

T. Byrne & T. Henry
Printing Hats &c.

N^o 47516.

Patented May 2. 1865.

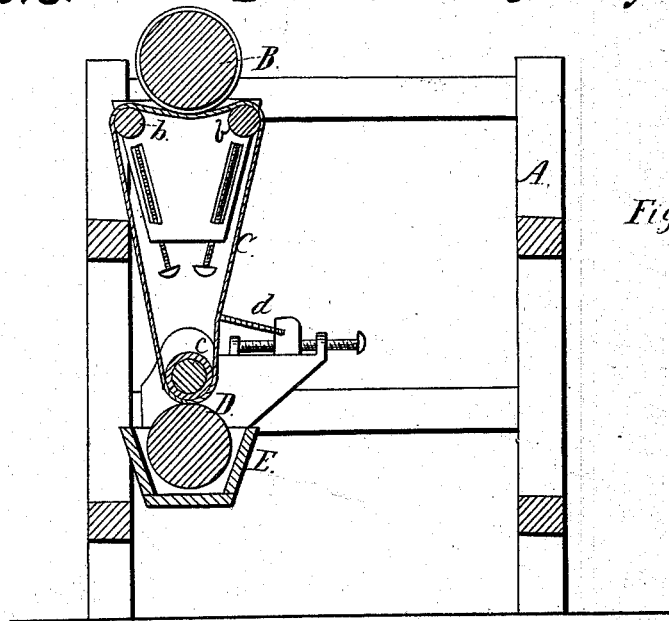


Fig. 1.

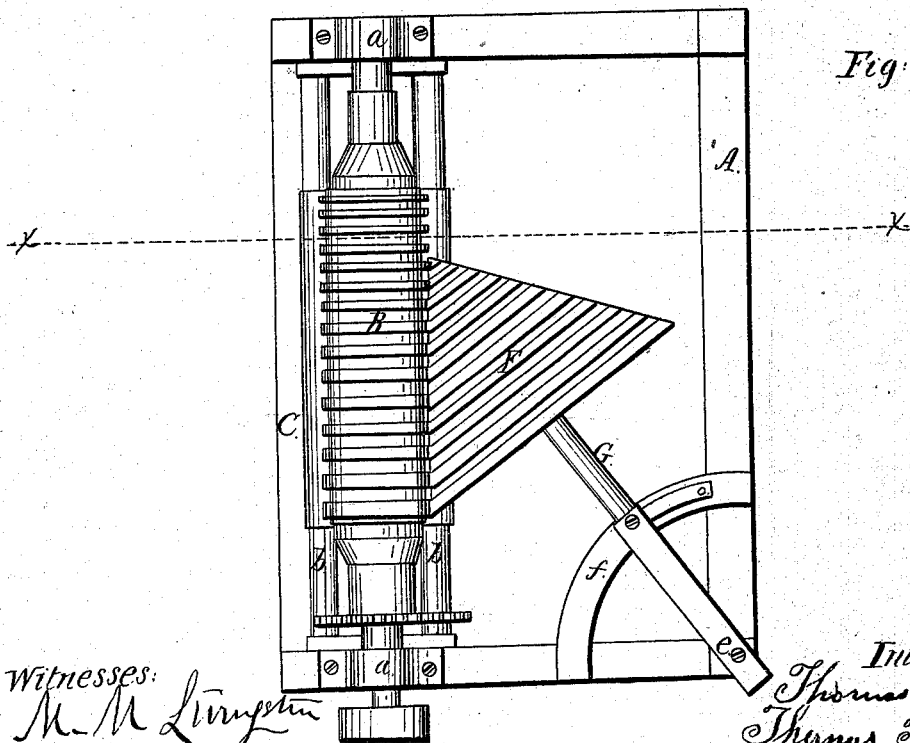


Fig. 2.

Witnesses:

M. M. Livingston
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Inventors:

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UNITED STATES PATENT OFFICE.

THOMAS BYRNE AND THOMAS HENRY, OF NEW YORK, N. Y.

MACHINE FOR PRINTING HATS.

Specification forming part of Letters Patent No. 47,516, dated May 2, 1865.

To all whom it may concern:

Be it known that we, THOMAS BYRNE and THOMAS HENRY of the city, county, and State of New York, have invented a new and Improved Machine for Printing Hats; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a transverse vertical section of this invention, the line *x x*, Fig. 2, indicating the plane of section. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention consists in the employment or use of a conical printing-roller combined with a suitable pattern roller or disk to which color is supplied by an endless apron, or other mechanism, in such a manner that hats and other articles secured to the conical printing-roller and revolved with it are brought in contact with the pattern-roller, and continuous stripes or other designs can be produced on said hats or other material with little loss of time.

A represents a frame, made of wood or any other suitable material and provided with journal-boxes *a* to form the bearings for the pattern roller B. This roller is provided with a series of circular projections to produce stripes on the articles to be printed, or it may be furnished with any other suitable pattern, and it revolves in contact with an endless apron, C, which extends over rollers *b b c*, and to which the requisite color is supplied by the color-roller D, which rotates in the trough E. Said trough is so arranged that it can be easily taken off and replaced by one containing a different color or that the contents of the trough can be changed at pleasure and with little labor. A doctor, *d*, bearing on the surface of the apron C, scrapes off the surplus

color and causes it to flow back into the trough.

The hat or other article to be printed is secured on the conical-roller F, which revolves loosely on the end of an arm, G, and said arm is secured to the frame A by a pivot, *e*, so that an oscillating motion can be imparted to it and to the conical roller toward and from the pattern-roller. It is adjusted in the desired position by a set-screw and segmental arc, *f*, or by any other suitable means. By using this adjustable arm with the conical roller we are enabled to bring said roller in a convenient position to put on and take off the hats or other articles to be printed, and, furthermore, said arm can be brought in different positions to accommodate itself to rollers of different shape, according to the articles to be printed.

We are aware that hats with circular stripes have been made, but such stripes were printed by blocks in several sections, and when the hat is finished these sections do not fully meet, and the appearance of the hat is impaired.

By the use of the conical printing-roller we are enabled to produce on the surface of the hat or other article continuous circular stripes or other patterns with little labor or loss of time, and our hats present a much better appearance than those printed in the old way.

Instead of the pattern-roller, a disk may be used which has engraved in its face the stripes or other pattern to be printed.

We claim as new and desire to secure by Letters Patent—

The employment or use of the conical printing-roller F, in combination with a suitable pattern-roller, B, of any desirable form or shape, and with a mechanism for supplying color, constructed and operating substantially as and for the purpose set forth.

THOMAS BYRNE.

THOMAS HENRY.

Witnesses:

M. M. LIVINGSTON,

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