

D. S. ANDERSON.
MACHINE FOR MANUFACTURING ROOFING COMPOSITION.
No 32,111. Patented Apr. 23, 1861

Fig: 1.

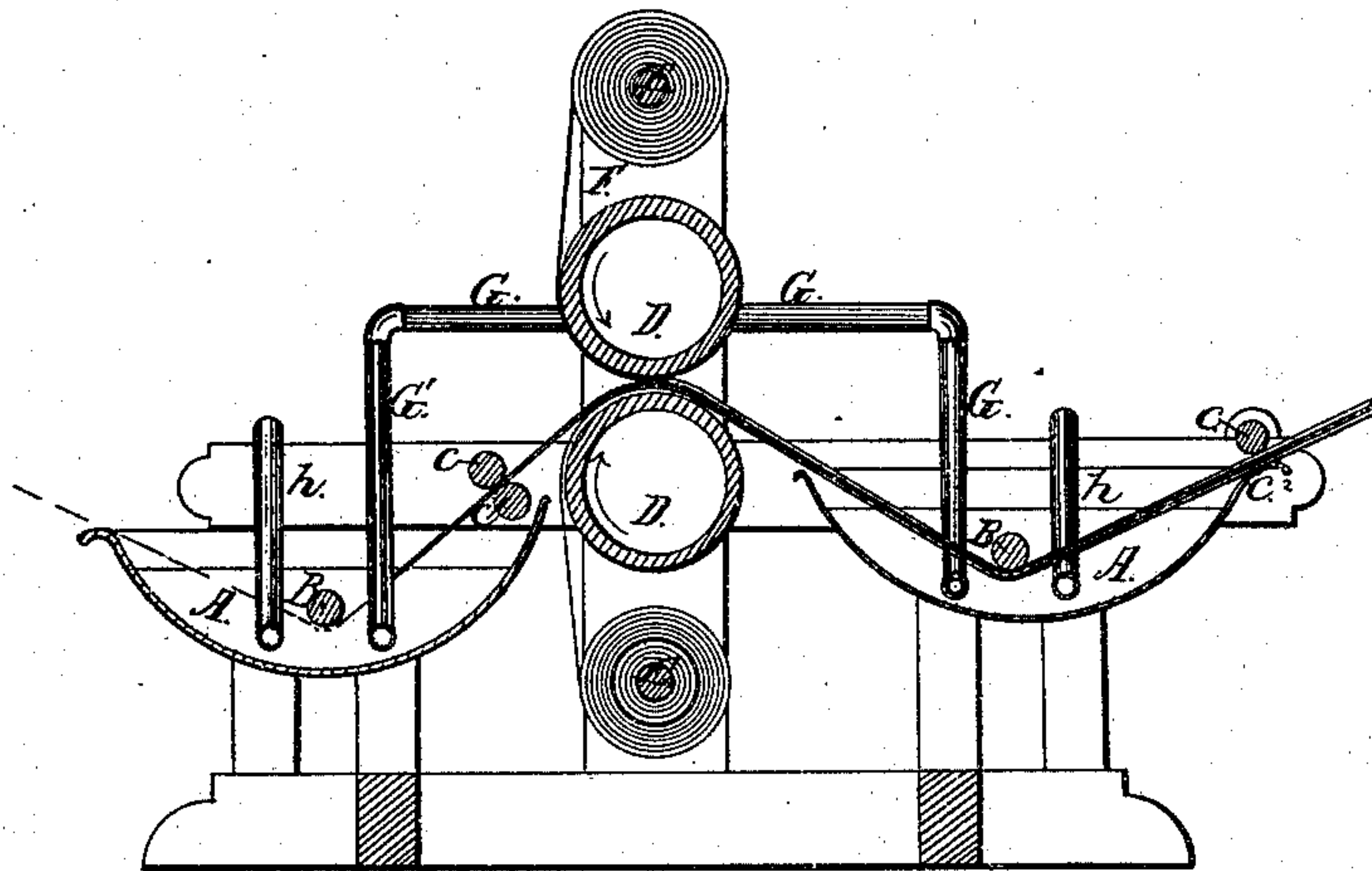
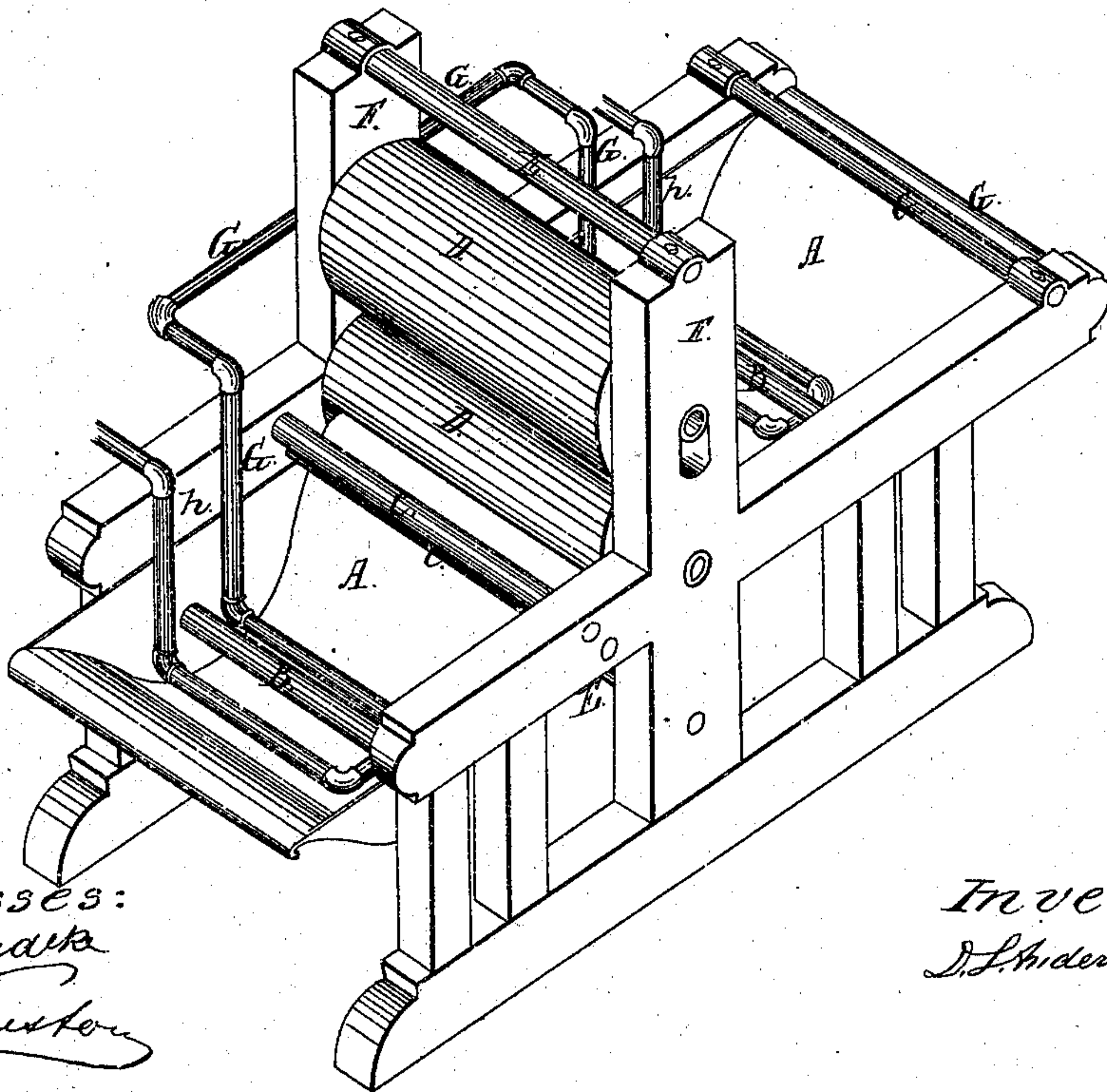


Fig: 2.



Witnesses:
Chas. G. Offutt
J. H. Johnston

Inventor:
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UNITED STATES PATENT OFFICE.

DAVID S. ANDERSON, OF TRENTON, NEW JERSEY.

APPARATUS FOR MAKING ROOFING-CLOTH.

Specification of Letters Patent No. 32,111, dated April 23, 1861.

To all whom it may concern:

Be it known that I, DAVID S. ANDERSON, of Trenton, in the county of Mercer and State of New Jersey, have invented a new and Improved Mode of Making Roofing-Clothing; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure (1) of the drawings represents a vertical section through the machinery used for making the roofing cloth and Fig. (2) represents a perspective view of the same.

The nature of my invention consists in saturating a piece of cotton cloth with a heated compound of tar and india rubber covering this saturated cotton cloth on both sides with paper, and coating this combined cotton cloth and paper on both sides with the same heated compound of tar and india-rubber, all done by the machinery represented on the annexed drawings, making a part of this specification.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

My improved machine for making roofing clothing, consists of two receptacles A, A, for the reception and distribution of the compound of tar and india rubber, near the bottom of which receptacles two rollers B, B, are placed to guide the cloth through the compound. The rollers C, C and the roller C' in connection with the rounded edge C² of the receptacle A serve to regulate the thickness of the layer of the compound and facilitate the motion of the cloth through the machine.

The two uprights F of the frame support two hollow iron rollers or calenders D, D, the distance of which may be adjusted by means of screws, or which may be pressed together by means of levers or in any other proper way. These calenders will be constructed to allow their heating with steam or hot air, if required. Perpendicular above and below these calenders D, D, and supported by the same uprights F two rollers E, E, are provided to receive the necessary quantity of paper and feed it to the calenders D, D.

The compound of tar and india-rubber may be heated and kept at a constant temperature by the radiating steam pipes g, g, conducting steam in two or more returns near the bottom of the receptacles through the compound and discharging the used steam by the exhaust pipes h, h.

Operation: The rollers E, being provided with the necessary quantity of endless thick paper and the receptacle filled with the proper quantity of the compound of tar and india rubber, the operation is commenced by passing the cotton cloth or canvas, which forms the center part of the roofing cloth, beneath the roller B of receptacle A and between the rollers C, C, to the calenders D, D at the same time the paper from each of the rollers E, E is also passed to the two calenders D, D.

It will be understood that by passing the cloth beneath the roller B which is entirely covered by the compound, the cloth is impregnated with this compound, and by passing between the rollers C, C the compound is spread uniformly on both sides of the cloth, and at the same time pressed into the pores of the same.

In Fig. (1) of the drawings the cloth is represented by the red line, the layer of compound on both sides by fine black lines inclosing the red line, the yellow lines denote the paper, which is intended to cover the impregnated cotton cloth on both sides, and which is by means of the rollers E, E, and of the calenders D, D, uniformly spread, pressed, and cemented upon the cloth. From the calenders D, D, the cloth, covered on both sides with paper is passed beneath the roller B in the receptacle A to be again covered and impregnated with the compound of tar and india-rubber, contained in the receptacle, and this last coating is uniformly spread by passing between the roller C, and the edge C² of the receptacle. The so prepared roofing cloth consists of cotton cloth impregnated and covered with a compound of tar and india rubber inclosed on both sides with thick paper, again covered with similar composition leaving the whole when dried fit for use.

Having thus fully described the construction and operation of my machine for making my composition roofing, I will proceed

to state what I claim as new and of my invention, and what I desire to secure by Letters Patent of the United States.

What I claim is—

- 5 The hollow calenders D, D, combined with the paper rollers E E, the distributing rollers B, B, and regulating rollers C, C, C' in connection with the receptacles A A pro-

vided with radiating steam pipes *g, g*, or their equivalents, when arranged as described with, in, and for the principle specified. 10

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Witnesses:

C. M. NORCROSS,
NICHOLAS DUGAN.