Oct. 23, 1923. 1,471,826

M. BZOWY

SHOE CLEANING DEVICE

Filed March 16. 1922

Fig. 1

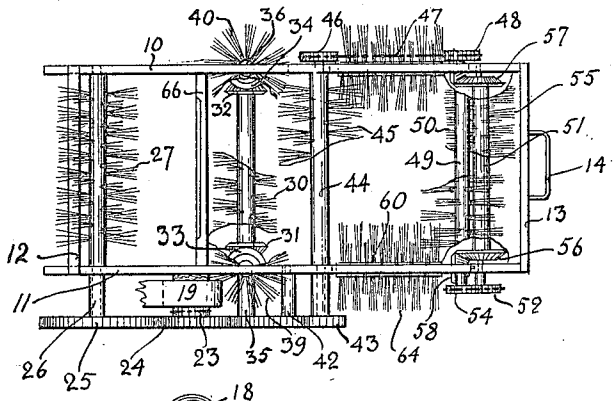


Fig. 2

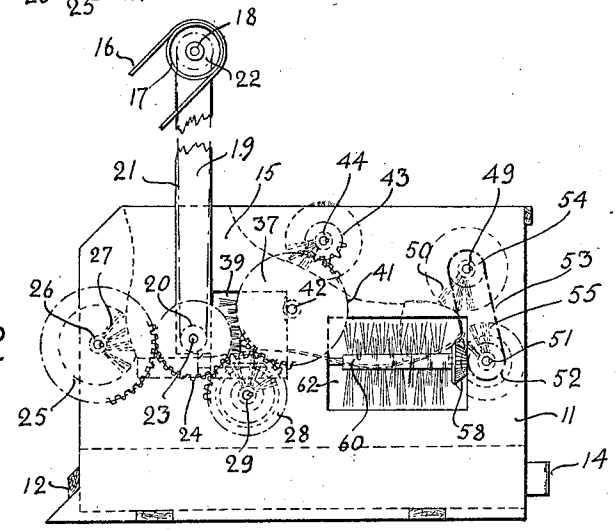
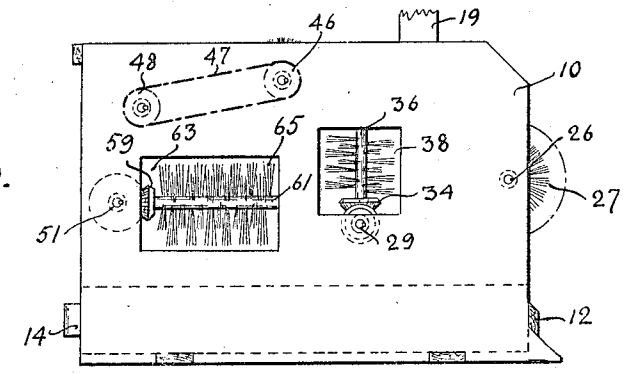


Fig. 3.



Inventor

Mike Bzowy

By his Attorney

George C. Heinicke

Patented Oct. 23, 1923. 1,471,826

UNITED STATES PATENT OFFICE.

MIKE BZOWY, OF STANLEY, WISCONSIN, ASSIGNOR OF ONE-HALF TO JOE PANOCHA, OF STANLEY, WISCONSIN.

SHOE-CLEANING DEVICE.

Application filed March 16, 1922. Serial No. 544,300.

To all whom it may concern:

Be it known that I, MIKE BZOWY, a citizen of Poland, residing at Stanley, county of Chippewa, and State of Wisconsin, have invented certain new and useful Improvements in Shoe-Cleaning Devices, of which the following is a specification.

This invention relates to improvements in shoe cleaning devices, and it is the principal object of the invention to provide a device of this character adapted to be operated by a suitable motor to clean and polish foot wear of every description thoroughly.

Another object of the invention is the provision of a device of this character which is adapted to clean simultaneously the sole as well as the upper leather, the heels, and welt of adhering dirt and to polish the same.

A further object of the invention is the provision of a device of this kind which is extremely simple in its construction as well as convenient to use.

Other objects and advantages of my invention will become more fully known as the description thereof proceeds, reference being had to the accompanying drawing forming a material part of this disclosure, and in which—

Figure 1 is a top plan view of a machine constructed according to the present invention.

Figure 2 is a side view thereof, and

Figure 3 is a view similar to Figure 2 seen from the opposite side.

The machine comprises a frame composed of the side walls 10 and 11, connected at one of their ends by cross bars 12.

Between the walls 10 and 11, a removable drawer 13, provided with a handle 14 is slidably arranged adapted to collect the dirt removed from a shoe 15.

The power derived from any suitable motor is transmitted to the machine by means of a belt 16 guided over a pulley 17 rotating around a stub shaft 18 at the upper end of a vertical post 19 secured at its lower end to the side wall 11 of the machine.

The lower end of the post 19 carries a belt pulley 20 over which a belt 21 is guided, which is also guided over a pulley 22 at the upper end of the post 19.

On the shaft 23 of the pulley 20, a gear 24 is secured, in mesh with a larger gear 25, on the end of a shaft 26 projecting out of the side wall 11 and journaled in the side walls 10 and 11. Between both walls the shaft 26 carries a brush 27 for cleaning the heel part of a shoe. The gear 24 is also in mesh with a gear 28 on a shaft 29 transversely journaled between walls 10 and 11 and carrying between these walls a brush 30 for cleaning the sole of a shoe.

Near the inner faces of walls 10 and 11 the shaft 29 carries bevel gears 31 and 32 in mesh with similar bevel gears 33 and 34 on vertical shafts 35 and 36 journaled in suitable windows 37 and 38 respectively in the side walls 10 and 11.

These vertical shafts carry brushes 39 and 40 for cleaning the sides of a shoe. The gear 28 is also in mesh with a gear 41 on a shaft 42 secured to the outer wall of side wall 11, and gear 41 in turn is in mesh with a gear 43 on the outer end of a shaft 44 extending through side wall 11 and transversely journaled between walls 10 and 11 and carrying between these walls a brush 45 for cleaning the upper leather of a shoe.

The outer end of shaft 44 is extended through the side wall 10 and carries a sprocket wheel 46 over which is guided a chain 47 which is also guided over a sprocket wheel 48 on the outer end of a transverse shaft 49 which carries between the side walls 10 and 11 a brush 50 for cleaning the cap of a shoe.

Below the level of shaft 49 another transverse shaft 51 is journaled between the side walls 10 and 11 and one of its ends is extended through side wall 11 and carries a sprocket wheel 52 over which a chain 53 is guided which is also guided over a sprocket wheel 54 on shaft 49. Between the walls 10 and 11 shaft 51 carries a brush 55 for cleaning the front point of a shoe.

The shaft 51 carries also near the inner faces of the side walls 10 and 11 bevel gears 56 and 57 in mesh with bevel gears 58 and 59 on the ends of horizontal shafts 60 and 61 respectively, journaled in suitable windows 62 and 63 in the side walls 11 and 10 respectively. The shafts 60 and 61 carry brushes 64 and 65 for cleaning the welt of the shoe.

A cross or transverse strip 66 connects the side walls 10 and 11 near the windows 37 and 38 respectively and serves to support the foot during the cleaning operation.

Changes may be made in the general arrangement of my machine and in the construction of the minor details thereof without deviating from the scope and spirit of my invention.

What I claim as new and desire to secure by Letters Patent of the United States is—

1. A shoe cleaning device of the class described comprising a frame, a plurality of transversely arranged brushes journaled in said frame for cleaning the heel, sole, upper leather and cap of a shoe, a plurality of longitudinally arranged brushes, said frame having windows in which said longitudinally arranged brushes are journaled for cleaning the welt, a plurality of vertically arranged brushes, windows in said frame in which said vertically arranged brushes are journalled for cleaning the side of a shoe and means for rotating all of said brushes simultaneously from a motor.

2. A shoe cleaning machine of the class described, comprising a frame adapted to support a shoe, a plurality of transverse rollers carrying brushes, a pair of bevel gears on one of said rollers within said frame, a pair of vertical shafts, windows in said frame in which said pair of vertical shafts are arranged, brushes on said shafts, bevel gears on said vertical shafts in mesh with the first named bevel gears, a plurality of gears, means for operating said gears to rotate said shafts to clean the heels, upper, cap and sides of a shoe.

3. A shoe cleaning machine of the class described, comprising a frame, a foot rest in said frame, a vertical post secured to the outside of the frame, a plurality of transverse rollers journaled in the side walls of said frame, brushes on said rollers, gears on the outer ends of said rollers, pulleys at the upper and lower ends of said posts, means for rotating said pulley from a motor, and means for transferring the rotation to said gears for operating said brushes, a rear shaft, a brush on said shaft, means for transferring the rotation of said rollers to said shaft, and means connected with said rear shaft for cleaning the welt of a shoe.

4. A shoe cleaning machine of the class described, comprising a frame, a plurality of transverse rollers, journaled in said frame, brushes on said rollers, means for rotating said rollers and brushes, a pair of vertical rollers, windows in said frame in which said vertical rollers are arranged, brushes on said rollers, means for transferring the rotation of said first named rollers to said vertical rollers, a rear shaft, means for rotating said rear shaft, brushes on said rear shaft, a pair of horizontal rollers, windows in said frame in which said horizontal rollers are arranged, bevel gears on said rear shaft and said horizontal shaft in mesh with each other, and means for transferring the rotation of said first named rollers to said rear shaft.

In testimony whereof I have affixed my signature.

MIKE BZOWY.