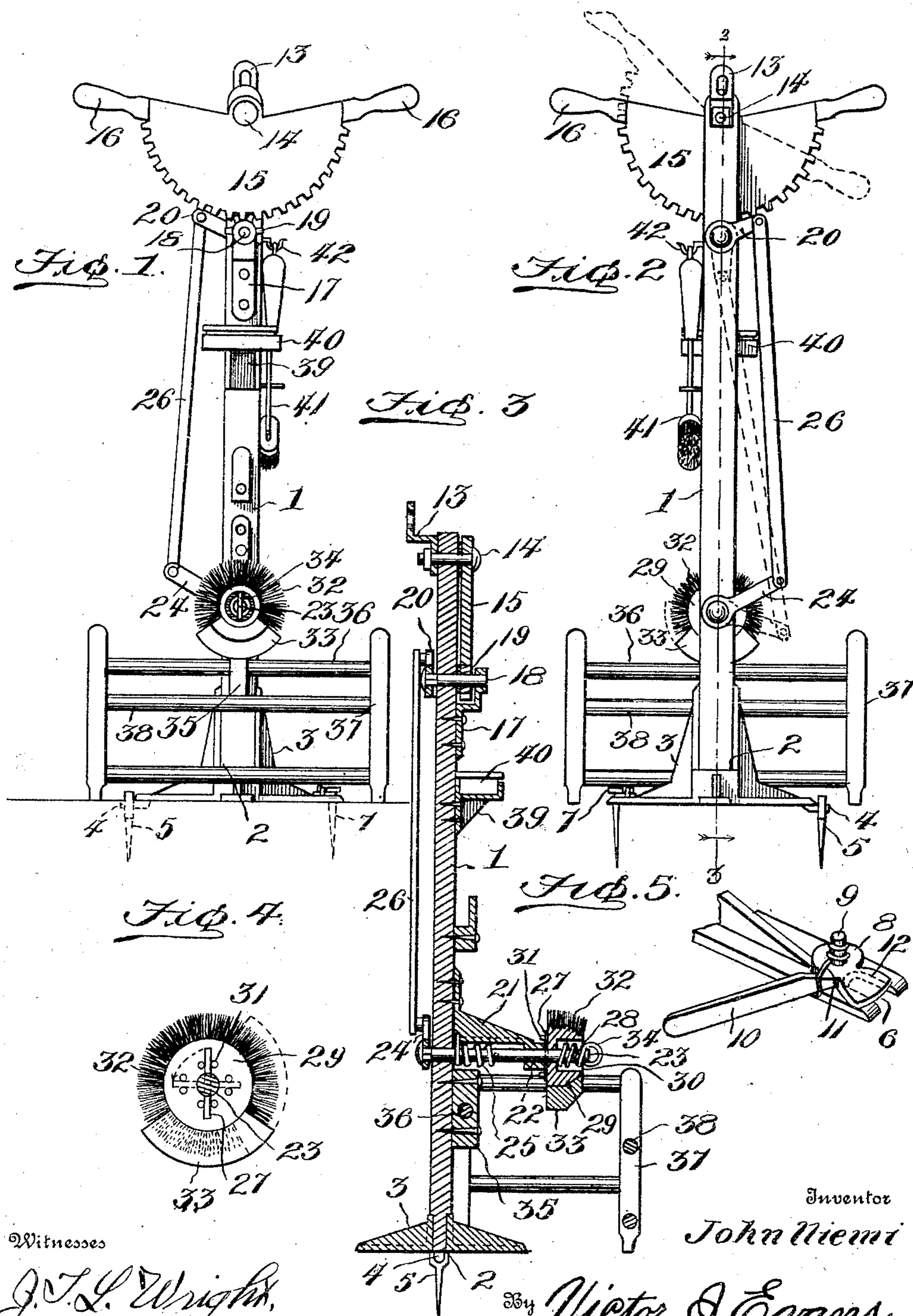


J. NIEMI.
SHOE POLISHING DEVICE.
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908,314.

Patented Dec. 29, 1908.



Witnesses

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JOHN NIEMI, OF FLOODWOOD, MINNESOTA.

SHOE-POLISHING DEVICE.

No. 908,314.

Specification of Letters Patent.

Patented Dec. 29, 1908.

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To all whom it may concern:

Be it known that I, JOHN NIEMI, a citizen of the United States, residing at Floodwood, in the county of St. Louis and State of Minnesota, have invented new and useful Improvements in Shoe-Polishing Devices, of which the following is a specification.

This invention is an improved shoe polishing device and the said invention consists in the construction, combination and arrangement of parts hereinafter described and claimed.

The object of this invention is to provide a cheap, simple and efficient shoe polishing machine, which may be secured on a floor, which occupies but little floor space and which is adapted for use for rapidly polishing shoes at a very slight expenditure of time and labor.

In the accompanying drawing, Figure 1 is a front elevation of a shoe polishing machine constructed in accordance with this invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a vertical sectional view of the same, taken on the plane indicated by the line 3—3 of Fig. 2. Fig. 4 is a detail elevation of the oscillating polishing element which has bristles on one side and a polishing felt on the other side, the shaft of such polishing element being indicated in transverse section. Fig. 5 is a detail perspective view of the base of the standard.

The standard 1 which supports the polishing element and the means for actuating the same has its lower end inserted in an opening 2 in a base or foot piece 3 which is preferably made of iron or other suitable metal and may be a casting. The said base is provided at one end with a projecting stud 4 which lies below the plane of the bottom of the base and in practice is placed in a recess made in the floor and engaged with an eye in the upper end of a nail or spike 5 driven in the floor, to effect a connection between the said end of the base and the said spike. The opposite end of the base is provided with an open slot 6 to clear the head of a spike 7 and on the said end of the base is a keeper 8 which is pivotally mounted as at 9, has a handle 10 whereby it may be readily turned, and has a spring 11 to normally maintain it in position to cause its wing 12 to engage the under side of the head of said spike 7 and thereby detachably connect the said end of the base to the said spike.

It will be understood from the foregoing that the base is detachably secured on the

floor so that it may be readily removed therefrom by first turning the keeper 8 against the tension of its spring 11 to the required position to disengage its wing 12 from the head of said spike 7, and then withdrawing the stud 4 from the eye of the spike 5.

The standard 1 is also provided at its upper end, on its rear side, with a hanger 13 whereby it may be secured, if desired, to a wall or other vertical support. The bolt 14 which secures the hanger 13 to the standard also serves as the supporting axle for the master gear 15 which is here shown as a peripherally spurred segment and is provided at opposite sides with handles 16 to enable said gear to be oscillated. A bracket 17 is secured on the front side of the standard at a suitable distance from its upper end and is formed with a bearing for a shaft 18 which also has a bearing in the said standard and the rear end of which is angular in form, cross sectionally. A gear 19 is secured to such shaft for revolution therewith and engages the segment gear 15. A rock arm 20 is secured on the rear end of said shaft, and has a polygonal opening for the reception of the polygonal portion of such shaft so that such rock arm is secured to such shaft for movement therewith.

On the front side of the standard at a suitable distance from the lower end thereof is a bracket 21 which is provided at its outer end with a bearing 22 for a shaft 23, said shaft also having a bearing in the said standard and having a rock arm 24 secured to its rear end. A spring 25, which is coiled on the said shaft has one end attached thereto and the other end attached to the bracket 21. Said spring tends to turn the polishing element on the shaft 23 to normal position from either direction. A pitman 26 connects the rock arms 20, 24 and it will be understood that when the gear 15 is oscillated corresponding motion will be transmitted to shaft 23 through the connection hereinbefore described. The said shaft 23, is provided, at a suitable distance from its front end with a cross bar 27. It also has near its front end a removable cross pin 28. A polishing element 29, which is of substantially cylindrical form, has a central opening to receive said shaft 23 and has a counter-bore in its front side providing a recess 30 and the rear side of the said polishing element has pins or studs 31 to engage the cross arm 27 and coact therewith to detachably lock said polishing element to such shaft. A number of the said pins 31 are

provided at suitable angles apart to enable the said polishing element to be so attached to the said shaft as to dispose either side thereof lowermost. The said polishing element is provided through the major portion of its circumference with bristles 32, its remaining portion having a polishing felt or other suitable fabric 33. Either the bristles or the polishing felt or fabric may be disposed to operate on a shoe below the polishing element by first appropriately securing such polishing element to the shaft as will be understood. A spring 34 is provided which is disposed in the recess 30 and bears between the said polishing element and the pin 28 to force the polishing element inwardly or rearwardly on such shaft and cause the same to remain in engagement with the cross bar 27 when set and yet enable it to move forwardly out of engagement with such cross bar and to be reattached thereto in an adjusted position.

On the front side of the standard 1, at a suitable distance from the lower end thereof, is secured a block 35 which provides a bearing for a rung 36 at the rear side of a stool or foot rest 37 which has on its front side a rung 38 to support the shoe in position to be polished by the polishing element.

A bracket 39 is secured on the front side

of the standard at a point below the bracket 17 and serves to support a receptacle 40 for blacking. A dauber 41 for applying blacking or polishing material to the shoes is hung from a hook 42 on one side of the standard.

It is thought the operation and advantages of this invention will be fully understood from the foregoing specification.

Having thus described the invention, what I claim is:—

The combination of a base, a support carried by the base, a shaft mounted in said support, a gear secured to the shaft, a master gear disposed above the first mentioned gear and adapted to engage the latter, a shaft mounted below the first mentioned shaft and carrying a polishing element, rock arms secured to said shafts, a pitman connecting said rock arms, and a spring encircling said second shaft and tending to turn the polishing element to normal position from either direction.

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

JOHN NIEMI.

Witnesses:

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