

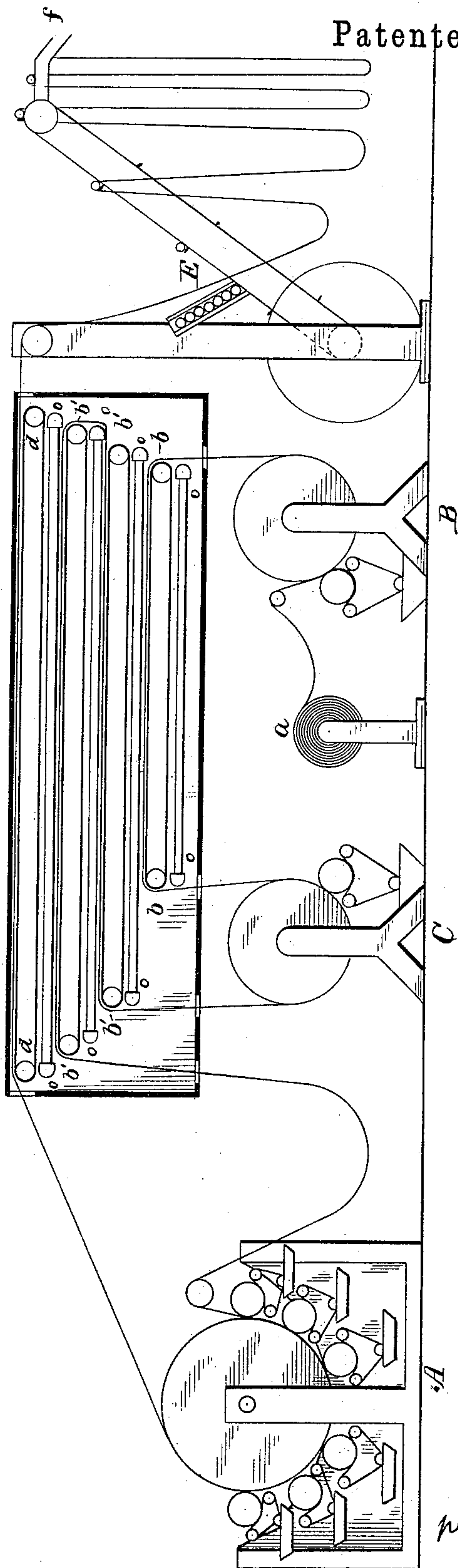
(No Model.)

W. WILSON.

METHOD OF MANUFACTURING WALL PAPER.

No. 335,264.

Patented Feb. 2, 1886.



Witnesses:
Wm. G. Wise.

Inventor
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per Horace Pettit,
att'y.

UNITED STATES PATENT OFFICE.

WILLIAM WILSON, OF EDGEWATER, NEW JERSEY.

METHOD OF MANUFACTURING WALL-PAPER.

SPECIFICATION forming part of Letters Patent No. 335,264, dated February 2, 1886.

Application filed October 30, 1885. Serial No. 181,429. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WILSON, of Edgewater, county of Burlington, and State of New Jersey, have invented a new and useful
5 Improvement in the Method of Manufacturing and Preparing Wall-Papers; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to an improved method
10 of manufacturing and preparing wall-paper; and it consists in grounding, printing, drying, and backing the paper with a back-coating or prepared backing in one operation, whereby
15 the paper, after leaving the roll in its blank unprepared condition, comes out, after undergoing the process, a fabric completely finished for the market, having the back-coating or prepared backing applied thereto.

The essential features of the apparatus employed by me in carrying out my improved
20 method or process are a backing-machine, through which the blank paper to be subjected to the process first passes and therein receives a complete coating of a suitable material on
25 what is to constitute the back or under surface of the paper. From this backing or blotching machine the paper, having received the back-coating, passes for the purpose of drying this coating through or between a set of canvas
30 aprons, adjusted lengthwise on rollers and provided with a series of steam-pipes by means of which the temperature between the said aprons is raised to a sufficiently high degree to thoroughly dry the coating before the paper
35 passes from the aprons into the second or grounding-machine. The paper thus having the back-coating thoroughly dried then passes from the drying-aprons into the grounding-machine, somewhat similar in construction to
40 the first machine. Here the blank or upper surface of the paper receives a coating or grounding, and from hence passes in one continuous passage through and between a second series of drying-aprons, similar in construction and principle to the first series, and after
45 the coating thus applied has become sufficiently dried to receive on this surface grounding the patterns, figures, designs, &c., desired to be produced the continuous strip of paper
50 then passes from this second series of drying-aprons into the color-printing machine, where

it receives, on the grounding thus applied and dried the patterns, figures, designs, &c., desired. The back-coating and printing process
55 being thus complete the continuous strip of paper, after leaving the printing-machine, passes through or between a third series of drying-aprons, and then is adjusted in folds for further drying purposes by means of a
60 suitable device, and then cut into the desired lengths and rolled into rolls. This method or process constitutes one complete operation, whereby the wall-paper is backed, grounded, printed, and dried with but a single handling
65 from the time the roll of blank paper is adjusted until it has undergone the last element of the process and is rolled into the rolls for the trade.

The object of my improved process is to save time and labor in the backing, grounding, printing, drying, &c., of wall-paper, and
70 a consequent saving of expense in its manufacture, and, further, to obtain by the said improved process a superior result in the fabric produced.

I will now describe my invention, so that
75 others skilled in the art to which it appertains may apply the same, reference being had to the accompanying drawing, forming part of this specification, in which the figure represents a sectional elevation of the apparatus as
80 employed in carrying out the process.

In the drawing, *a* represents the blank roll of paper in position to undergo the process. *B* represents the backing-machine, into which
85 the blank paper passes immediately from the roll, and receives, on what is to constitute the back or under surface of the paper, a back coating or prepared backing composed of a suitable material. From this machine *B* the
90 paper passes through or between the canvas aprons *b b'*, provided with a series of steam-pipes, *c*, for the purpose of drying the coating previously applied. From these drying-aprons the paper then passes in its continuous course
95 into the grounding or blotching machine *C*, where it receives on its blank surface or opposite side from that which was coated or backed in machine *B* a coating or grounding upon which the desired figures, patterns, &c., are to
100 be printed. From the grounding or blotching machine *C* the paper backed and grounded

passes through or between the heating-aprons *b' b'*, provided with a series of steam-pipes, as in the aprons *b b'*, where the coatings become thoroughly dried. From the aprons *b' b'* the paper thence passes, as shown in the accompanying drawing, into the printing-machine A, where the desired figures, patterns, designs, &c., are applied in the desired colors. From the printing-machine it passes on in its continuous course through or between the third series of drying-aprons *d d*, and thence onto racks or bars adjusted by a suitable device, as E, allowing the paper to fall into folds for further drying purposes; or, after being dried in any suitable manner, is rolled into rolls of the desired length prepared for the trade.

The machines B and C, used for backing and grounding the paper, are such as are in general use among wall-paper manufacturers for grounding and blotching purposes, and the printing-machine A is any practicable wall-paper printing-machine.

Heretofore all processes employed in the manufacture of wall-paper have been such as have been capable only of coating or decorating in the one operation but one side—*i. e.*, the outer surface of the paper.

I am aware that that part of the process which I have described relating merely to the grounding, printing, and drying has been in use a number of years; but what I claim as my improved method is the backing, grounding, printing, and drying, &c., in one continuous process, considered as a whole, and thereby obtaining a completely new and improved method of manufacturing wall-paper with a backing or back-coating in one and a single operation.

The entire process can be put into operation and regulated by a single lever, and requires no handling of the paper from the time the blank roll *a* is placed in position until it comes out at *f* finished in every detail, grounded,

printed, dried, &c., and having the prepared backing or back-coating applied thereto. 45

I am aware that heretofore processes have been invented for coating, grounding, enameling, and finishing the surface of paper and card-board in the one continuous operation. This, however, is not what I claim as my invention. 50

My invention consists in the process of producing a wall-paper or fabric having a back-coating or prepared backing applied thereto by backing, grounding, printing, and drying the paper or fabric in one continuous operation or process in the manner hereinbefore described. 55

The advantages of my improved process are the saving of time and labor in the manufacture of wall-paper, and also the saving of expense in the cost of production, and by reason of the superior process the obtaining of a superior result in the fabric itself. 60

I do not herein limit myself to any special form of apparatus or machinery. 65

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described method or process, in the manufacture of wall-paper, of backing the paper with a back-coating of prepared backing, and of grounding, printing, and drying in one continuous operation, in the manner and for the purposes substantially as hereinbefore set forth. 70

2. The combination of the backing-machine B, the drying-aprons *b* and *b'*, the grounding or blotching machine C, and the printing-machine A. 80

In testimony whereof I have hereunto set my hand this 21st day of October, A. D. 1885.

WILLIAM WILSON.

Witnesses:

B. F. HESSER,
JAMES LANING.