

No. 728,503.

PATENTED MAY 19, 1903.

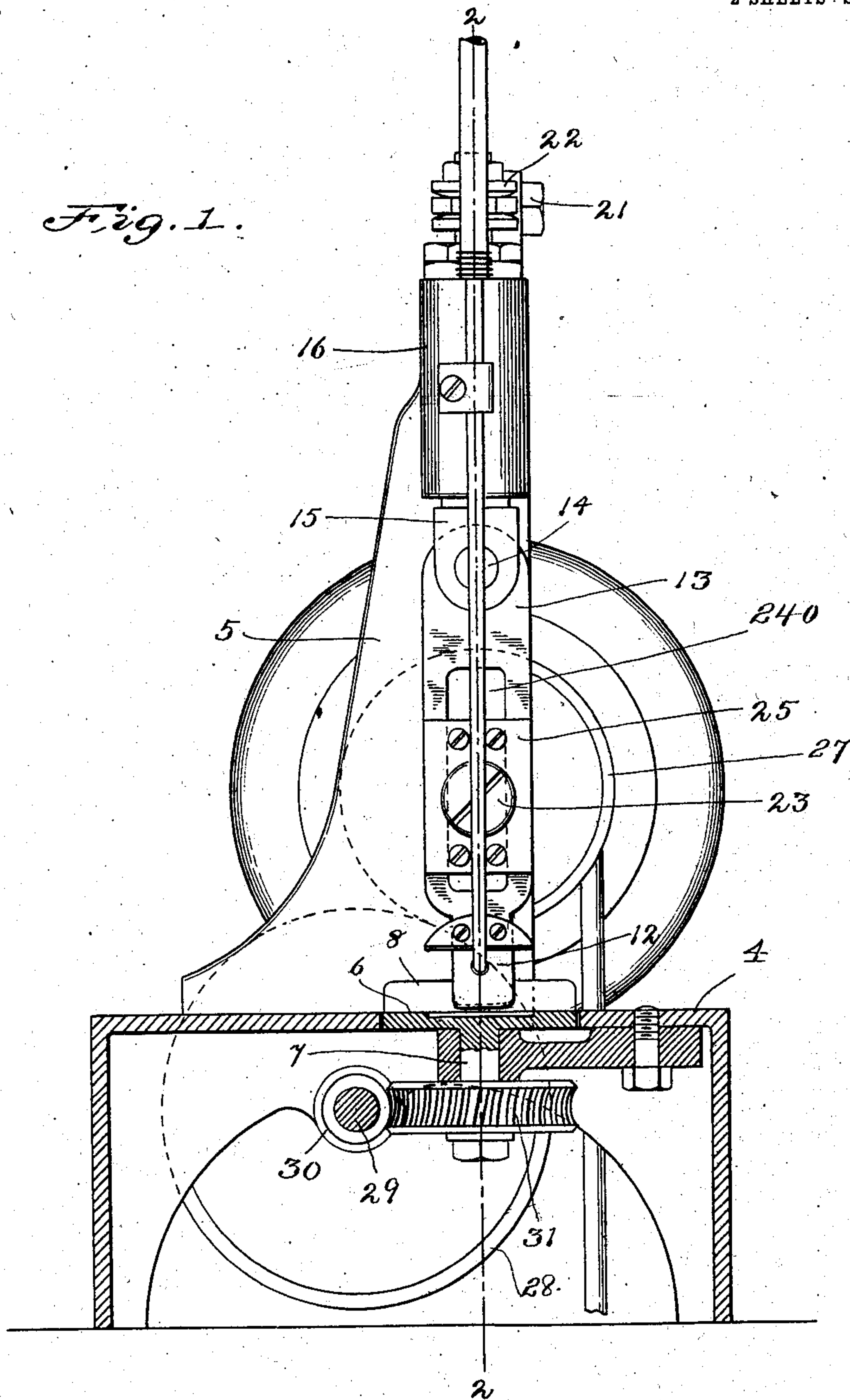
J. G. SCHNEIDER.
BURNISHING MACHINE.

APPLICATION FILED MAR. 24, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.



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E. Batchelder

INVENTOR:
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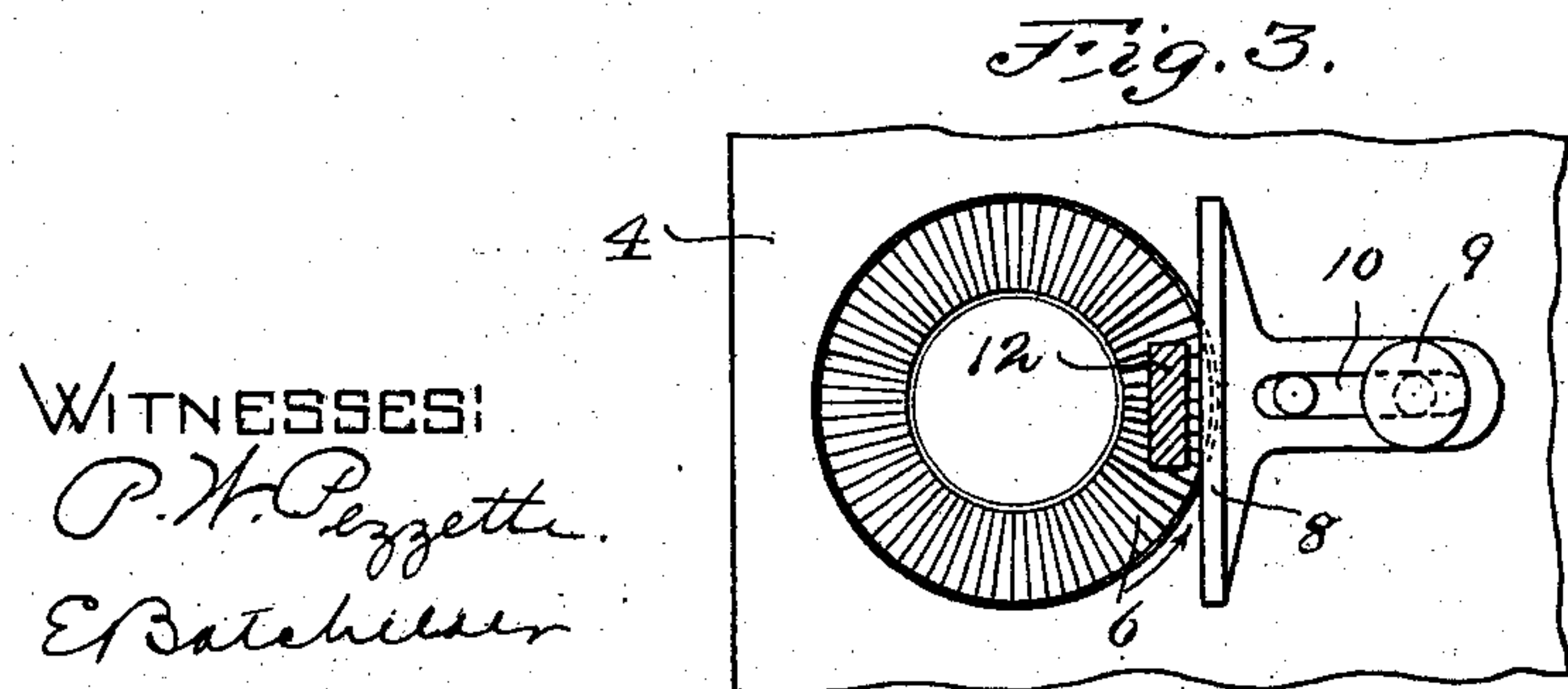
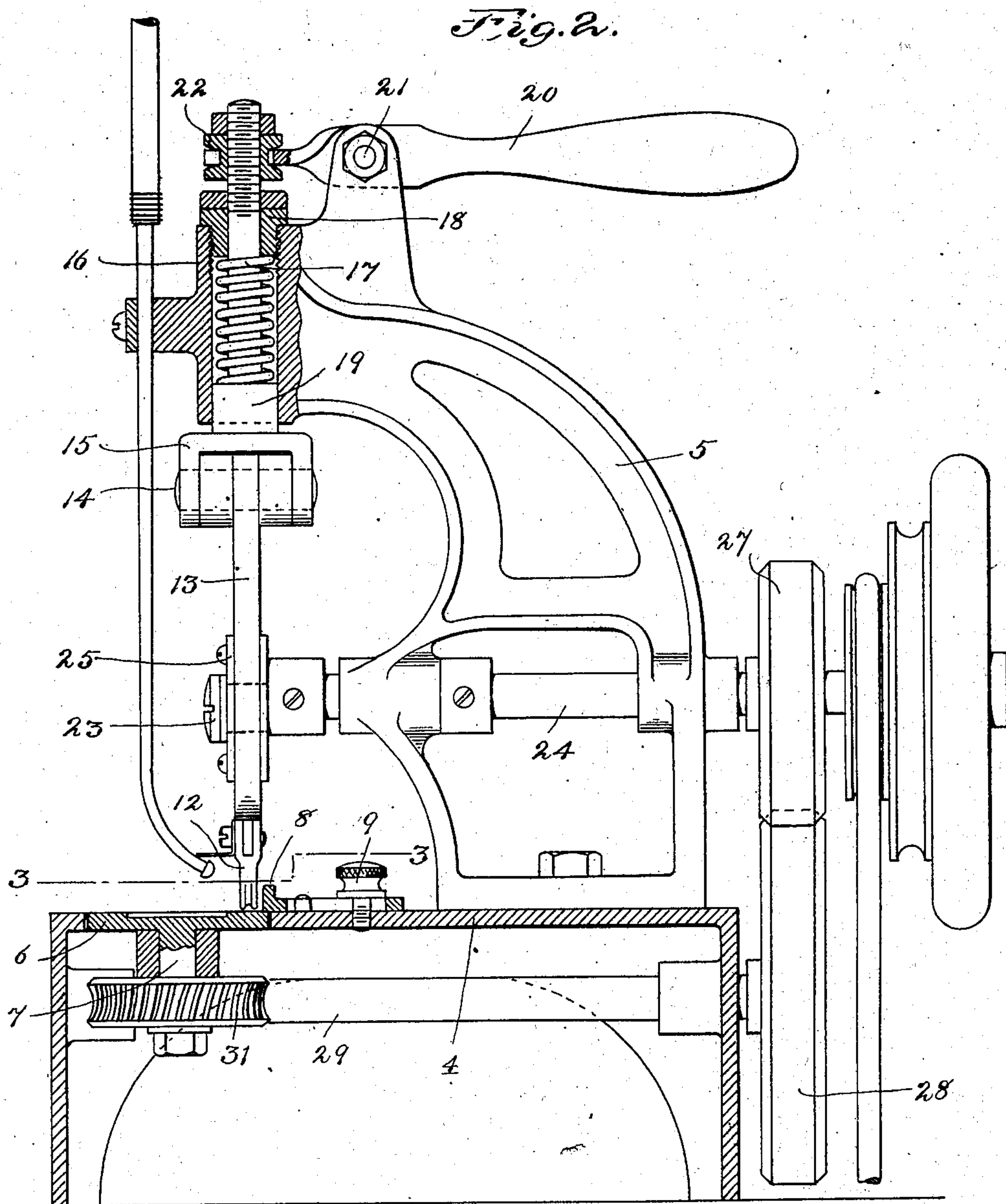
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NO MODEL.

2 SHEETS—SHEET 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN GEORGE SCHNEIDER, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF
ONE-HALF TO WILLET M. CLARK, OF BROOKLINE, MASSACHUSETTS.

BURNISHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 728,503, dated May 19, 1903.

Application filed March 24, 1902. Serial No. 99,593. (No model.)

To all whom it may concern:

Be it known that I, JOHN GEORGE SCHNEIDER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Burnishing-Machines, of which the following is a specification.

This invention has for its object to provide an improved machine for forming an ornamental line or lines on one side of a leather strip or piece and parallel with the edge thereof, the said line or lines being formed by indenting the said outer surface by a burnishing-tool and feeding the strip or piece along to cause the burnished indentation to assume the form of an elongated stripe or line parallel with the edge of the piece.

The invention is particularly intended for ornamenting straps, belts, and other articles of leather.

The invention consists in the several improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a front elevation of a burnishing-machine embodying my invention, a portion of the machine being shown in section. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a section on line 3 3 of Fig. 1 and a plan view of the parts below said line.

The same reference characters indicate the same parts in all the figures.

In the drawings, 4 represents a substantially horizontal table forming a part of the supporting-frame of the machine and having suitable legs or standards, and 5 represents the upper part of the supporting-frame, which may be formed integral with the table 4 or made separately therefrom and bolted thereto.

6 represents a rotary bed having a substantially horizontal work-supporting upper surface and mounted to rotate upon a vertical shaft or axis 7, which is journaled in a bearing affixed to the frame of the machine. The bed 6 is preferably a horizontally-arranged disk, the upper surface of which forms the work-support and is preferably radially corrugated, as shown in Fig. 3. I prefer to arrange the bed 3 so that its upper surface

is substantially flush with the upper surface of the table 4, the bed being located in a circular recess formed for its reception in the table.

8 represents an edge gage or guide which is adjustably secured to the table 4 by means of a clamping-screw 9, passing through a slot 10 in the shank of the guide 8. The guide 8 is located at one side of the axis of the bed 6 and preferably slightly overhangs the margin of said bed, as shown in Figs. 2 and 3.

12 represents a burnishing-tool which is located over the bed between the guide 8 and the axis of the bed. The tool 12 is formed to indent the upper surface of a piece of leather resting on the bed 6 and is adapted to burnish the indented portion, said burnished and indented portion being caused by the movement of the leather, as hereinafter described, to form an elongated stripe or band parallel with the edge of the leather or, if desired, a plurality of stripes, the tool having one indenting edge or a plurality of indenting edges.

The tool 12 is affixed to the lower end of a bar or carrier 13, the upper end of which is fulcrumed or pivoted at 14 to a holder 15. Said holder is vertically adjustable in a guide or socket 16, formed on the supporting-frame, so that the burnishing-tool can be raised and lowered, thus moved toward and from the bed 6. The holder 15 is normally pressed downwardly to cause the tool 12 to bear with a yielding pressure upon the work by means of a spring 17, located within the socket 16 and bearing at its upper end on an adjustable abutment 18 and at its lower end on a shoulder 19, formed on the holder 15.

20 represents a lever which is fulcrumed at 21 on the supporting-frame and is forked at one end, its forked end being engaged with a grooved collar 22, affixed to the holder 15. The operator by depressing the rear end of the lever 20 can elevate the holder 15, bar or carrier 13, and burnishing-tool 12 to permit the insertion of the work between the tool and the bed 6. When the lever is released, the spring 17 holds the tool with a yielding pressure upon the work, the pressure being adjustable by means of the abutment 18, which in this case is a collar having an exter-

nal screw-thread adapted to engage a screw-thread in the socket 16.

Means are preferably provided for giving the burnishing-tool 12 a back-and-forth motion, this motion being permitted by the pivotal connection of the bar or carrier 13 with the holder 15. The means here shown for imparting the said back-and-forth motion to the burnishing-tool comprise a wrist or stud 23, eccentrically mounted on one end of an operating-shaft 24, which is journaled in bearings in the supporting-frame, and a slide 25, engaged with the said wrist 23 and with a vertical slot 240 in the carrier 13, the arrangement being such that the rotation of the shaft 24 gives the wrist 23 a revolving movement, the said wrist imparting a corresponding movement to the slide 25, which moves up and down on the carrier 13 and imparts an oscillating motion to the latter and to the burnishing-tool.

The bed 6 is rotated in the direction indicated by the arrow in Fig. 3 by mechanism connecting the shaft 7 of the bed 6 with the operating-shaft 24, said mechanism, as here shown, comprising the following elements: 27 represents a friction-wheel affixed to the shaft 24 and running in frictional contact with a similar friction-wheel 28, affixed to a shaft 29, which is journaled in bearings in the supporting-frame below the table 4. 30 represents a worm affixed to the shaft 29 and engaging a worm-wheel 31, affixed to the shaft 7.

It will be seen that the rotation of the shaft 24 is communicated by the described mechanism to the bed 6. It will also be seen by reference to Fig. 3 that the relative arrangement of the bed 6, guide 8, and burnishing-tool 12 is such that the horizontal rotation of the bed has a tendency to hold the edge of the work closely against the guide 8. I prefer to so locate the burnishing-tool that the greater portion of its path is forward of a line drawn through the axis of the bed 6 at right angles with the path of the burnishing-tool. By the term "forward" I mean toward the side of the machine at which the operator is located, said side being at the right as the machine is viewed in Fig. 1.

In consequence of the described tendency of the bed to press the work against the guide the operator is enabled to very easily control the work, whether the same be straight or curved.

It will be seen that the horizontal bed besides having the described tendency to hold the work against the guide has the following advantage over a bed formed by the surface

of a roll rotating on a horizontal axis—namely, the horizontal work-supporting surface of the bed gives the corrugations of the bed an extended hold on the under surface of the work, preventing any tendency on the part of the burnishing-tool to force the work backward when the tool is moving backward or toward the operator.

I do not limit myself to the described details of mechanism, as the same may be variously modified without departing from the spirit of my invention.

I claim—

1. A machine of the character specified comprising a substantially horizontal bed rotatable on a substantially vertical axis, means for rotating said bed, a burnishing-tool located above said bed at one side of its axis and formed to indent the upper surface of a piece of leather supported by the bed, a bar or carrier supporting said tool and mounted to oscillate on a fulcrum above the bed, and means for oscillating said carrier.

2. A machine of the character specified comprising a substantially horizontal bed rotatable on a substantially vertical axis, means for rotating said bed, a burnishing-tool located above said bed at one side of its axis and formed to indent the upper surface of a piece of leather supported by the bed, a bar or carrier supporting said tool and mounted to oscillate on a fulcrum above the bed, means for oscillating said carrier, a vertically-adjustable support for the fulcrum of said carrier, means for exerting a downward yielding pressure on said support, and means for raising the support.

3. A machine of the character specified comprising a substantially horizontal bed, a substantially vertical shaft supporting the same, a burnishing-tool located above the bed at one side of its axis and formed to indent the upper surface of a piece of leather supported by the bed, a bar or carrier supporting the tool and mounted to oscillate on a fulcrum above the bed, an operating-shaft having an eccentric, connections between the said eccentric and carrier whereby the revolution of the eccentric is caused to oscillate the carrier, and connections between the operating-shaft and the bed-supporting shaft whereby rotary motion is imparted from the operating-shaft to the bed.

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

JOHN GEORGE SCHNEIDER.

Witnesses:

C. F. BROWN,
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