UNITED STATES PATENT OFFICE.
BERTHA VON SALVIATI, OF DUSSELDORF, GERMANY.

SHOE-CLEANING APPARATUS.

No. 902,254.

Patented Oct. 23, 1908.

To all whom it may concern:

Be it known that I, BERTHA VON SALVIATI, a subject of the German Emperor, and resident of Dusseldorf, Germany, have invented certain new and useful Improvements in Shoe-Cleaning Apparatus, of which the following is a specification.

This invention has for its object an apparatus for cleaning and polishing boots and shoes. The new feature of the apparatus, in the face of the already known apparatus of this kind, consists in arranging all the main parts such as brushes, devices for putting on the blacking and so on, in a drum turning on a horizontal axle and further in the arrangement of a series of peripheral apertures for access of the foot-wear to the brushes in such a manner as to accommodate the feet on the foot-rests in an easy position.

The invention is illustrated on the accompanying drawings, where

Figure 1 shows a longitudinal section through the apparatus, Fig. 2 a cross-section with a partial front view, Fig. 3 a fragmental view of one side of the drum. Fig. 4 is a view of the other side of the drum.

Similar letters refer to similar parts throughout the several views.

In a drum a turning on a horizontal axle are arranged the pairs of brushes b, b, c, c, d, d for cleaning the boot or shoe, for putting on the blacking on, and for producing the shine. These oppositely arranged brushes are, as can be seen from the cross-section (Fig. 2) of a shape corresponding to the different breadth of the boot in the front and behind. The brushes are used two by two one of such a pair cleaning the boot in the front and the other from behind. Owing to the larger size of the feet in front than behind one of the brushes has a larger groove than the other brush belonging to the same pair. The foot-rests are marked with f, f, f. The devices g and g serve for putting on the blacking or cream. The drum a rotates on the fixed shaft k and is turned by means of the toothed rim i and a toothed wheel g engaging the same. It is started by throwing the toothed wheel k into gear with the driving wheel l either automatically or not. This driving wheel can be rotated by any source of power, for instance an electromotor or the like.

As soon as the wheel l is rotated, a rotary movement of the cleaning rollers b, b, c, c and d, d is effected through the rotation of the gears m, m, n, o, p, o, p, p engaging with the latter. It is to be noted that the coupled toothed wheels m and m run loose on the shaft h.

After the shoe has been cleaned by means of the pair of brushes b, b, the drum is rotated by throwing the toothed wheel k into gear with the driving wheel l and keeps on rotating, until the apparatus is adjusted for the next working phase. During this rotation the blacking or cream is put upon the brush-rollers c, c and the latter put the same upon the shoe in the drum.

The blacking or cream is put upon the brushes by the following device. On the stationary shaft k two separate segments q and r of a beveled toothed crown are arranged (Fig. 4) which mesh with the beveled gears on the shafts s, t, which also carry gears meshing with toothed wheels e, e. The axes u and w (Fig. 2) carrying the toothed wheels e, e respectively operate toothed wheels x, x mounted thereon (Fig. 1) by which toothed rods y, y provided with pistons are pushed into cylinders g, g so that the blacking or cream contained in the cylinders is ejected. When the blacking or cream contained in the cylinders g, g is consumed t, e, when the pistons are pressed entirely against the rear ends of the cylinders a special device may be caused to indicate the fact and the whole machine is put out of action.

What I claim as my invention and desire to secure by United States Letters Patent is:

1. In a shoe-cleaning and polishing apparatus the combination of a rotary drum mounted on a horizontal axle, a moving series of pairs of rotatable brushes within, for cleaning the boot, putting on the blacking or cream and polishing the boot, a series of peripheral apertures being provided in the drum for access of the feet to the brushes, and a series of foot-rests mounted within the rotary drum in positions to accommodate the feet to be introduced in an easy position between the brush-pairs, substantially as described.

2. In a shoe-cleaning and polishing apparatus the combination of a rotary drum mounted on a horizontal axle, a series of pairs of rotatable brushes within said drum, adapted to act successively on the boot for cleaning it, putting on the blacking or cream, and polishing the boot, said drum having a series of peripheral apertures for access of the feet to the brushes, and a series of foot-rests,
mounted within the rotary drum in positions to accommodate the feet to be introduced in position between the brush-pairs, the brushes of each pair rotating in opposite direction thereby pressing the foot against the foot-rest, substantially as described.

3. In a shoe-cleaning and polishing apparatus the combination of a rotary drum mounted on a horizontal axle, a series of pairs of rotatable brushes within said drum, adapted to act successively on the boot for cleaning it, putting on the blacking or cream and polishing the boot, said drum having a series of peripheral apertures for access of the feet to the brushes, a series of foot-rests mounted within the rotary drum in positions to accommodate the feet to be introduced in position between the brush-pairs, the brushes of each pair rotating in opposite direction thereby pressing the foot against the foot-rests and a series of devices for putting on the blacking or the cream on each brush of one pair of brushes, the said devices being actuated by the rotation of the drum, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERTHA VON SALVIATI.

Witnesses:

WILLIAM ESSENWEIN,

PETER LIEBER.