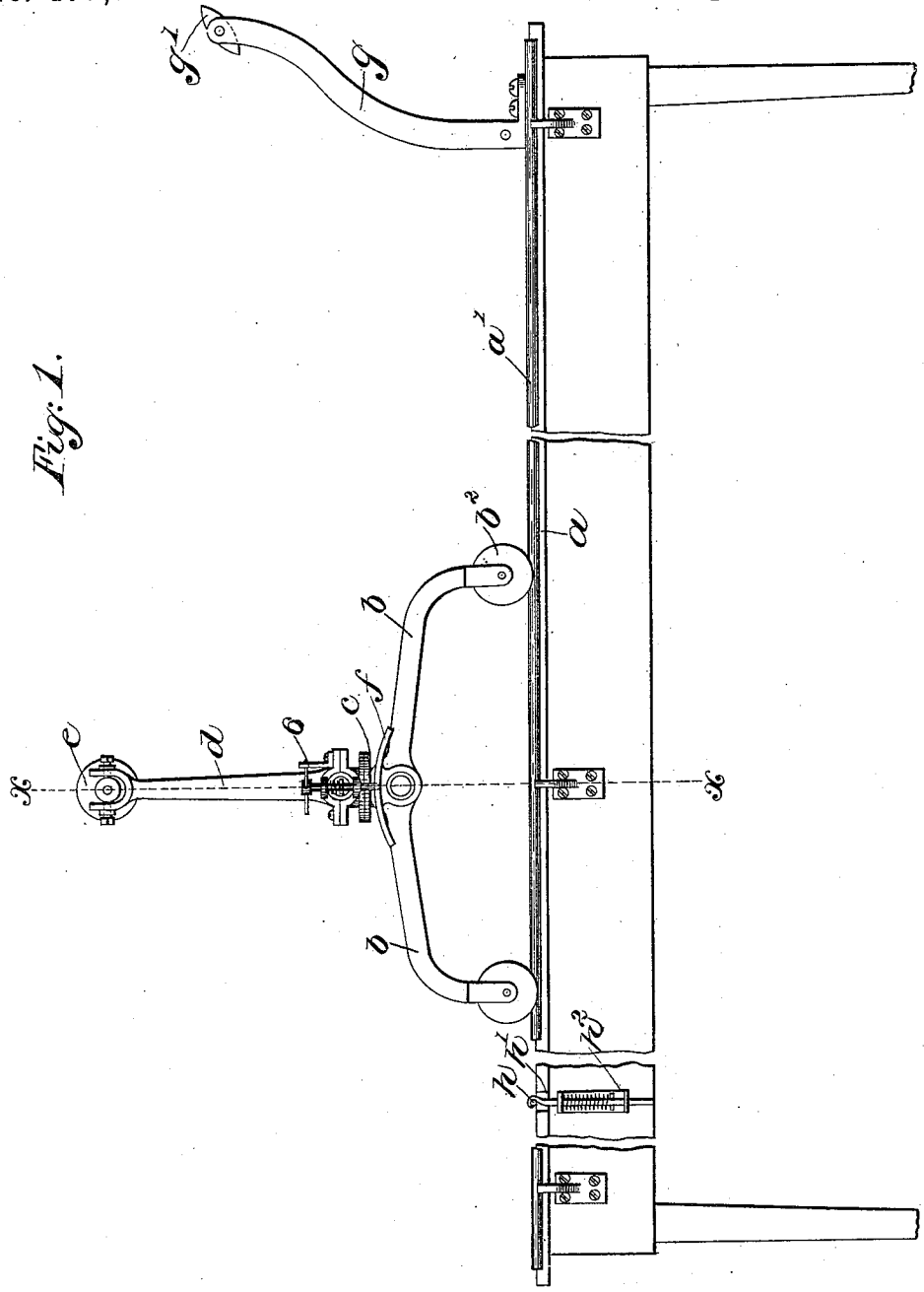
(No Model.) 2 Sheets—Sheet 1.

P. HOWE.

CLOTH LAYING MACHINE.

No. 472,173. Patented Apr. 5, 1892.

Fig. 1.



Witnesses.
Edward F. Allen
Louis N. Powell

Inventor.
Patrick Howe.
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Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.)

2 Sheets—Sheet 2.

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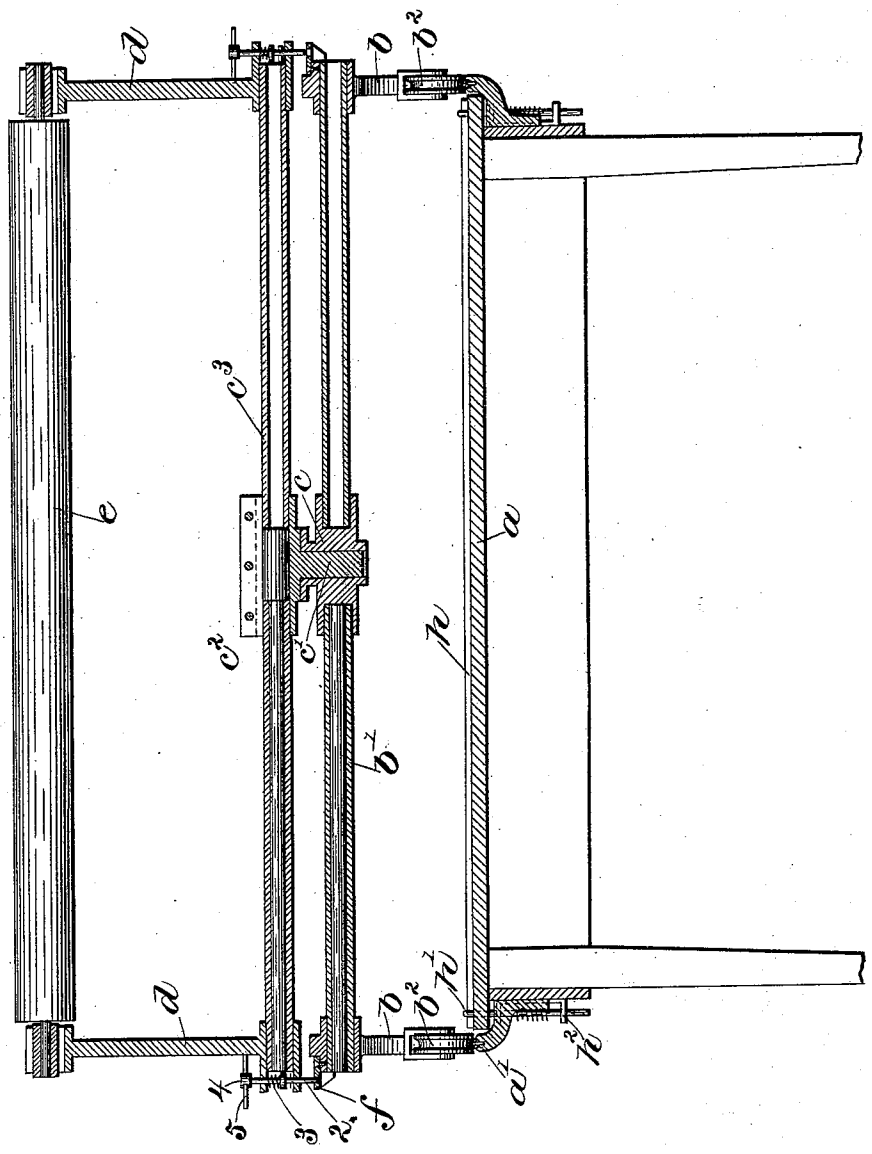
CLOTH LAYING MACHINE.

No. 472,173. Patented Apr. 5, 1892.

Fig. 2.



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UNITED STATES PATENT OFFICE.

PATRICK HOWE, OF BOSTON, MASSACHUSETTS.

CLOTH-LAYING MACHINE.

SPECIFICATION forming part of Letters Patent No. 472,173, dated April 5, 1892.

Application filed November 2, 1891. Serial No. 410,618. (No model.)

To all whom it may concern:

Be it known that I, PATRICK HOWE, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Cloth-Laying Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention has for its object to improve the construction of cloth-laying machines, whereby the position of the roll-supporting frame with relation to the carriage or truck supporting it may be reversed; and my invention consists in details of construction to be hereinafter pointed out in the claims at the end of the specification.

Figure 1 shows in side elevation a cloth-laying machine embodying this invention; and Fig. 2, a vertical section of the machine shown in Fig. 1, taken on the dotted line $x\,x$.

The table a is of any usual or suitable construction. At each side of the table a rails a' are supported by suitable brackets to form a track, which receives rolls b^2, journaled in suitable end supports of a carriage or truck, each end support being herein represented as having two supporting-lugs b, which carry the roll. Into each end support a tubular rod or bar b' is fitted, which rods or bars are connected at their adjacent ends to a pivot-block c, and as said rods or bars are of an equivalent length, or substantially so, the pivot-block will be centrally located. These roll-carrying supports and means employed to connect them together constitute a truck or carriage. The pivot-block c receives the pivot c' of a block c^2, into the adjacent ends of which are fitted tubular rods or bars c^3, which are made substantially the same length as the connecting rods or bars b' and lie in parallelism therewith. The rods or bars c^3 at their outer or extreme ends each have secured to them a vertical arm or post d, which arms furnish bearings at their upper ends for the journals of a roller e, arranged parallel to the rods or bars c^3 and transverse the table.

The cross-bars c^3 and vertical arms $d\,d$ constitute a roll-supporting frame for the cloth-supporting roll. At each end of the roll-supporting frame locking devices are provided, which are herein represented as pins 2, passing down through holes in extensions on the post or arms d, said pins being encircled by springs 3, which are connected at one end to the pins and are adapted to bear against the extensions at the opposite ends, the tendency of said springs being to normally keep the pins depressed.

At each end of the truck or carriage a plate f is secured, which has a convex upper surface and is provided at its center with a hole adapted to receive the projecting end of the pin 2. The upper end of each pin 2 is provided with a head having laterally-projecting arms 5, which when the pin is raised may be swung into position to rest upon the standard or stop 6 to thereby hold the pin in elevated position.

At one end of the table I have erected two standards g, which at their upper ends afford bearings for a roll g', made substantially flat, as represented in Fig. 1.

At one end of the table, and herein represented as at that end opposite the standards g, a rod h is laid crosswise the table and held down by spring-actuated hooks h', supported by brackets h^2 at each side of the table.

The operation of the machine is as follows: The usual board or flat roll having been withdrawn from a piece of goods, the flat roll g' is inserted and said roll, with the goods on it, is then placed in the supports in the standards g. The cloth is then wound upon the roll e by a crank or otherwise, thereby giving the operator ample opportunity to thoroughly inspect the cloth. One end of the cloth is then placed beneath the rod h and thereby firmly held down on the table, and the carriage is then moved to the opposite end of the table, where the cloth will be cut off. The carriage is then returned to its normal position without delivering any cloth. The roll-supporting frame is then unlocked and turned one-half a revolution and again locked. The end of the cloth is placed beneath the rod h and the carriage again moved to the opposite end of the table. This operation may be repeated as many times as desired, reversing the position of the roll-supporting frames each time, until several layers are piled upon the table.

It will be seen that by reversing the position of the roll-supporting frame for each layer, as described, the first layer of cloth

may be laid with the nap face upon the upper side, the second layer with the nap face upon the under side, and so on, the nap faces of each two successive layers coming in contact with each other. It will also be seen that the cloth may be laid evenly and quickly, so that when the pile is completed it may be marked off in patterns preparatory to being cut.

I claim—

1. In a cloth-laying machine, a table and track thereon, combined with a truck or carriage consisting of end supports, rolls carried thereby for the truck, rods or bars b', extended inwardly from each end support, a pivot-block c between the adjacent ends of and connecting said rods or bars, a roller-supporting frame pivoted to said block and comprising uprights d, rods or bars c^3, extended inwardly therefrom, a pivot-block c^2, intermediate and connecting the adjacent ends of said rods or bars c^3, a spring-controlled rotatable locking-pin to hold said frame in position, and means to retain said pin in inoperative position, substantially as described.

2. In a cloth-laying machine, a table and track thereon, combined with a carriage having thereon an extension f, made with a convexed upper surface and having a hole through it, and a roller-supporting frame pivoted to said carriage and having a spring-pressed pin 2, adapted to engage the said extension f and to enter the hole therein to lock the roll-supporting frame in fixed position, substantially as described.

3. In a cloth-laying machine, a table, a rail or track at each side thereof and supported beyond its edge, a truck or carriage movable on said rails or tracks, a roller-supporting frame pivoted thereon, and a retaining device at one end of said table, comprising a transverse rod h, spring-actuated hooks h' for the ends of said rod and located within said rails or tracks, and supporting-brackets for the hooks at each side of the table, the track having an unobstructed path from one to the other end of the table, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PATRICK HOWE.

Witnesses:
BERNICE J. NOYES,
EMMA J. BENNETT.