

J. D. McDONALD.

Apparatus for Printing Patterns.

No. 155,879.

Patented Oct. 13, 1874.

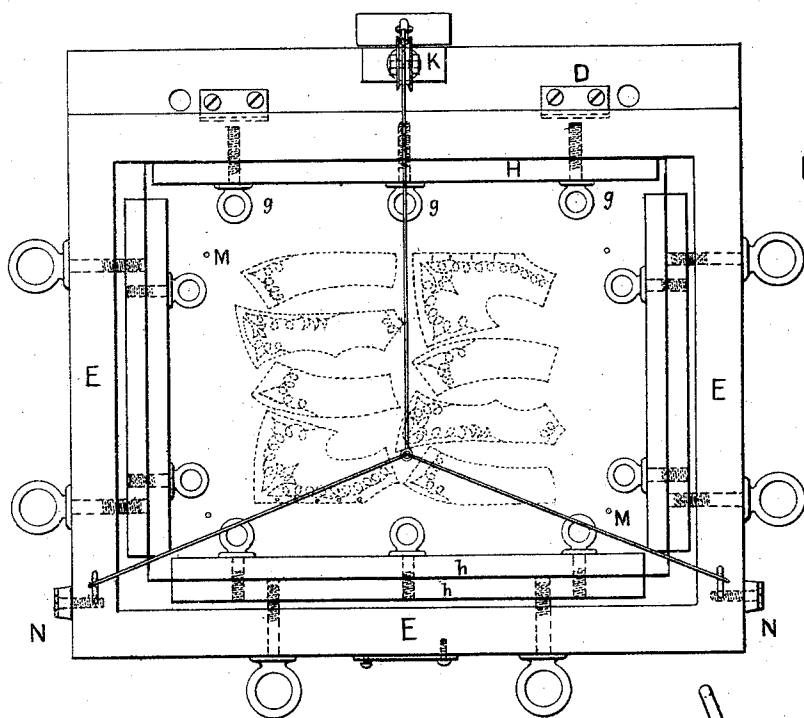
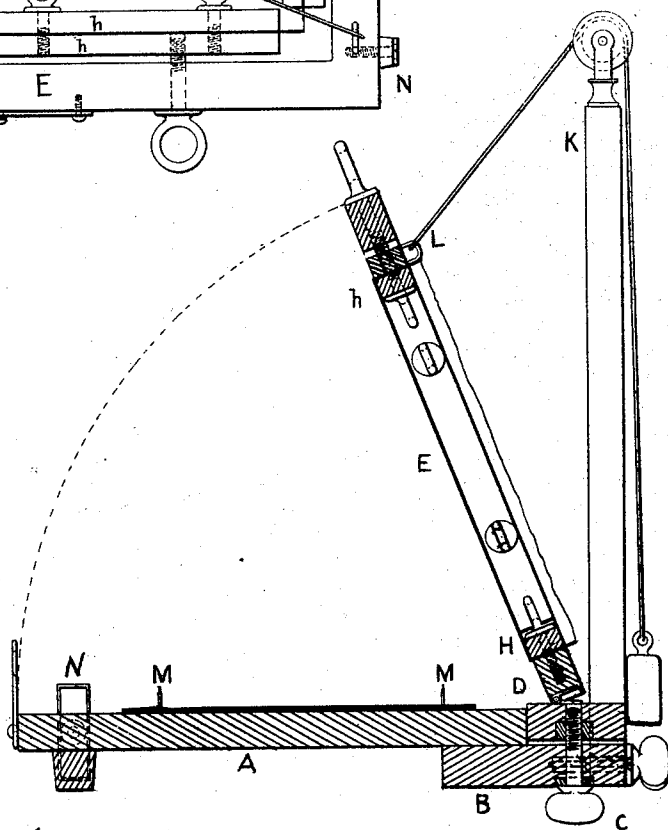


Fig. 1.

Fig. 2.



WITNESSES.

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IMPROVEMENT IN APPARATUS FOR PRINTING PATTERNS.

Specification forming part of Letters Patent No. **155,879**, dated October 13, 1874; application filed July 29, 1874.

To all whom it may concern:

Be it known that I, J. DUFF McDONALD, of the city, county, and State of New York, have invented certain Improvements in Stamp-ing or Stenciling Apparatus, of which the following is a specification:

This invention pertains to that class of devices used in the operation of stenciling or marking goods through perforated patterns; and the object of this invention is to provide certain conveniences for holding the pattern or perforated sheet in a smooth condition, and at the same time give great facility in handling it; also, to provide at the same time for variable thicknesses of the goods, or variable quantities of the same on the table, and registered, so that a great number of the same patterns may be cut at the same time; and the invention consists, first, in providing a frame for holding the pattern with adjustable clamps and screws so that the said pattern may be stretched smooth and held so during the operation of spreading the color over it; and, second, in mounting the pattern-frame over a table on which the goods are laid to be stamped, so that said frame may be raised or lowered at its hinged edge, to compensate for the varying thicknesses of the material or the varying quantities of the same on the table; and, third, in combination with the said frame, certain guides for holding it in proper registering position; also, a weight to assist in operating it, when required, as will hereafter appear.

Figure 1 represents a plan or view as seen in looking down upon the apparatus when it is closed and ready for the color to be applied. Fig. 2 is a transverse section, and with the pattern-frame raised or in the position to apply a piece of goods to be stamped.

At A is a table or board, of any suitable dimensions corresponding to the work to be done, preferably made large enough to hold the amount of material to form a suit or garment complete, so that a complete set of the patterns may be used at the same time, and arranged so as to have the goods cut without much waste, and also that when the cutting operation is completed the entire suits will be ready for the manufacturer to make up complete. At the back edge of the table A there

is attached a bar or two more cleats, as at B, through which regulating-screws, as at C, pass, and which engage with nuts in a second bar or block, as at D, to which the back edge or side of the pattern-frame E is hinged, as at F. The pattern-frame E is formed in a rectangular shape of four bars, framed together in a firm manner, and at the back edge or side is provided with binding or clamping screws, as at *g g*, which hold a bar or clamp-strip, as at H, against the inner edge of the frame, and between which the back edge of the pattern is held. The front edge of the pattern-sheet is then clamped between two strips, as at *h h*, by screws similar to those at *g g*, and then one of said strips is connected to screws that enter from the outer edge of the frame E, and through it, so that the patterns may be stretched or drawn outside,wise across the frame, and held tightly between the two sides of the pattern-frame E. Similar clamps to those last mentioned may also be provided at the ends of the pattern-frame for holding the ends of the pattern-sheet smooth and taut, if desired, but these are only necessary in the use of larger sheets, or when the pattern paper is liable to stretch inequally, or when wet or moist colors are used. Upon an upright at the back of the table, as seen at K, is provided a sheave to receive a cord, one end of which is attached to the pattern-frame E, as seen at L, and the other end is provided with a weight to act as a counter-balance to the pattern-frame, and hold it out of the way of the cutter or the operator, in laying on a piece of fabric to be stamped. Said sheave may be attached to the ceiling of the room, and thereby dispense with the upright, if desired. Pins, as at M, are also provided in the four corners of the table, to hold the material smooth upon it. Guides also, as at N, may be attached to the table at its outer corners, to prevent the pattern-frame from being thrown out of register with its previous work.

The operation of such an apparatus will now be readily understood. A sheet or one thickness of the fabric to be stamped is placed on the table and held with four pins at the corners. The pattern is then brought down upon it and the color rubbed through the per-

forations, and then a second layer of the fabric is laid over the first, and it is marked, and so on until a great number of sheets or layers are stamped—sometimes as many as twenty-five or thirty—when the operator, using a large pair of shears, cuts them all out at the same time.

This shows the importance of the pattern being held in a true position, so that the stamping will be the same on the various layers of the goods, and it also shows the necessity of having the back edge of the pattern-frame made so that it can be raised to adapt the pattern to increasing layers of material.

I therefore claim—

1. In a stenciling or stamping apparatus, as

described, the combination, with the pattern-frame E, of stretching-clips, as and for the purposes set forth.

2. In combination with the pattern-frame E, the adjusting-screws C at the back edge for raising or lowering the frame, as and for the purposes set forth.

3. In combination with the table of a stamping apparatus having a stretching pattern-frame, as described, the guides N, as and for the purposes set forth.

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Witnesses:

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