked at each end of its stropping stroke so as to simulate the movement of the human hand in stropping a razor. The driving mechanism for accomplishing this result is at once simple, reliable, and entirely automatic, so that the apparatus may be placed in the window and left with the certainty that the machine will function for so long a time as may be desired.

The construction and operation of my demonstrating apparatus, together with a form of machine which I have found satisfactory in use and well adapted to the requirements of manufacture, is described and illustrated in the accompanying specification and drawings, and the characteristic features of novelty are particularly pointed out in the appended claims. Throughout the specification and drawings, like reference characters are correspondingly employed, and in the drawings.

Figs. 1, 2, 3 and 4 are front, side, end and plan views, respectively, of a machine in accordance with my invention, the side, end and top walls of the casing being omitted in Figs. 2, 3 and 4, respectively, to show the operating parts enclosed therein, and

Figs. 5 and 6 are detail views, particularly illustrating the rocking action of the stropper at each end of its stroke.

I have indicated at 1 a casing enclosing the operating parts of the machine, with the exception of the moving hand H and the moving razor blade stropper R associated with said hand and the vertically disposed stationary strop S along which the stropper and hand are moved. The adjacent side wall of the casing is vertically slotted, as indicated at 2, Fig. 3, to permit the rock shaft 3, on which the hand and stropper are mounted, to be reciprocated vertically along the strop S by the operating mechanism enclosed in said casing.

The strop is anchored at its lower end to the floor of the casing, and at its upper end is fastened to a hook 4 projecting from the casing, the connection of the strop at its lower end to the base being a spring connection, as indicated at 5, so that the strop is under tension and may yield as the stropper R is moved thereover. To carry out the effect sought, the strop may have fastened to it at its lower end a second hand H'.

Rising from the floor of the casing is a frame indicated generally at 6 and presenting a vertically disposed guideway consisting of a pair of spaced guide rods 7 for the offset slide block 8 which carries the stropper R and hand H, which is fast to the rock shaft 3, as appears in Fig. 4.

The stropper is reciprocated vertically by means of an electric motor M (Fig. 4) and suitable operating connections from said motor to the slide block 8. Such connections comprise a friction disc 9 fast on a horizontally disposed shaft 10 which is journaled through a gear box 11 set on the base of the casting 6. The friction disc 9 is driven from a rubber pulley 12 on the motor shaft and through a reducing gear train 13 drives a crank shaft 14 also journaled through the gear box 11. The crank of the crank shaft is connected by pitman 15 to a rocker lever 16 which is fulcrumed between its ends at 17 on the frame 6 and at its forward end is counterweighted as at 16' and at its rear end is forked as indicated at

18 to straddle a roller 19 carried by the slide block 8.

These connections cause the stropper R to move vertically along the strop S in simulation of the human act of stropping a razor, but in order to further carry out the effect, I provide for rocking the stropper at either extreme of its stropping stroke, as is true of the human act of stropping a razor. This may be conveniently effected by mounting upon one of the guide rods 7 adjacent either end thereof a pair of stops 20 and 21, which stops define the limit of the stropping stroke in either direction. Mounted on the slide block 8 is a pair of spaced pins 22 and 23 which define the arc of rocking movement of the stropper. Fast on the rock shaft 3 for the stropper is a rocker arm 24 which is under spring tension as indicated at 25. The purpose of the spring 25 is to hold the rocker arm 24 against one or the other of the pins 22 and 23 as the case may be until the slide block 8 reaches the limit of its stroke in either direction at which time the rocker arm will contact one or the other of the stops 20 or 21. (See Fig. 5.) Such contact will swing the arm 24 from the pin against which it has been bearing (as the pin 22 in Fig. 6) to the other pin (23 in Fig. 6) as shown in dotted lines in said figure, rocking the stropper R relative to the strop, as indicated in full and dotted lines in Fig. 5. This operation is continuous and the stropper is constantly moved back and forth over the strop and is automatically rocked at the limit of its stroke in either direction in simulation of the human act of stropping a blade.

The electric motor may be driven from any suitable current source and the gear box 11 which houses the reducing train may be filled with a suitable lubricant so as to insure proper lubrication.

Various modifications in the construction and operation of my device may obviously be resorted to without departing from the spirit of my invention if within the limits of the appended claims.

What I therefore claim and desire to secure by Letters Patent is:

1. In demonstrating apparatus, a relatively stationary strop, a razor blade holder spaced apart sufficiently from said strop so as not to contact therewith, and means for automatically reciprocating said holder alternately in opposite directions longitudinally along said strop and for rocking it relative to said strop at either extreme of its reciprocating movement in simulation of the manual act of stropping a razor.

2. In demonstrating apparatus, a relatively stationary vertically disposed strop, a relatively movable horizontally disposed razor blade holder spaced apart sufficiently from said strop so as not to contact therewith, a hand grasping said holder and moving therewith, and means for automatically reciprocating said holder and hand alternately in opposite directions longitudinally along said strop and for rocking said holder and hand relative to said strop at either extreme of their reciprocating movement in simulation of the manual act of stropping a razor.

3. In demonstrating apparatus, a relatively stationary strop, a mount for a razor blade holder, a blade holder carried by said mount and spaced apart sufficiently from said strop so as not to contact therewith, a guideway for said mount, and a motor and operative connections therefrom to said mount for reciprocating said holder alternately in opposite directions longitudinally along said strop.

4. In demonstrating apparatus, a relatively stationary strop, a sliding and rocking mount for a blade holder, a blade holder carried by said mount and spaced apart sufficiently from said strop so as not to contact therewith, a guideway for said mount, a motor and operative connections therefrom to said mount for reciprocating said holder alternately in opposite directions longitudinally along said strop, a pair of spaced stops, associated with said guideway adjacent either end thereof, and means for automatically rocking said holder relative to said strop at either extreme of its reciprocating movement.

5. In demonstrating apparatus, a relatively stationary strop, a sliding and rocking mount for a razor blade holder, a blade holder carried by said mount and spaced apart sufficiently from said strop so as not to contact therewith, a guideway for said mount, a motor and operative connections therefrom to said mount for reciprocating said holder alternately in opposite directions longitudinally along said strop a pair of spaced stops associated with said guideway adjacent either end thereof and defining the limit of reciprocation of the holder in either direction, a pair of spaced stops carried by said mount and defining the limit of rocking movement of said holder, and a contact member associated with said mount and normally engaged with one or the other of said second-named pair of stops and alternately engageable with one or the other of said first-named pair of stops to rock said blade holder relative to said strop upon reversal of the direction of reciprocation of said holder.

6. In demonstrating apparatus, a relatively stationary strop, a rock shaft, a slide block carrying said rock shaft, a blade holder mounted on said rock shaft and spaced apart sufficiently from said strop so as not to contact therewith, a guideway for

said slide block, a motor and operative connections therefrom to said slide block for reciprocating said holder alternately in opposite directions longitudinally along said strop, a pair of spaced stops associated with said guideway adjacent either end thereof, and defining the limit of reciprocation of the holder in either direction, a pair of spaced stops carried by said slide block and defining the limit of rocking movement of said holder, a rocker arm on said rock shaft and disposed for alternate contact with said first-named stop pair whereby to rock said blade holder relative to the strop, and a spring normally tending to hold said rocker arm against one or the other of said second-named stop pair according to the direction of movement of the holder over the strop.

In testimony whereof I affix my signature.

PRESTON W. MOWRY.