(No Model.)

J. J. FITZGIBBON.

BURNISHING MACHINE.

No. 386,920. Patented July 31, 1888.

Fig. 1.

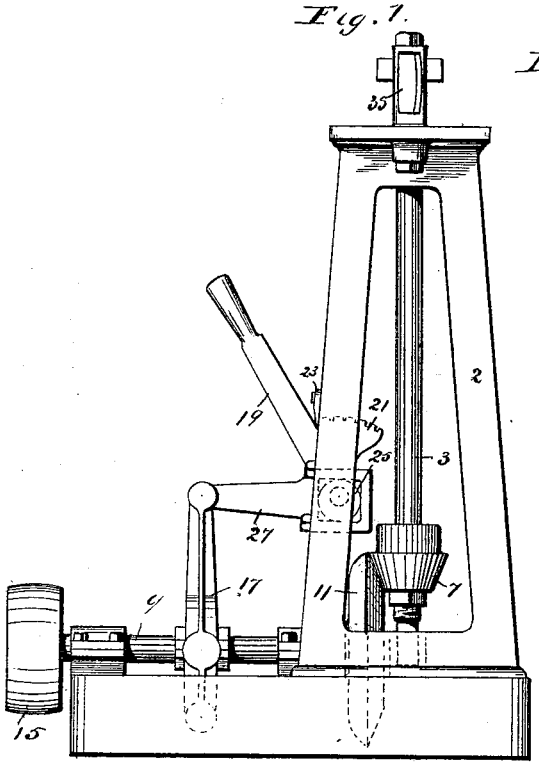


Fig. 2.

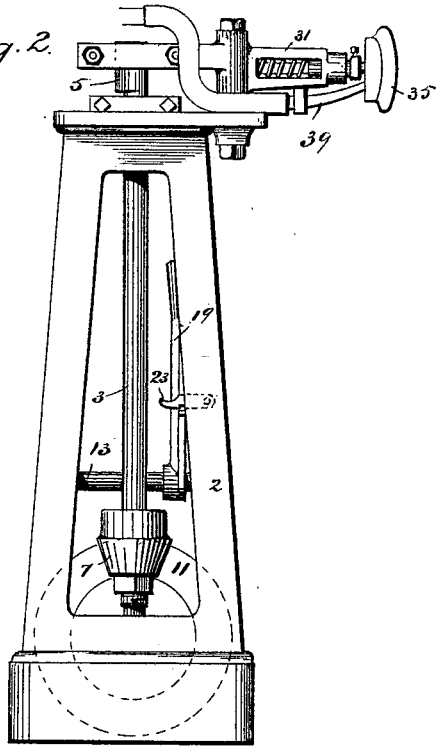


Fig. 4.

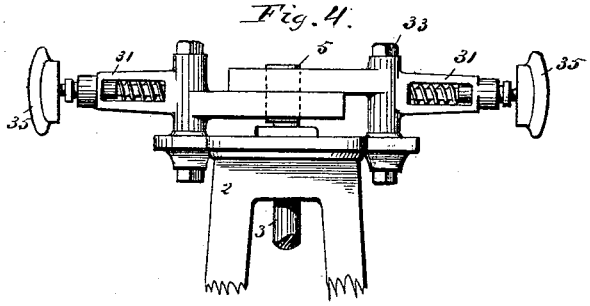
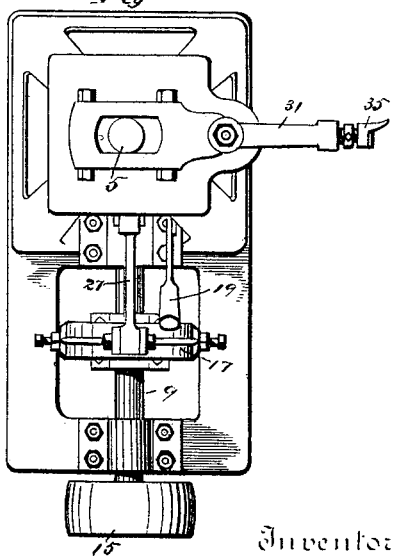


Fig 3



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UNITED STATES PATENT OFFICE.

JAMES J. FITZGIBBON, OF MINNEAPOLIS, MINNESOTA.

BURNISHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 386,920, dated July 31, 1888.

Application filed March 26, 1888. Serial No. 268,556. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. FITZGIBBON, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Burnishing-Machines, of which the following is a specification.

My invention relates to improvements in machines designed for use in the manufacture of boots and shoes for burnishing either the shanks or the bottoms or the heels; and the object I have in view is to provide a machine of this kind by means of which the work may be expeditiously carried on.

Another object is to provide a simple and inexpensive machine by which two burnishers may be simultaneously operated.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of my improved machine. Fig. 2 is an end elevation of the same. Fig. 3 is a plan view, and Fig. 4 is a partial side elevation showing the preferred arrangement of the burnishers.

In the drawings, 2 represents a suitable frame, which may be of any preferred size and constructed of any suitable material. Mounted in suitable supports in this frame is a vertically-arranged shaft, 3, which is provided at its upper end with an eccentric, 5. The shaft 3 is provided with a beveled friction-gear, 7, preferably arranged near its lower end. A shaft, 9, is arranged horizontally and mounted in bearings in the frame of the machine, as shown in Fig. 1. This shaft is provided with a friction-wheel, 11, that is adapted to engage the friction-wheel 7 upon the shaft 3. The shaft 9 is also provided with a suitable driving-pulley, 15, by means of which it may be driven from any convenient source of power. The shaft 9 is adapted to slide longitudinally in its bearings and thereby to throw the friction-gear 11 into or out of contact with the friction-wheel 7. A lever, 17, is pivoted in the frame 2 and embraces the shaft 9. A shaft, 13, is mounted in bearings in the frame 2, and is provided with a handle, 19, and with a notched plate, 21, adapted to be engaged by a latch, 23, to hold the shaft in any desired position.

An eccentric, 25, is secured upon the shaft 13 and engages an arm, 27, that is connected with the upper end of the lever 17. By moving the lever 19 the eccentric 25 is turned upon its axis and thereby the arm 27 and the pivoted lever 17 are moved in one direction or the other and the friction-gear 11 thrown into or out of engagement with the gear 7. Projecting from each side of the machine, at the top of the frame 2, is a horizontal arm, 31, which is mounted at the edge of the machine upon a vertical pivot, 33. In these arms 31 the burnishers 35 are mounted. The burnishers which I prefer to use are shown and described in my former patent, No. 370,053, dated September 20, 1887. The inner ends of both of the arms 31 are provided with suitable openings, through which the eccentric 5 on the shaft 3 extends. These arms are preferably arranged at the inner portions one above the other, as shown in Fig. 4, and a single eccentric passes through both of them and thereby both are operated simultaneously from the same shaft. The shaft 3 being driven through the means already described, both of the arms 31 will be very rapidly oscillated upon their pivots 33.

One or both of the burnishers may be heated by means of gas that is supplied through a suitable pipe, 39, arranged as shown in Fig. 2. If preferred, one of the arms 31 may be omitted, in which case but a single burnisher will be operated by the machine.

I claim as my invention—

1. The combination, in a machine of the class described, with the frame 2, of the vertical shaft 3, mounted therein and provided at its upper end with the eccentric 5, the horizontal arm 31, mounted upon the vertical pivot 33 and provided at its outer end with the burnisher 35, and having its inner end engaged by the eccentric 5, substantially as described.

2. The combination, in a machine of the class described, with the frame 2, of the vertical shaft 3, mounted in said frame and provided at its upper end with the eccentric 5, the arms 31, mounted upon opposite sides of the frame 2 upon vertical pivots 33, and provided at their outer ends with a burnisher, 35, and having the inner ends of both of said arms engaged by the eccentric 5, substantially as described.

3. The combination, in a machine of the class described, with the frame 2 and the shaft 3, mounted therein and provided at its upper end with the eccentric 5, of the horizontal pivoted arms 31, provided with the burnishers 35 and engaged by said eccentric 5, the friction-gear 7, the sliding shaft 9, provided with the friction-gear 11, adapted to engage said gear 7, the lever 17, connected with said shaft, the shaft 13, provided with the eccentric 25 and the hand-lever 19, and the arm 27, connecting said eccentric with said lever 17, substantially as described.

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