G. E. RUSSELL.

SHOE BRUSHING MACHINE.

APPLICATION FILED OCT. 21, 1908.

936,948. Patented Oct. 12, 1909.

Fig. 2.

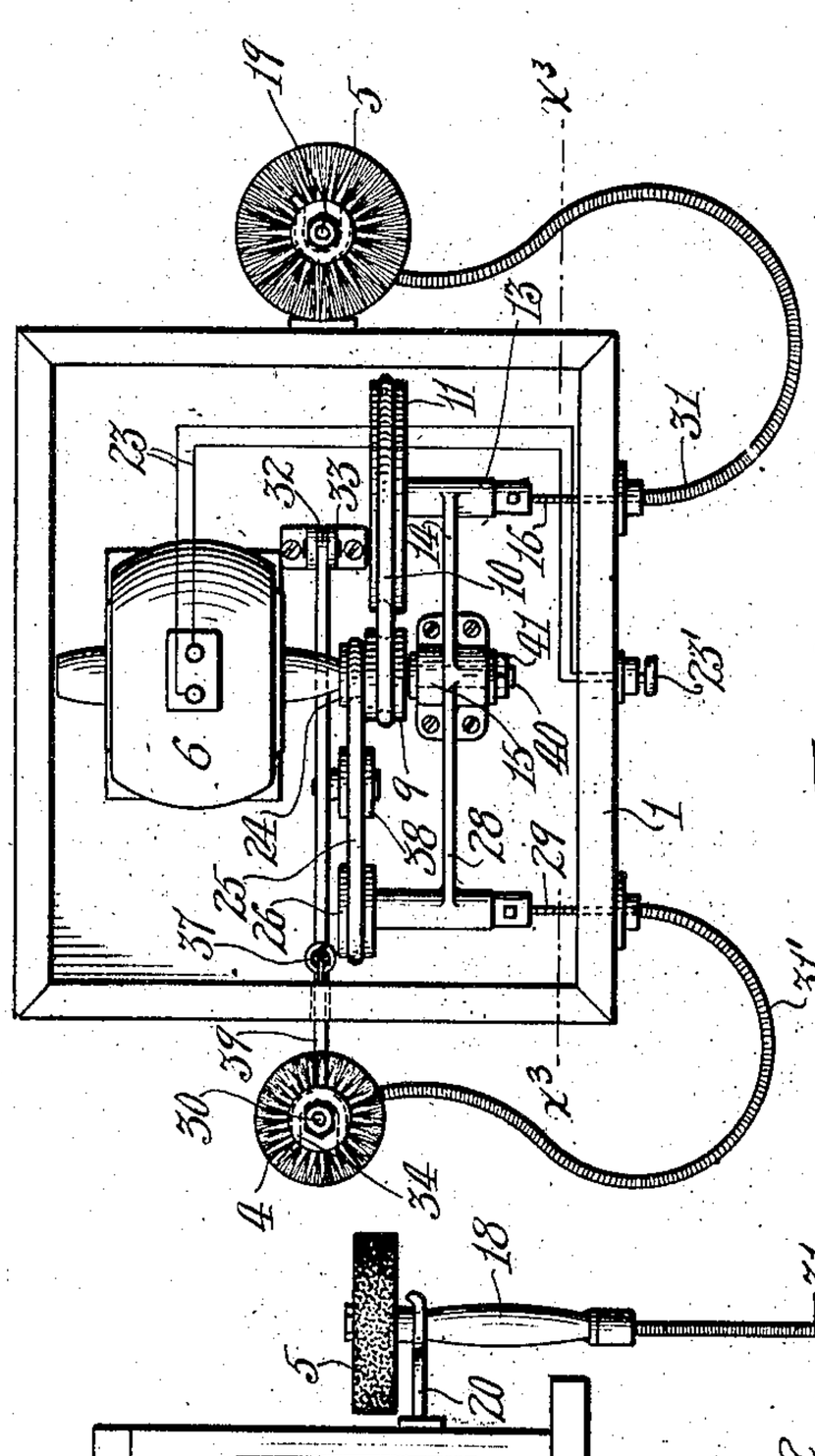


Fig. 3.

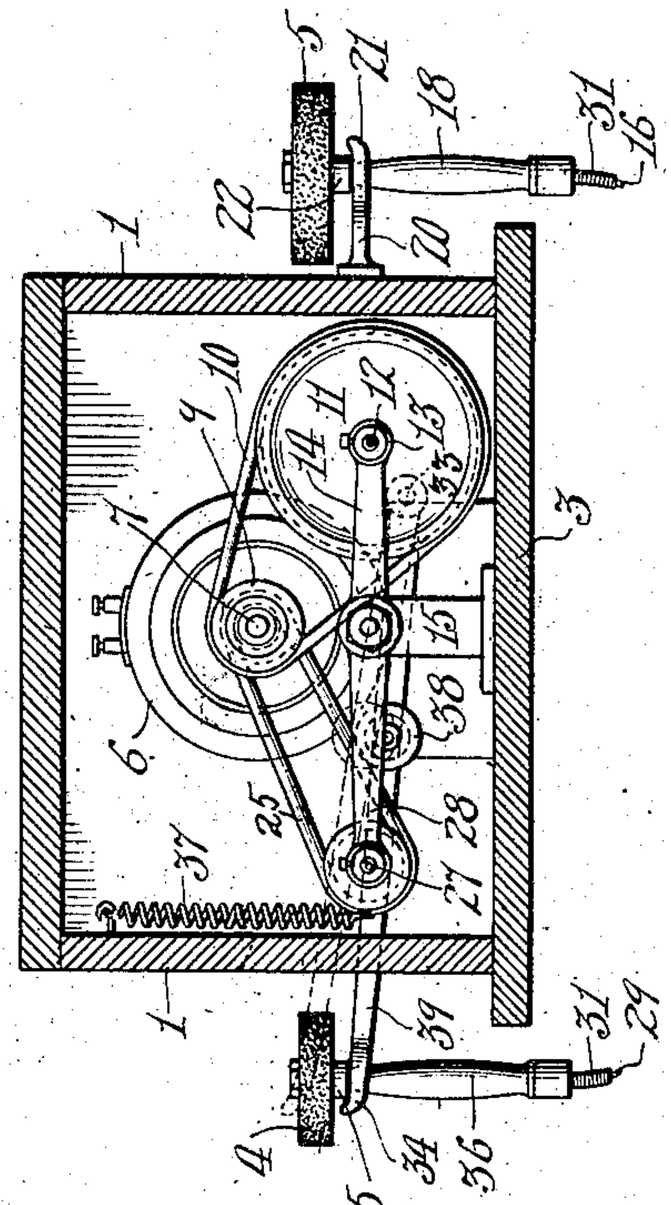
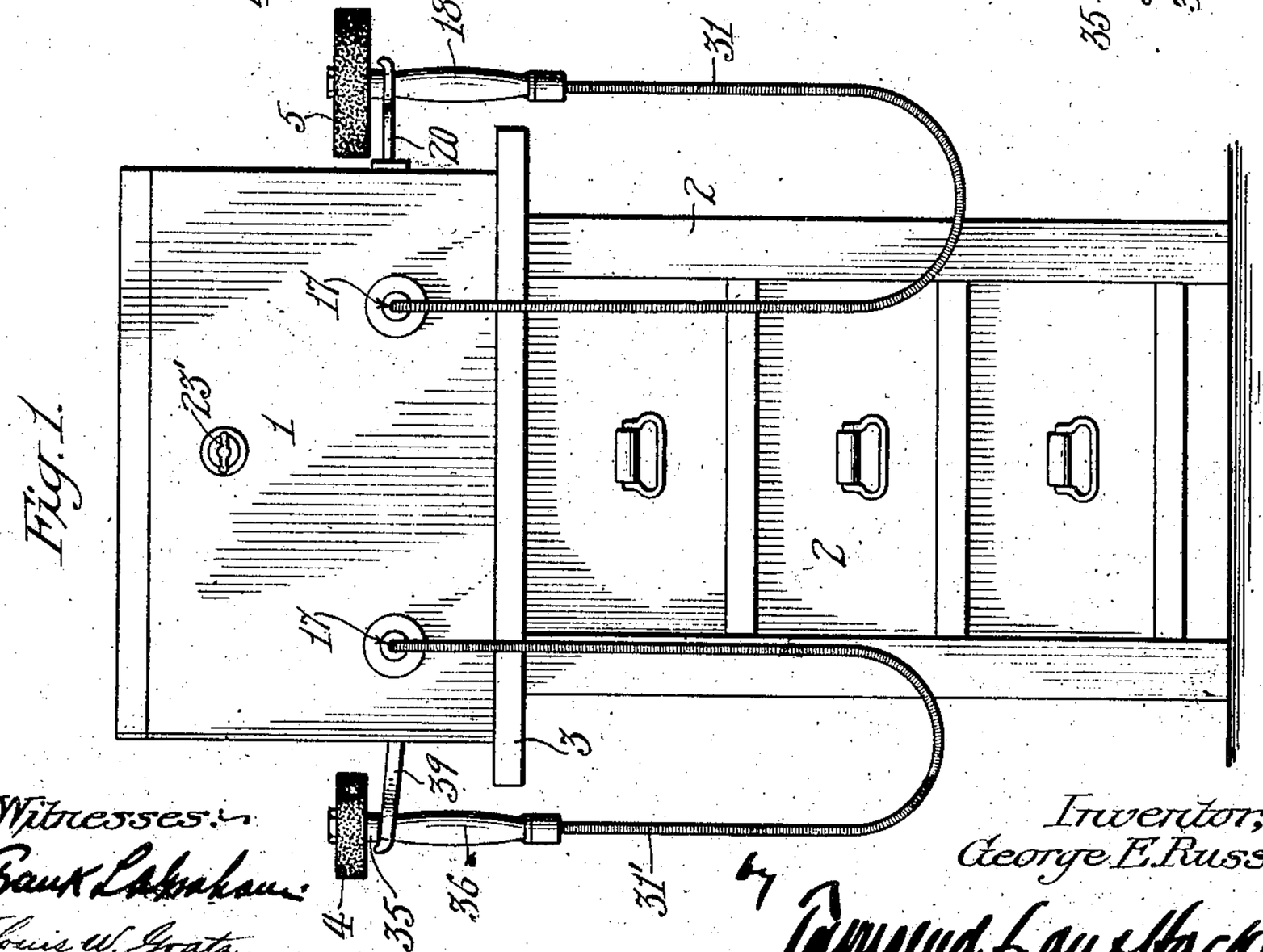


Fig. 1.



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UNITED STATES PATENT OFFICE.

GEORGE E. RUSSELL, OF LONGBEACH, CALIFORNIA.

SHOE-BRUSHING MACHINE.

936,948. Specification of Letters Patent. **Patented Oct. 12, 1909.**

Application filed October 21, 1908. Serial No. 458,866.

To all whom it may concern:

Be it known that I, GEORGE E. RUSSELL, a citizen of the United States, residing at Longbeach, in the county of Los Angeles and State of California, have invented a new and useful Shoe-Brushing Machine, of which the following is a specification.

This invention relates to a machine for brushing or shining shoes and an object of the invention is to provide means for this purpose which will be rapid and effectual in operation and simple in construction.

Other objects of the invention will appear hereinafter.

The accompanying drawings illustrate the invention.

Figure 1 is a front elevation of the machine. Fig. 2 is a plan with the top removed. Fig. 3 is a vertical section on the line x^3—x^3 in Fig. 2.

1 designates an inclosing case for the mechanism, said case being supported, for example, on a chest of drawers 2 which may serve to hold blacking, etc. The bottom 3 of case 1 serves as a base for supporting the various parts of the mechanism. The mechanism comprises a rotary brush or dauber 4 for applying blacking, a rotary brush 5 for polishing, a motor 6 and driving connections between said motor and said brush. Said motor 6 is mounted on base 3 and its shaft 7 is provided with a pulley 9 connected by belt 10 with a pulley 11 whose shaft 12 is mounted in a bearing 13 on an arm 14 projecting from a standard 15, said shaft 12 being connected to a flexible shaft or cord 16 which passes through an aperture 17 in the front of case 1 and is connected at its end to the rotary polishing brush 5. Said brush has a handle 18 wherein the shaft or arbor 19 of the brush rotates, said arbor being connected to the flexible driving shaft 16 as aforesaid, so that the brush can be manipulated by the handle 18 while it is in rotation.

A hook or hanger 20 is provided at one side of case 1 for supporting the brush 5 when not in use, the handle of said brush being slipped into a fork 21 of said hanger, engaging under a collar 22 of said handle. The electric motor 6 is operated by electric circuit 23 controlled by electric switch 23′ at the front of the case so that by turning the switch the person using the polisher can set the same into or out of operation. Motor shaft 7 is also provided with a pulley 24 connected by belt 25 to a pulley 26 whose shaft 27 is journaled on a support 28, and is connected by a flexible shaft 29 to the shaft or arbor 30 of the dauber 4. Said flexible shaft passes through an aperture in the front of the case 1. Non-rotative sheaths 31, 31′ are provided for shafts 16, 29.

The dauber 4 is preferably arranged to automatically control its driving connection so that when the dauber is not in use it will not be in rotation. For this purpose the support 39 for brush 4 is formed as a lever pivoted at 32 on a standard 33 on base 3 and provided at its end with a hook or fork 34 to receive and support the dauber by engaging with a collar 35 on the handle 36 of said dauber. A spring 37 tends to draw this lever upwardly and said lever is provided with an idler pulley 38 adapted to engage with the driving belt 25 for the dauber. Arms 14, 28 are formed as a single lever pivoted at 40 and clamped by nut 41 to adjust the belts 10, 25.

The operation is as follows: The person wishing to use the device takes hold of the polisher handle 18 and removes the polisher from its hook and turns switch 23 to turn on the current; he then can use the polisher to clean and polish his shoes, the rapid rotation of the rotary brush 5 serving to quickly clean and shine the shoes. If blacking is required he can, without hanging up the polisher, remove the dauber from its hook, whereupon the controlling mechanism 37, 38 will cause the belt 25 to be tightened so as to cause the dauber to be rotated and the same may be then used in obvious manner to apply blacking to the shoes. When sufficient blacking has been applied the dauber can be hung up, and the operative connection between the motor and dauber is broken so that the latter is not operated when not in use. When the polishing operation is completed the switch 23 is turned off and the polisher may then be hung up.

What I claim is:—

1. A shoe brushing machine comprising a rotary brush, a handle therefor, a shaft for said brush rotatably mounted in said handle, a flexible shaft connected to said brush shaft, a movable support provided with means for engaging the handle to support the brush, means for causing said movable support to move when the rotary brush is removed therefrom, a motor, a driving connection between said motor and said flexible shaft and means controlled by said movable

support to render said driving connection effective when the brush is removed from its support.

2. A shoe brushing machine comprising a rotary brush, a handle therefor, a shaft for said brush rotatably mounted in said handle, a flexible shaft connected to said brush shaft, a movable member provided with means for engaging the handle, means for causing said movable member to move when the rotary brush is removed therefrom, a motor, a driving connection between said motor and said flexible shaft and means controlled by said movable member to render said driving connection effective when the brush is removed from its support.

3. A shoe brushing machine comprising a rotary brush, a handle therefor, a shaft for said brush rotatably mounted in said handle, a flexible-shaft connected with said brush shaft, a pivoted lever provided with means for engaging the handle to support the brush, means for causing said lever to move when the rotary brush is removed therefrom, a motor, a driving belt connection between said motor and said flexible shaft, and means carried by said lever for engaging the belt to tighten the belt when the brush is removed from its support.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 12th day of October, 1908.

GEORGE E. RUSSELL.

In presence of—

ARTHUR P. KNIGHT,

GLADYS RUSSELL.