

J. PERKINS.
COLOR PRINTING-BLOCK.

No. 172,340.

Patented Jan. 18, 1876.

Fig. 1.

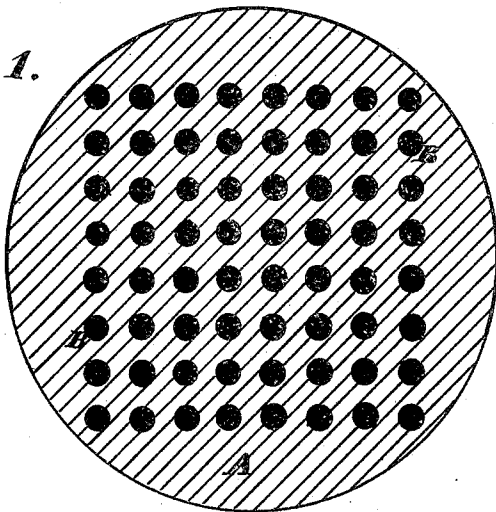
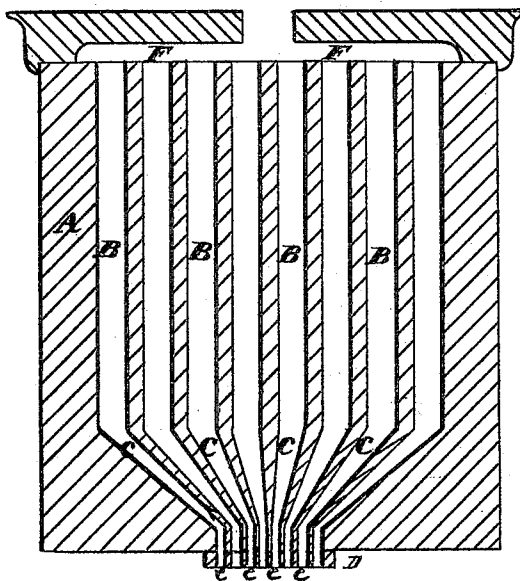


Fig. 2.



Witnesses

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JOSEPH PERKINS, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN COLOR-PRINTING BLOCKS.

Specification forming part of Letters Patent No. 172,340, dated January 18, 1876; application filed July 23, 1875.

To all whom it may concern:

Be it known that I, JOSEPH PERKINS, of San Francisco city and county, State of California, have invented an Improvement in Color-Printing Blocks; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains, to make and use my said invention or improvement without further invention or experiment.

My invention relates to certain improvements in color-printing, which are more especially applicable to printing oil-cloths, where many colors in a thick medium and small and intricate patterns are employed, and in which the printing has hitherto been done by many impressions.

My improvement consists in the employment of a pattern-block having two or more tubes or passages leading to its face, so that as many colors may be applied at one impression as may be desired. It also consists in the employment of a system of reservoirs for each of the tubes, and converging connecting-tubes opening into them, and a means for producing a pressure upon the surface of the paint in the reservoir so that a supply of color is continuously led to a printing-surface within a narrow compass, so as to form a colored pattern. I thus overcome a difficulty hitherto met in this class of color-printing, that the thick medium employed and the smallness of the patterns, has necessitated numerous impressions, and the use of a single color at each impression.

Referring to the accompanying drawings for a more complete explanation of my invention—

Figure 1 is a horizontal section. Fig. 2 is a vertical section.

A is a cylindrical or other suitably shaped vessel having any desired number of tubes or perforations, B, made through it. These tubes

serve as reservoirs, within which each color to be used upon any pattern may be kept entirely distinct from the other. These tubes must necessarily be large enough to hold a good supply of the colors, and as the pattern to be printed is always much smaller, it will be necessary to carry the colors, by some means, to the points where they are used. This I do by means of converging-tubes *c*, which extend from the ends of the reservoir-tubes to the upper part of the pattern-block D, where they connect with the smaller vertical printing tubes or holes *e*, which are formed in the pattern-block. Above the reservoir-tubes B I make a large open space, F, and this space I connect with any device for producing pressure, either hydraulic or pneumatic, as the case may require, so that I am enabled to produce an even pressure as great as may be required to force the colors through the concentrating-tubes and cause them to print accurately and evenly upon the surface beneath the pattern-block, and this is important in the case of oil-cloth printing, where thick paints are used.

I am aware that cylinders have been employed having tubes through which a single color is transmitted to the surface to be marked; that reservoirs are employed for holding colors; that perforated pattern-blocks are used; and I do not therefore claim these devices broadly, neither do I claim such an arrangement or construction; but

What I do claim as new, and desire to secure by Letters Patent, is—

In combination with the pattern-block D, perforated as described, the vessel A, reservoir B, with converging tubes, as shown, and the pressure-chamber F, all constructed to operate substantially as and for the purpose set forth.

JOS. PERKINS.

Witnesses:

GEO. H. STRONG,
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