

No. 762,782.

PATENTED JUNE 14, 1904.

J. T. WATERS.
SHOE CLEANING MACHINE.

APPLICATION FILED MAR. 7, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

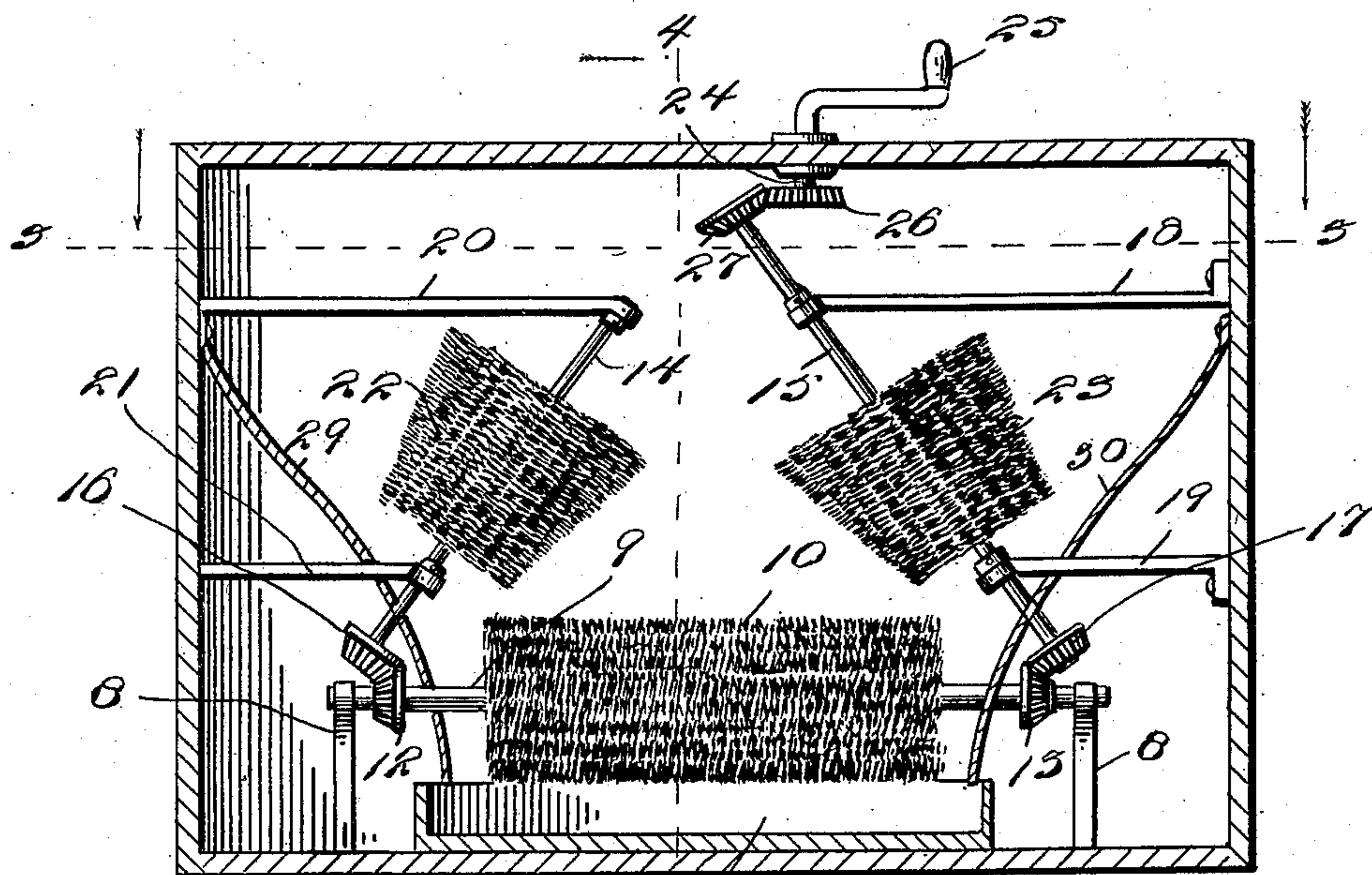
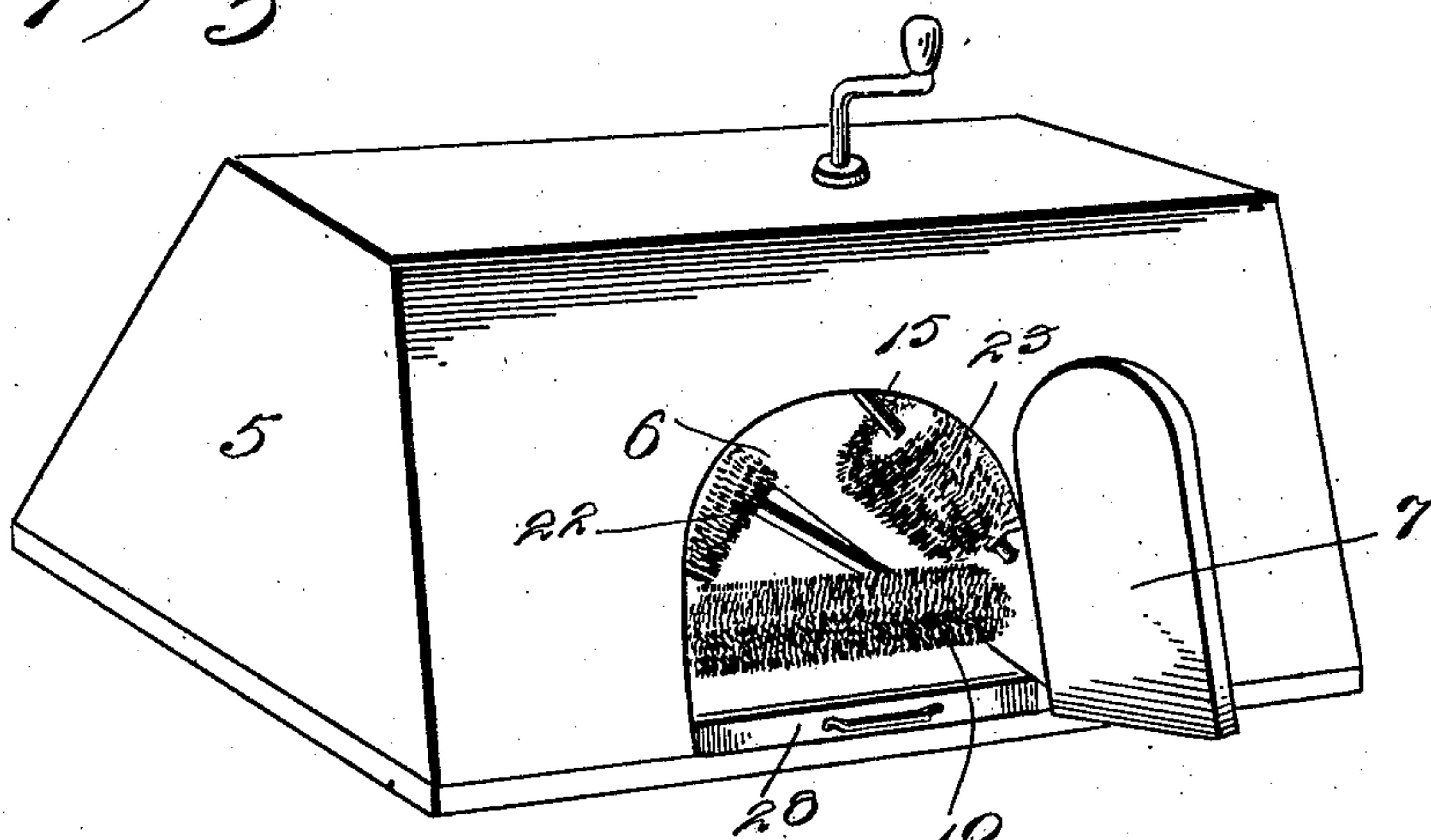


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

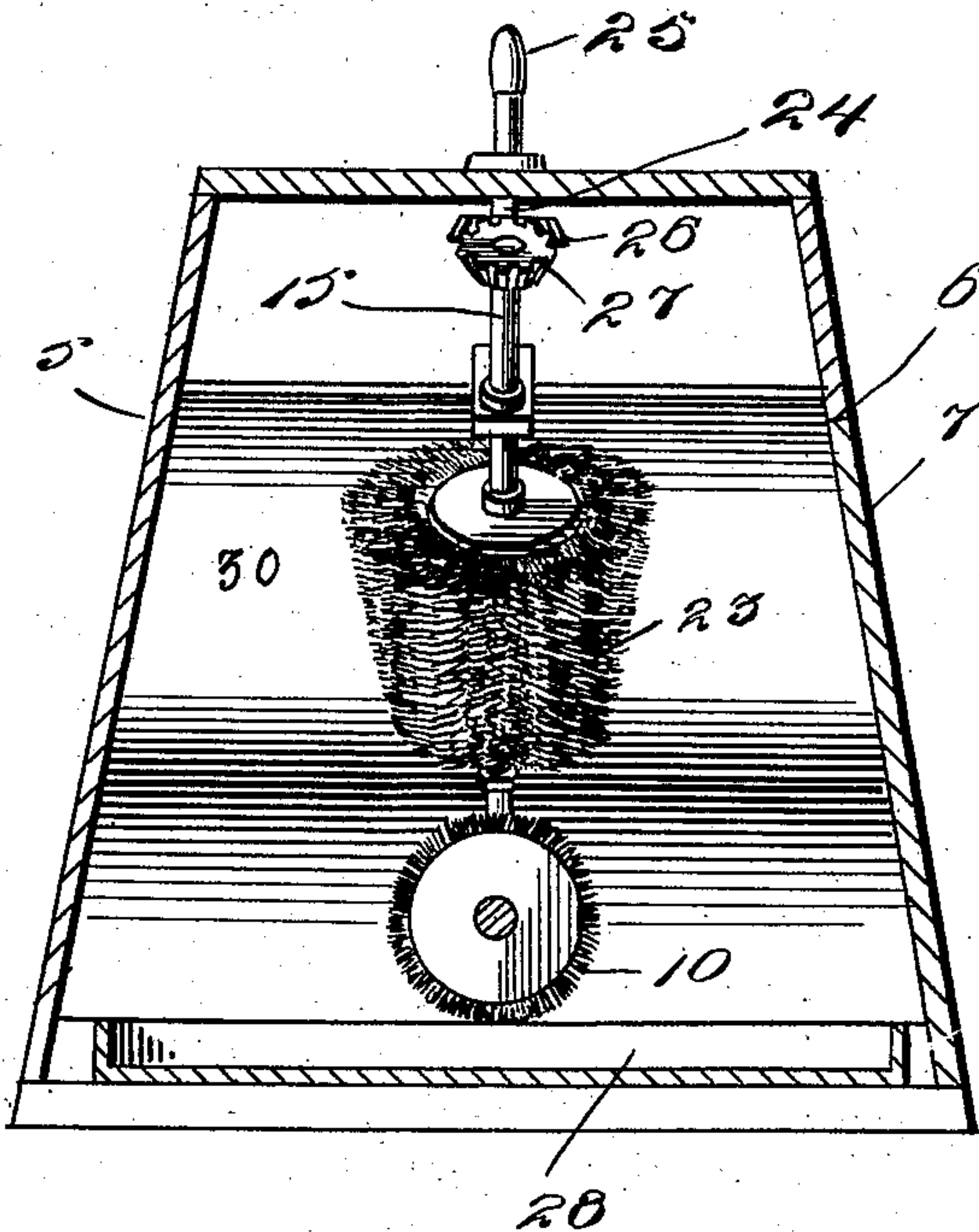
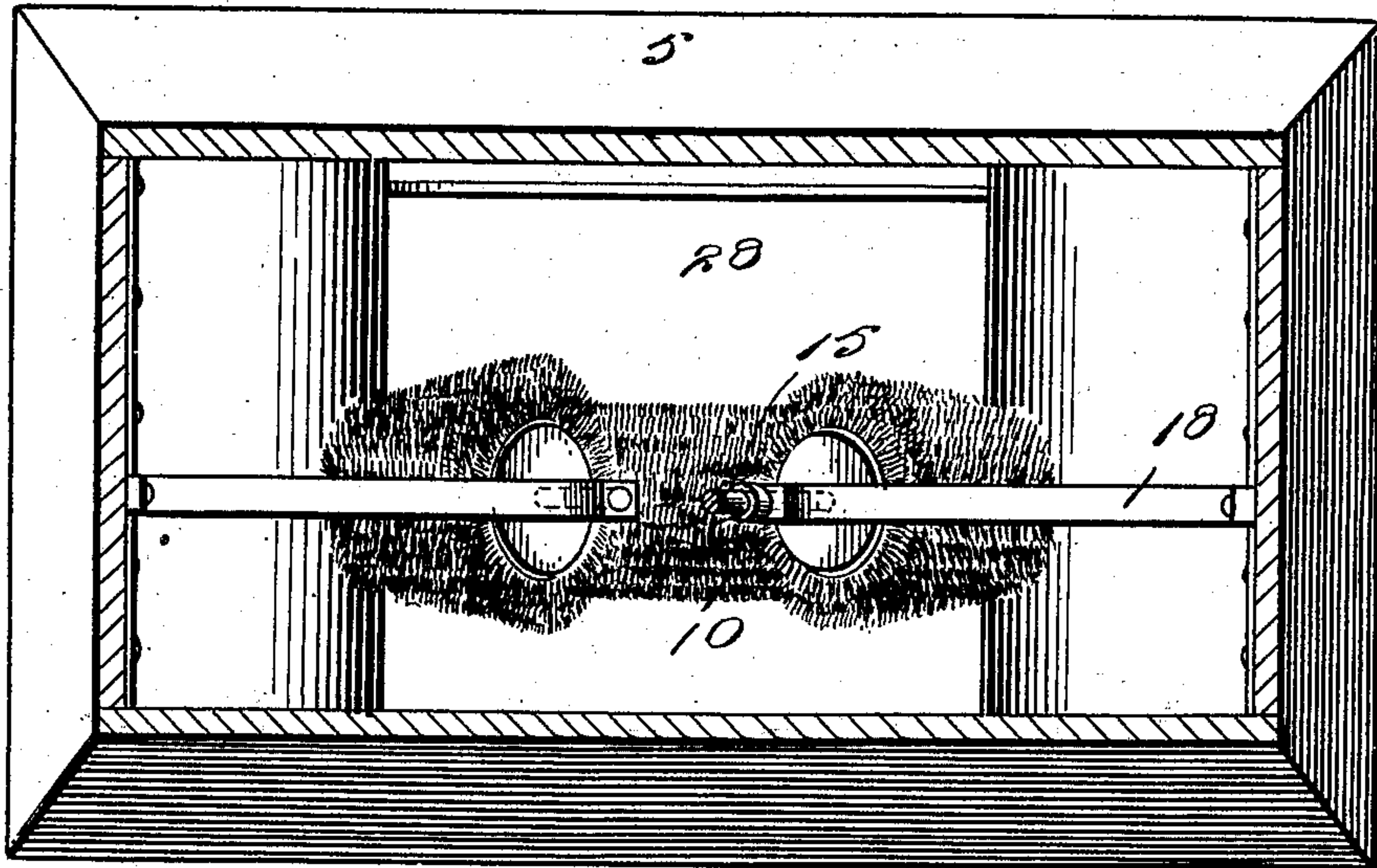


Fig. 4.

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UNITED STATES PATENT OFFICE.

JAMES T. WATERS, OF AUGUSTA, KENTUCKY.

SHOE-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 762,782, dated June 14, 1904.

Application filed March 7, 1904. Serial No. 197,013. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. WATERS, a citizen of the United States, residing at Augusta, in the county of Bracken and State of Kentucky, have invented certain new and useful Improvements in Shoe-Cleaning Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to shoe-cleaning machines; and it has for its object to provide a machine which may be manufactured at a low cost and into which the shoe may be introduced while on the foot and by then operating the machine will be cleansed of any dirt that may be thereon, whether on the uppers, the vamp, or the sole.

Other objects and advantages of the invention have reference to details of structure and will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view of the machine. Fig. 2 is an elevation of the machine with the front removed. Fig. 3 is a section on line 3 3 of Fig. 2. Fig. 4 is a section on line 4 4 of Fig. 2.

Referring now to the drawings, the present machine comprises a casing 5, which may have any desired specific shape, but which in the present construction is illustrated as tapered in the direction of the top, and in the front of this casing is formed an opening 6, having a door 7 for closing it when desired. Upon the bottom of the casing, at opposite sides of the door-opening, are mounted posts or uprights 8, in which is journaled a shaft 9, which lies across the lower portion of the door-opening and upon which shaft is mounted a cylindrical brush 10, formed of a drum provided with radiating bristles in the usual manner. This shaft is provided with beveled gear-wheels 12 and 13. Two additional brush-shafts 14 and 15 are provided, having beveled gear-wheels 16 and 17, respectively, at their lower ends, which engage the gear-

wheels 12 and 13, respectively. The shaft 15 is mounted in bearings in brackets 18 and 19, that are secured to one end wall of the casing, while the shaft 14 is journaled in the ends of brackets 20 and 21, which are mounted upon the opposite end of the casing. The shaft 14 carries a cylindrical brush 22, while the shaft 15 carries a cylindrical brush 23, the brushes 22 and 23 being disposed to converge upwardly and project inwardly over the end portions of the brush 10, the shafts 14, 15, and 9 being disposed in the same vertical plane. To rotate the several brush-shafts with the brushes thereon, a crank-shaft 24 is mounted vertically in the top of the casing and is provided with a handle 25 for rotating it, the shaft 24 being provided at its lower end with a beveled gear-wheel 26, which meshes with a similar gear-wheel 27 on the upper end of the shaft 15. It will be understood that by operating the crank-shaft 24 the several brushes will be rotated, and these brushes are disposed in such relation to each other that when a shoe is introduced between them the brush 10 will engage and clean the sole of the shoe, while the brushes 22 and 23 will engage and clean the sides of the shoe, the top of the shoe being brought into engagement with either of the brushes 22 and 23 by proper manipulation of the foot. To catch the dirt that is removed from the shoe, a pan 28 is slid through the door-opening into the casing and rests upon the bottom thereof beneath the brushes, and to direct the dirt to the pan plates 29 and 30 are arranged slantingly, so as to converge downwardly above the pan and direct into the latter the dirt that strikes these plates. As illustrated, the plates may be arranged to lie between the brushes and the gear-wheels, so that the latter will be protected against dirt that may fly from the brushes.

In practice modifications of the specific construction shown may be made, and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A shoe-cleaning machine comprising a casing, a cylindrical brush mounted in the casing and provided with a shaft having bev-

eled gears at opposite ends of the brush, additional shafts having beveled gears engaged respectively with the first-named beveled gears, brushes mounted upon the last-named
5 shafts, the last-named brushes converging upwardly and extending inwardly over the end portions of the first-named brush, and means connected with one of the second shafts for rotating the several shafts and their
10 brushes.

2. A shoe-cleaning machine comprising a casing having a door-opening therein, a shaft journaled transversely of the lower portion of the door-opening and having a cylindrical
15 brush fixed thereon, said shaft having gears at its ends, upwardly-converging shafts disposed above the first-named shaft and having gear-wheels at their lower ends meshing with

the gear-wheels respectively of the first-named shaft, brushes fixed upon the convergent
20 shafts, said brushes extending inwardly over the ends of the first-named brush, a gear-wheel mounted upon the upper end of one of the convergent shafts, a crank-shaft having a gear-wheel meshing with the last-named
25 gear-wheel, a pan removably disposed in the bottom of the casing beneath the first-named brush, and deflector-plates at the sides of these brushes and leading downwardly and
30 convergently to the pan.

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

JAMES T. WATERS.

Witnesses:

W. J. Hook,
N. T. WILEY.