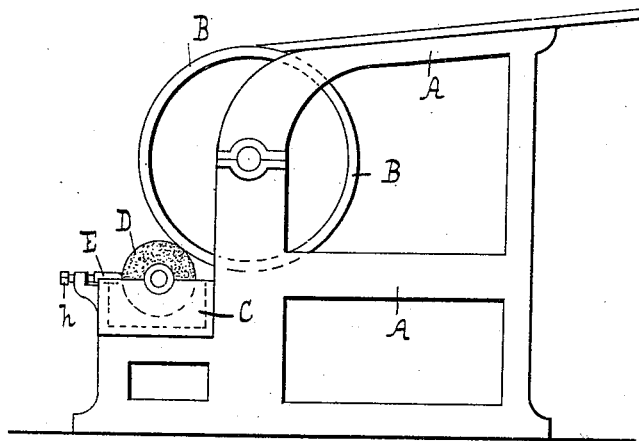


(No Model.)

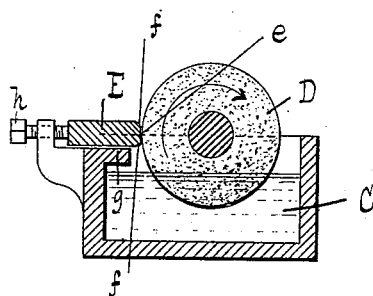
J. D. EHLERS.  
VARNISHING MACHINE.

No. 344,954.

Patented July 6, 1886.



*Fig. 1.*



*Fig. 2.*

*Witnesses:*

*Wm. Ringle*  
*Chas. W. Smiley*

*Inventor:*

*John D. Ehler*  
*By G. A. Boyden Atty*

# UNITED STATES PATENT OFFICE.

JOHN D. EHLERS, OF BALTIMORE, MARYLAND.

## VARNISHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 344,954, dated July 6, 1886.

Application filed March 1, 1886. Serial No. 193,688. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN D. EHLERS, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Varnishing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in varnishing-machines for lithographs, prints, labels, &c., as illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the machine; Fig. 2, an enlarged cross-sectional view of the varnish-fountain.

Similar letters refer to similar parts throughout the several views.

The letter A is the frame of the machine, and B the cylinder, both of which may be made in any of the usual and many forms, as desired.

To the frame A is attached the fountain C, which contains the varnish. To the fountain is attached the roller D, which is made of any flexible material—such as used for printers' rollers—and which is arranged in relation to the fountain so that it is in contact with the varnish therein, and in relation to the cylinder that it will bear against its periphery, thereby depositing the varnish on the print as it is brought in contact with the flexible surface of the roller as the cylinder rotates, the motion being imparted to the roller by being in contact with the print on the cylinder.

My invention pertains to regulating the amount of varnish deposited in this class of machines. Heretofore an auxiliary roller was arranged parallel with and to bear against the surface of the flexible one, to regulate the amount of varnish deposited, which rotated therewith in the same direction; but in passing the varnish between the two great trouble was experienced in regulating the quantity of varnish deposited, and it often occurs that when a thin coating is desired, and otherwise, the auxiliary roller had to be pressed so hard against the flexible one that it soon destroyed the same and resulted in imperfect work.

Previous to my invention it was thought necessary to have an auxiliary roller used in

connection with the flexible one to regulate the supply, which is erroneous if a scraper is properly arranged and constructed. Therefore I arrange the scraper E to the fountain C in a plane diametrical with the roller, with its face *e*, that bears against the same, of a form that its central portion conforms with that of the roller D, that when it is gently pressed against the roller it accurately regulates the amount of varnish disposed, with the adjoining corners *f* rounded off, by which any injury to the surface of the roller or other portions is avoided. The scraper E rests on the surface *g*, and is moved toward and from the roller D by the regulating-screw *h*, thereby governing the quantity of varnish applied. By this arrangement the flexible roller is not injured in any way, and the quantity of varnish regulated as may be desired.

I am aware that scrapers have been used before with metal rollers, and also flexible rollers are not new, but which have heretofore been used with an auxiliary roller to regulate the amount of varnish deposited; therefore I do not lay any claim to either, as I combine a scraper with the flexible roller as my invention; and

What I claim, and wish to secure by United States Letters Patent, is—

1. In a machine for varnishing labels, prints, &c., the combination of the cylinder B, the fountain C, the flexible surface-roller D, arranged to convey the varnish from the fountain to the print on the cylinder B, and the scraper E, arranged for the purpose set forth.

2. In a fountain for varnishing-machines, the combination of the flexible roller D, the scraper E, and the receptacle for the varnish, as set forth.

3. In a fountain for varnishing-machines, the combination of the receptacle for the varnish, the flexible roller D, and the scraper E, having the surface *e* to conform with the roller D, and the corners *f* rounded off, for the purpose set forth.

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

JOHN D. EHLERS.

Witnesses:

CHAS. W. SMILEY,  
JNO. T. MADDOX.