E. MERTENS.

APPARATUS FOR VARNISHING ROLLER SHAPED BODIES.

APPLICATION FILED JAN. 13, 1910.

1,166,850. Patented Jan. 4, 1916.

Fig. 1.

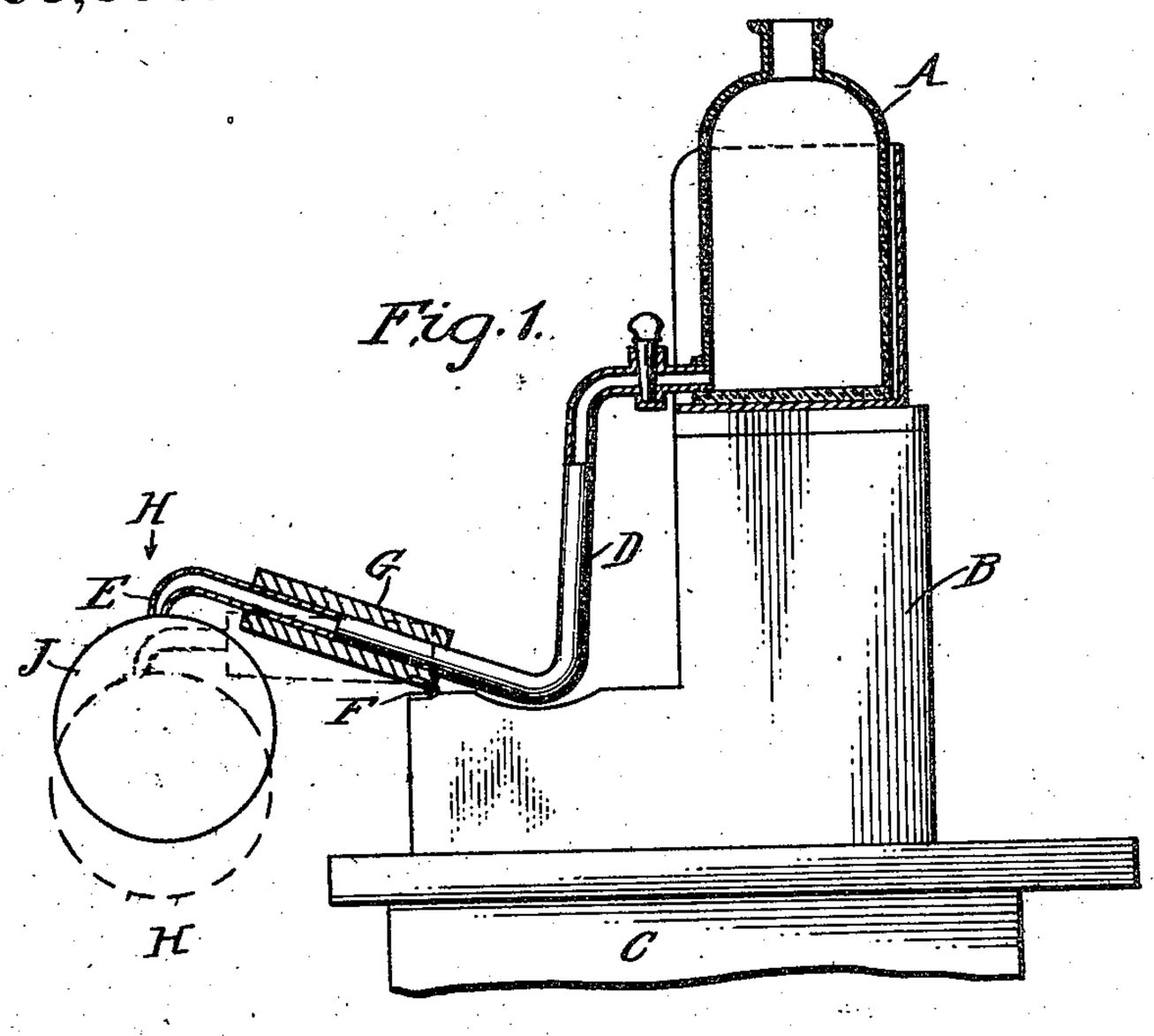
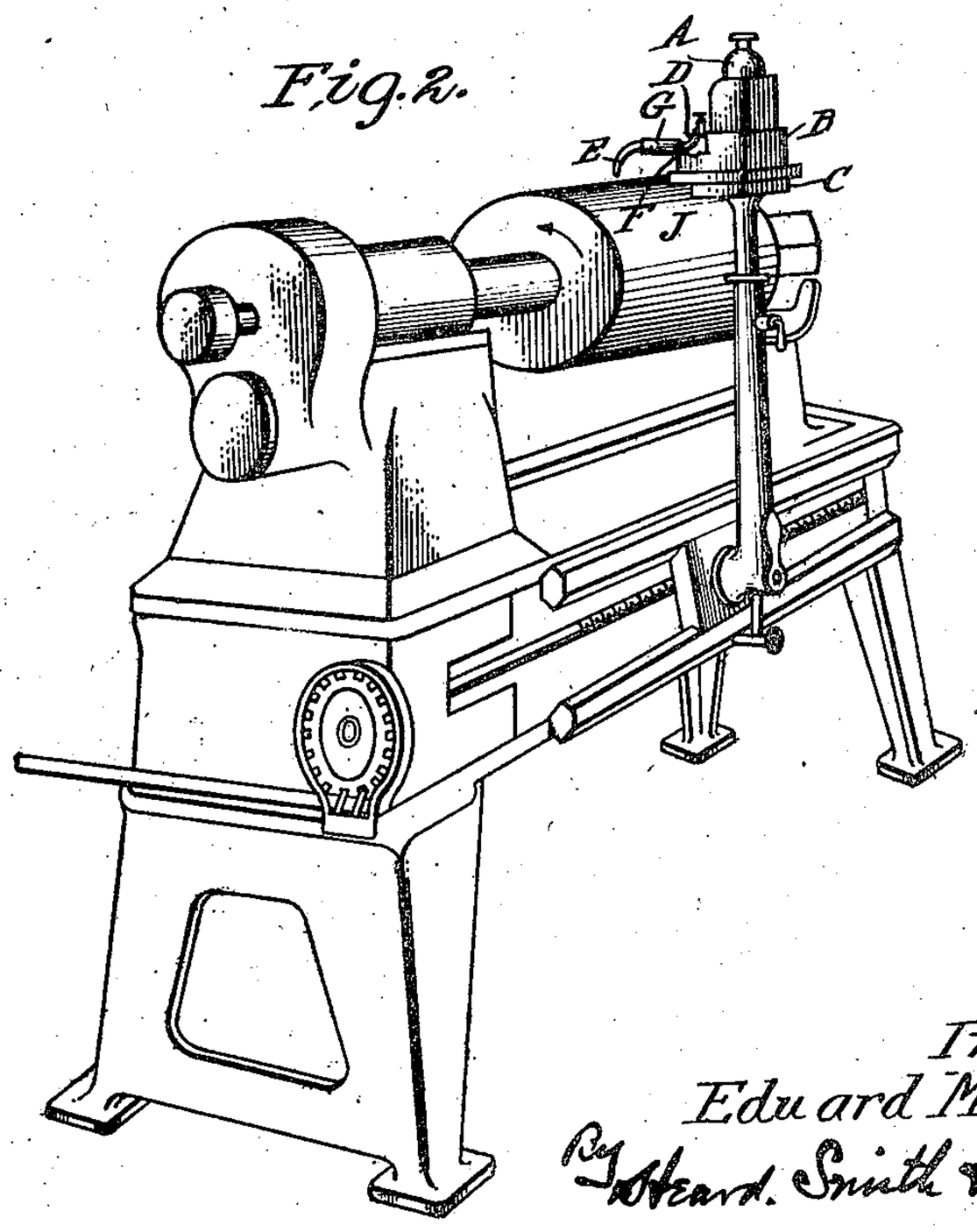


Fig. 2.



Inventor:
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UNITED STATES PATENT OFFICE.

EDUARD MERTENS, OF FREIBURG, GERMANY.

APPARATUS FOR VARNISHING ROLLER-SHAPED BODIES.

1,166,850. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed January 13, 1910. Serial No. 537,830.

To all whom it may concern:

Be it known that I, EDUARD MERTENS, a subject of the Emperor of Germany, residing at Freiburg, Baden, Germany, have invented a new and useful Apparatus for Varnishing Roller-Shaped Bodies, of which the following is a specification.

This invention has reference to apparatus for varnishing roller shaped bodies by means of a fine jet of liquid varnish applied spirally to the body.

A method of coating the surface of a roller with varnish or the like is known in which the roller is caused to rotate continuously in a fixed bearing upon a turning lathe or the like and a flask containing the varnish is placed upon the traveling saddle of the lathe, from the fine nozzle of which flask the liquid flows on to the surface of the roller. In this method of varnishing when there is any irregularity in the motion of the roller the nozzle is not always at the same distance from the surface of the roller or does not always lie regularly thereon, and this results in uneven application of the varnish.

In accordance with my invention the nozzle of the varnish squirt is allowed to swing under a predetermined pressure only in one plane—as nearly as possible in a vertical plane when the roller is mounted in horizontal bearings—so that it always makes regular contact with the surface of the roller in spite of unsteady running or pitching of the roller, the object of the invention being to insure great precision in the application of the varnish to the periphery of rollers for photogravure purposes.

I have illustrated my invention in the accompanying drawing.

Figure 1 shows the apparatus in sectional side elevation, and Fig. 2 is a perspective view of a lathe with the apparatus mounted thereon.

A flask A containing the varnish is mounted with a standard B upon the saddle C of the turning lathe and a nozzle E which is connected by means of a flexible or other tube D with the flask A is mounted in a block G which is attached by means of a hinge F to the standard B so that the nozzle E can swing in a vertical direction H—H, when the roller J pitches or rocks in its bearings, but cannot move at all sidewise. The axis of the hinge F is for this purpose mounted parallel to the axis of the roller J. The weight of the bearing block G presses the nozzle E firmly upon the surface of the roller J and the said nozzle is thus caused to partake of all the up and down movements of the surface of the roller, without displacement of the nozzle in the direction of the axis of the roller being possible. Instead of the saddle or support being slidable, the roller itself may be arranged to slide in the direction of its axis.

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

Apparatus for varnishing roller-shaped bodies by means of a fine jet of liquid varnish applied spirally to the body, comprising in combination with a turning lathe adapted to rotate the body on its longitudinal axis and having a traveling saddle which moves parallel to the said axis, a varnish reservoir mounted on a standard carried by the said saddle, a bearing block pivoted on the said standard and capable of swinging in a plane at right angles to the said axis, a nozzle carried by the said bearing block and pressed thereby with a constant pressure against the periphery of the roller-shaped body, and a flexible tube connecting the said nozzle to the varnish reservoir.

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

EDUARD MERTENS.

Witnesses:

H. KESTNER,

GEO. GIFFORD,

ARNOLD ZUBER.