

L. L. ALLEN.
Machine for Coating Fabrics.

No. 162,332.

Patented April 20, 1875.

Fig. 2.

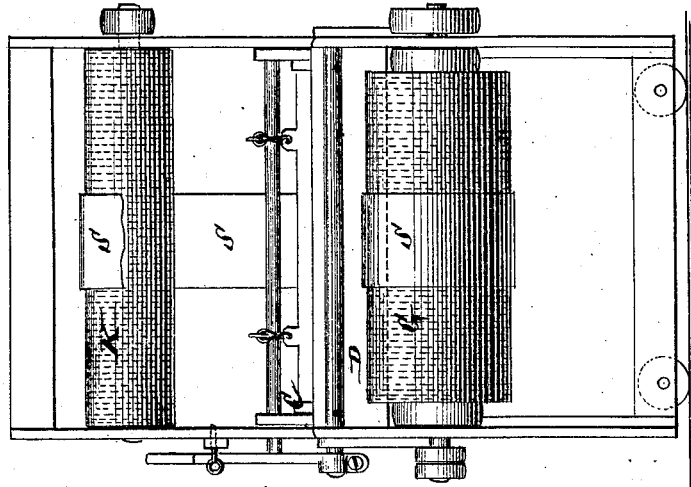
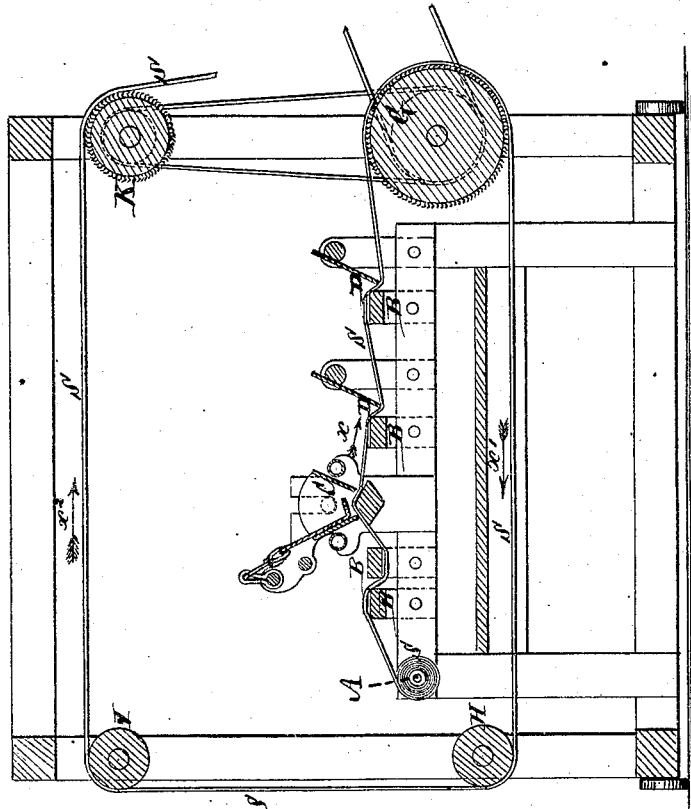


Fig. 1.



Witnesses
John Decker
Fred Warrner

Luther L. Allen
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

LUTHER L. ALLEN, OF MONMOUTH, MAINE, ASSIGNOR TO EASTERN MANUFACTURING COMPANY, OF ELIZABETH, NEW JERSEY.

IMPROVEMENT IN MACHINES FOR COATING FABRICS.

Specification forming part of Letters Patent No. **162,332**, dated April 20, 1875; application filed July 30, 1874.

To all whom it may concern :

Be it known that I, LUTHER L. ALLEN, of Monmouth, in the county of Kennebec and State of Maine, have invented an Improvement in Machines for Enameling Fabrics, of which the following is a specification :

This invention relates to the manufacture of enameled leather, cloth, or other fabrics or material, and in covering cloth, or other fabrics or material with water-proof and other substances or compounds, and more particularly relates to machinery for automatically spreading and covering the fabric with the enameling or other substance or compound, and in which the cloth or other material to be coated is fed along and covered with an evenly-laid surface of the enameling or other desired substance or compound, substantially as described in Letters Patent No. 130,968, issued September 3, 1872, to Charles E. Cummings, as assignee of myself. This invention consists in a combination with such or other equivalent covering and spreading machine, of card-clothed rolls at the delivery end of the machine, and smooth rolls at the opposite end thereof, arranged to pass the coated cloth or fabric in an elevated position, to be conveniently taken by the carrier of the drying apparatus, so that as it is delivered by the machine it may be hung up in folds or loops, as in apparatus for drying paper-hangings.

In the accompanying drawings, Figure 1 represents a longitudinal vertical section, and Fig. 2 a rear-end view of a machine having my invention applied.

A is the beam or roll, as in my former machine, hereinbefore referred to, on which the cloth or fabric S to be coated is wound, and from which it is unwound or fed to be passed, as indicated by the arrow x , under and over grooved bars B to smooth and evenly spread the cloth or other material to its full width, both before and after its passage below the hopper C, provided with steam chambers or tubes, and from which the enameling, water-proofing, or other substance or compound is deposited upon the cloth or other material,

and regulated in its delivery through an opening or throat in the bottom of said hopper by the action of a sliding gate, also passing under blades or scrapers D, which serve to distribute and incorporate the enameling or other mixture evenly upon the entire surface of the fabric. After the fabric S has passed these several stretching, coating, and spreading devices, it is passed around a card-clothed roll, G, at the delivery end of the machine, and on a level with said devices or thereabout, and from whence it is returned below, as indicated by the arrow x^1 , to and around a lower smooth roll, H, at the opposite end of the machine, and from thence up over another smooth roll, I, at the same end of the machine as the roll H, from whence it is run in an upward forward course, as indicated by the arrow x^2 , to and over an upper card-clothed roll, K, at the delivery end of the machine; said last-mentioned roll and the lower card-clothed roll G being belted together to run at the same speed.

By this combination of rolls the coated surface of the fabric passing over them is always kept from contact with the latter, and the upper card-clothed roll K delivers the fabric S in an elevated position to be conveniently taken by the carrier of the drying apparatus, which hangs it up in folds or loops, and which may be similar to the drying apparatus used for drying paper-hangings.

I claim—

The combination, with the feed-roll A, grooved bar B, hopper C, and scraper D of a machine for coating fabrics, of the card-clothed reel for receiving the fabric from the coating devices, the lower and upper rolls H and I for receiving the fabric from the roll G, and the card-clothed roll K, arranged above the roll G, for delivering the coated fabric in an elevated position to the carrier of a drying apparatus, substantially as described, for the object specified.

LUTHER L. ALLEN.

Witnesses :

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