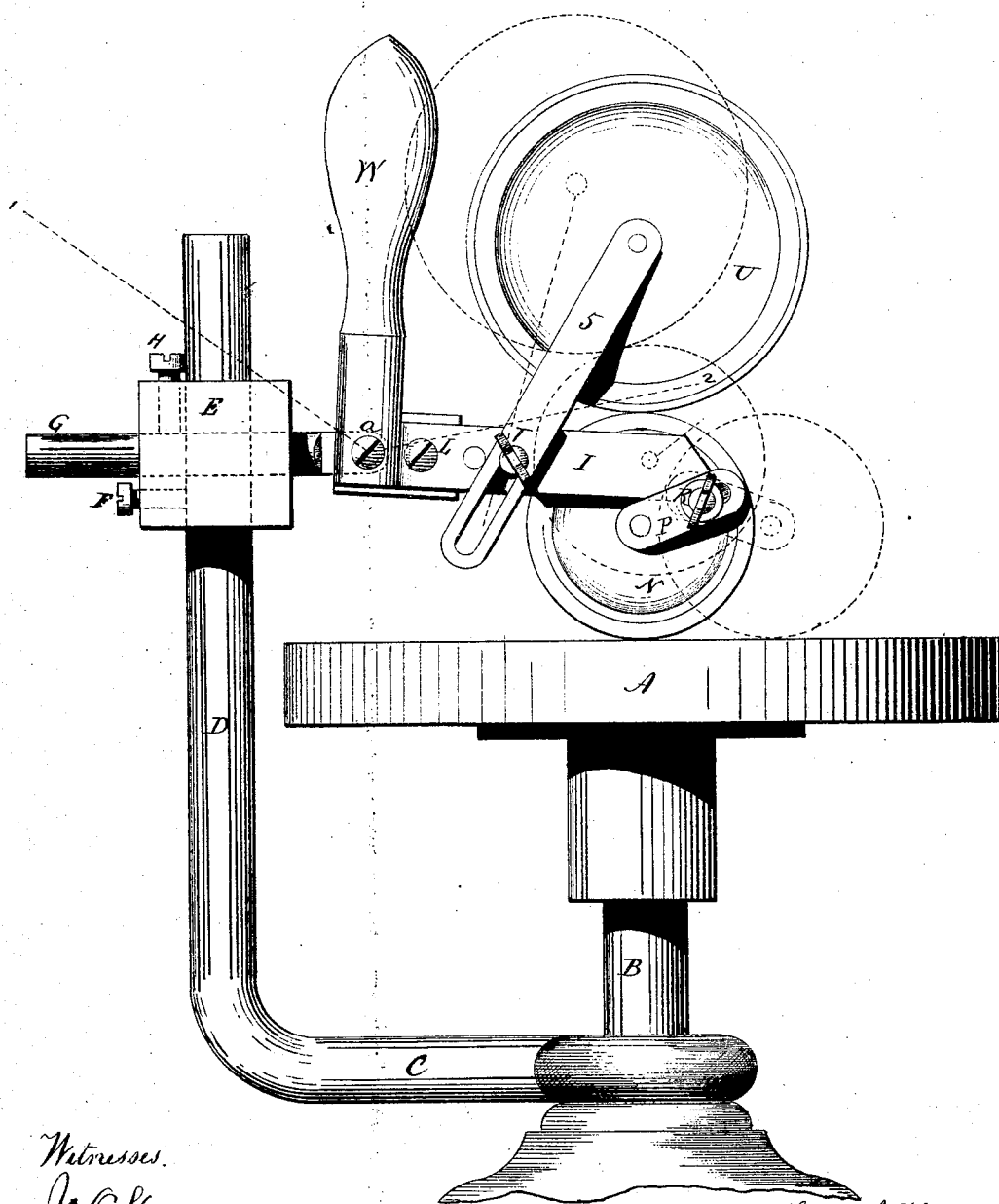


S. J. HOGGSON.
 Apparatus for Printing upon and Decorating
 Enamelled Surfaces.

No. 144,979.

Patented Nov. 25, 1873.



Witnesses.
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UNITED STATES PATENT OFFICE.

SAMUEL J. HOGGSON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
AMERICAN ENAMEL DECORATING COMPANY, OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR PRINTING UPON AND DECORATING ENAMELED SURFACES.

Specification forming part of Letters Patent No. **144,979**, dated November 25, 1873; application filed
September 16, 1873.

To all whom it may concern:

Be it known that I, SAMUEL J. HOGGSON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Machine for Decorating Enamel, Glass, &c.; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents a side view of the machine.

This invention relates to an apparatus for ornamenting enameled and other surfaces, preferably employing for the purpose the process for fixing the ornamentation for which Letters Patent were granted to me December 26, 1871; and the invention consists in a printing disk or roll supported upon a self-adjusting arm, and combined with an adjustable inking or fountain roll and a revolving table, and also in the mechanical adjustments of the same, as more fully hereinafter described.

A is a table, supported upon a central post or pivot, B, so as to be turned freely thereon. From this central post an arm, C, extends, and is turned up to form a post, D, which said post may be turned around or set at any desired position, its adjustment being preferably concentric to the table. On this post a block, E, is fitted to slide freely up and down, and also so as to be turned freely on the said post, and set at any required point by a set-screw, F. Transversely through this block is arranged a bar, G, and so as to be revolved or turned in the said block, and set in any desired position by the set-screw H. To the forward end of this bar G an arm, I, is hung upon a pivot, L, so as to swing freely up and down, and to the forward end of the arm the disk or roll N is hung, preferably by means of an auxiliary arm, P, adjustably attached to the arm I by a set-screw, R, so that the disk may be thrown forward, as denoted by the broken lines, and set, by means of the screw R, at any point between these two extremes. To the arm I another adjustable arm, S, is attached by means of a set-screw, T. To this arm the disk or roll U is pivoted. Upon the edge of the disk

N is made the form or type of the figure desired to be impressed upon the surface of any article, and the edge of the roll U is coated with the substance to be laid upon the article to be ornamented. This roll runs in close contact upon the disk N, so that the disk N takes from this roll the requisite material or substance; as, for instance, supposing the article to be ornamented to be an earthen, glass, or china plate, the design for the ornamentation is made upon the edge of the disk N, and the roll U coated with an enamel of the desired color. The plate is placed upon the table A, and the disk adjusted to the proper relative position, and the table and plate turned together. The disk, traversing around the plate in the desired path, leaves upon the surface of the plate its impression in the enamel taken from the roll U. The plate is then removed, and the ornamentation fixed by baking or otherwise. From this it will be understood how other articles of similar character may be ornamented. The arm I, being pivoted to the bar G, may be turned up from the table, or raised to any desired position, or will accommodate itself to any irregularities of the surface of the article to be ornamented; or it may be turned vertically into any desired position by turning the bar G accordingly.

In order to adjust the pressure of the printing-disk, I arrange a counter-balance, W, which may be in any desired form, and is attached to the arm L by a pivot, a, but so as to be turned toward or from the roll, as denoted by the broken lines 1 2. If the pressure required be greater, turn the weight W forward toward the roll; if less, turn it in the opposite direction. By this means the pressure can be adjusted to the greatest nicety.

I claim as my invention—

1. In combination with the revolving table A and the post D, the arm I supported from the said post, and carrying the printing-disk N and the coating-roll U, substantially as set forth.

2. In combination with the printing-disk N supported from the post D, the block E, to which the disk is attached, and made adjustable vertically and axially, substantially as described.

3. In combination with the printing-disk N, the post D, and the block E supporting the disk, the cylindrical bar G to which the disk is hung, and made adjustable in said block, substantially as described.

4. In combination with the printing-disk N, hung to or supported from the post D by the arm I, the weight W, pivoted to the said arm, for the purpose of adjusting the pressure of the said disk, substantially as described.

5. In combination with the printing-disk N, supported from the post D, and the coating-roll U, the auxiliary arm P, attached to and made adjustable upon the arm I, substantially as and for the purpose described.

SAMUEL J. HOGGSON.

Witnesses:

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