

J. HOLT.
Press Dyeing.

No. 63,159.

Patented March 26, 1867.

Fig. 1

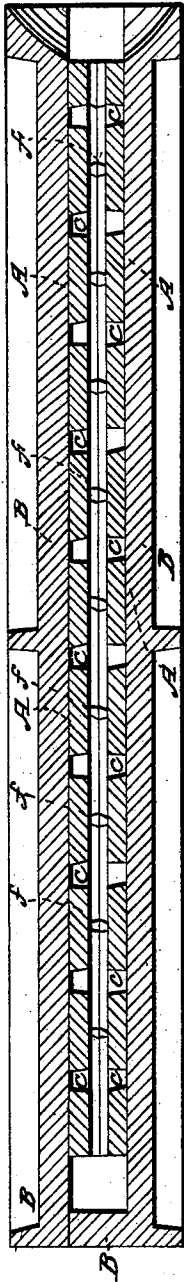


Fig. 3

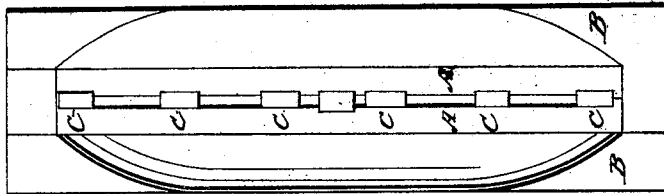
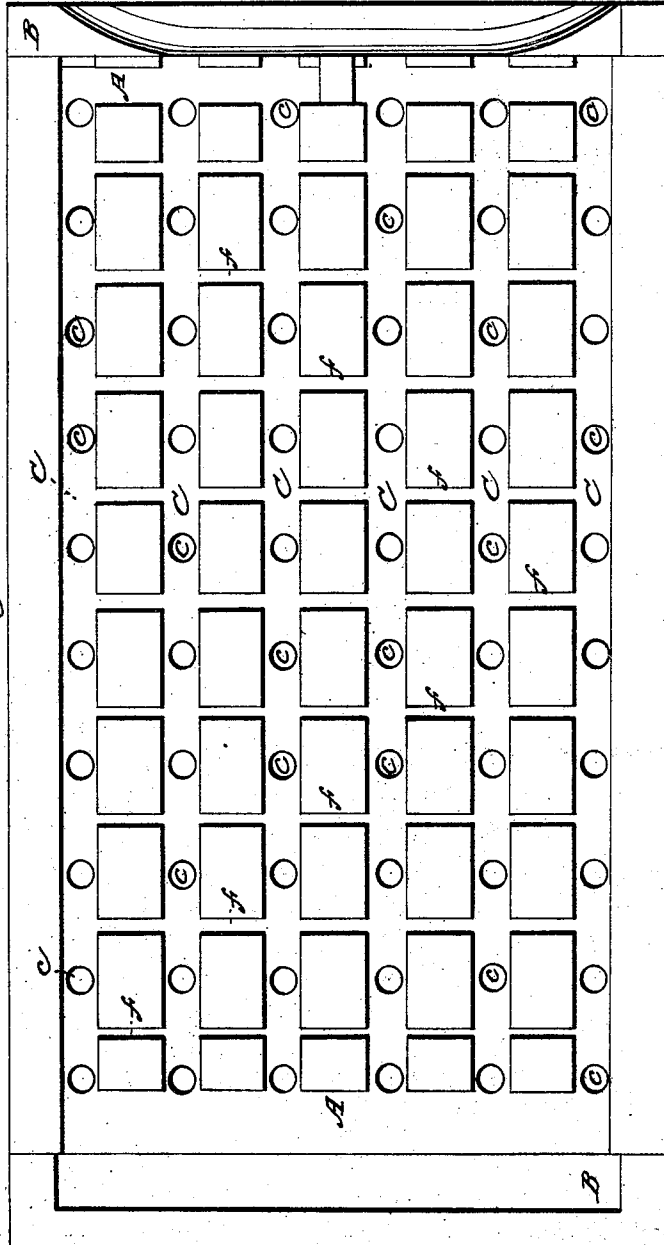


Fig. 2



Witnesses:

John E. Gloran
Henry H. Holt.

Inventor:

John Holt

United States Patent Office.

JOHN HOLT, OF LOWELL, MASSACHUSETTS.

Letters Patent No. 63,159, dated March 26, 1867.

IMPROVED METHOD OF MAKING DIES FOR FIGURES IN PRESS-DYED FABRICS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN HOLT, of Lowell, in the county of Middlesex, and State of Massachusetts, have invented a new and improved Method of Making the Impression Dies which are used for Producing the Figures in Press-Dyed Fabrics, which are textile fabrics colored in part in the ordinary coloring liquids by being folded over a series of impression dies made in figures of ornament or otherwise, and pressed firmly together on to both sides of the fabric to keep the coloring liquid from penetrating the fabric on such parts as is desired to retain the original color in said figures of ornament; and I do hereby declare that the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a central longitudinal section of my invention.

Figure 2, a plan of the lower half of the same.

Figure 3, an end view, where melted metal is poured into the mould.

My invention consists of a metallic mould formed of two inner plates, A, and two outer plates, B, all fitted together with great care. The inner plates are of about the same thickness, and both of these plates together must have an equal thickness throughout their entire surfaces. Longitudinal grooves, C, and transverse grooves, f, are made in the substance of the inner sides of the plates A, and the grooves C are wide enough to admit of holes, c, being made through the plates at the bottom of each groove. Either of the grooves may be made wider, and admits of a larger or a different-formed hole, that is, either square, or oblong, or curved and ornamental, so that the dies cast in said mould will produce ornamental figures on the fabric colored by the press-dyeing process where said dies are used. The inner plates A are arranged between the plates B on guide-pins, and when used, the plates are all put together and clamps placed thereon to hold them all firmly in place. The outer plates B fit very close to the outside of the plates A, and when the melted metal is poured into the mould, filling all the grooves C and f and the holes c, a die is formed so perfect that thirty or forty of them may be folded in with the cloth to be colored; and pressed firmly together in the coloring vat or tub and prevent the coloring liquid penetrating that portion of the cloth which comes between the projecting portions cast in the holes c throughout the entire pack or bundle of cloth which is being colored. The bars formed by the melted metal running into the grooves C and f serve as stays and connections for the dies or ornamental impression surfaces, and may be varied in form and size to suit the figure to be used in coloring the fabric.

I claim the method, substantially as herein described, of making the impression dies which produce the figures in press-dyed fabrics.

JOHN HOLT.

Witnesses:

JOHN E. CRANE,

HENRY H. HOLT.