No. 632,871.

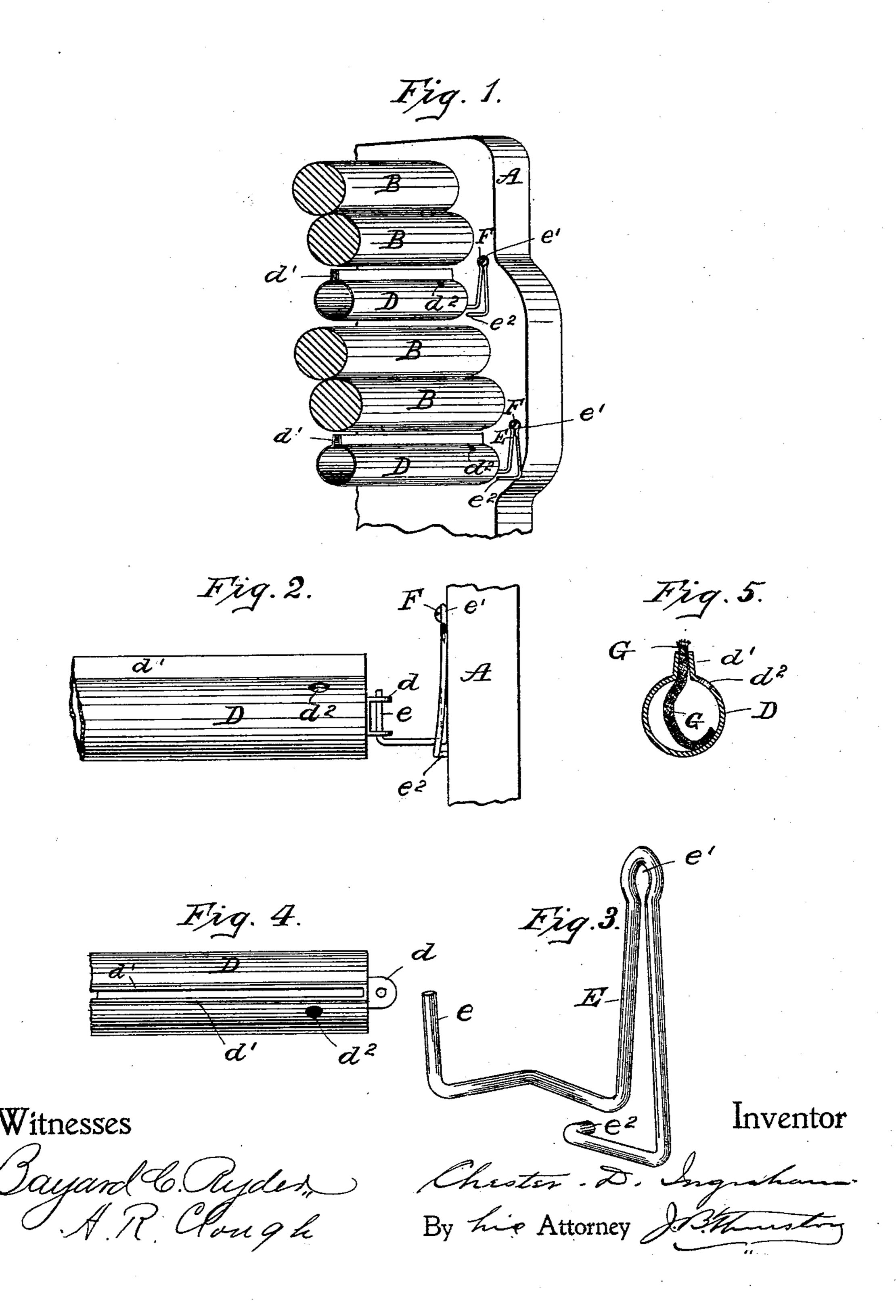
Patented Sept. 12, 1899.

## C. D. INGRAHAM.

## ATTACHMENT FOR CONDENSERS OF CARDING MACHINES.

(Application filed Apr. 16, 1898.)

(No Model.)



## United States Patent Office.

CHESTER D. INGRAHAM, OF PENACOOK, NEW HAMPSHIRE.

## ATTACHMENT FOR CONDENSERS OF CARDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 632,871, dated September 12, 1899.

Application filed April 16, 1898. Serial No. 677,772. (No model.)

To all whom it may concern:

Be it known that I, CHESTER D. INGRAHAM, a citizen of the United States, residing at Penacook, in the county of Merrimac and State of New Hampshire, have invented a certain new and Improved Attachment for the Condensers of Carding-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention affords a means for reducing the temperature of carding-rooms of textile manufactories, and as the material must 15 contain a certain amount of moisture to destroy the electrical influences which attract the fine particles of wool a large saving of card-clothing or metal work of the machines is effected by removing this means of producing 20 rust. The necessity for maintaining a hot moist air where these machines are run is very wearing upon the operatives; but by the use of my invention the temperature of the rooms containing these machines may be kept 25 as cool and the air circulation as strong as the operatives require for their personal comfort.

To this end my invention consists in the novel means for supplying moisture directly to the condensing-rolls, as fully set forth in the following specification and claims, and clearly illustrated in the drawings accompanying and forming a part of the same, of which—

Figure 1 is a broken perspective view showing a portion of the condensing-rolls of a machine having my moistening device attached, Fig. 2 being an elevation. Fig. 3 is a perspective view of one of my improved spring-to hangers. Fig. 4 is a detailed broken elevation of one of my improved moistening-cylinders, Fig. 5 being a cross-section of the latter.

Similar reference-letters designate corre-45 sponding parts in all the views.

A represents a portion of the frame of a condenser, upon which are assembled the condensing-rolls B, and D represents my improved moistening-cylinder, which is suspended below the lower condensing-roll of each series by means of ears d, perforated for the reception of the vertically-disposed end e of a

spring-hanger E, composed of wire and preferably of the form shown best in Fig. 3, the same being bent so as to provide an eye or 55 loop e' for the reception of a retaining-screw F, which is threaded to the frame A, the end e<sup>2</sup> of said hanger being adapted to bear with sufficient pressure against the said frame to maintain the cylinder D in its normal position (directly under a condenser) or a position out of contact with a condenser, said hangers being movable on the screw F for this purpose.

The moistening-cylinder D is provided with 65 flanges forming a wick-tube d' and running longitudinally from end to end, and into this is passed a wick G of any fibrous absorbent material, as shown in Fig. 5, which projects from said tube d' far enough to form contact 70 with the condensers. The cylinder D is also provided with a plurality of openings  $d^2$ , located at one side of the said wick-tube, as shown,through which said cylinder is supplied with water, said wick G becoming saturated 75 with the water, and thus moistening the condensers, as may be required.

Having described my invention, what I claim is—

1. The combination with a condensing-roll 80 of a carding-machine, of a water-cylinder provided with a longitudinal wick-tube in close proximity to the roll, and means for adjusting the cylinder toward and from the roll, substantially as specified.

2. The combination with a condensing-roll of a carding-machine, of a water-cylinder designed to carry a wick, and a swinging hanger provided with a supporting member designed to support the cylinder and with a retaining 90 member designed to secure the hanger in its adjusted positions, substantially as specified.

3. The combination with a condensing-roll of a carding-machine, of a water-cylinder provided with a longitudinal wick-tube, open-95 ings to one side of the tube and with terminal ears and a swinging hanger comprising an arm designed to engage the ears upon the cylinder, and a second arm provided with a right-angular extremity designed to bear upon 100 a fixed part to secure the hanger yieldingly in various adjusted positions, substantially as specified.

. 4. The combination with a condensing-roll

of a carding-machine, of a wick contacting with the cylinder along its entire length, a water-cylinder supporting the wick, and means for adjusting the cylinder toward or from the roll, substantially as specified.

5. A device for moistening the condensers of a carding-machine consisting of a water-cylinder running longitudinally and below the condenser provided with perforations for receiving water and with a wick-tube adjacent to the condenser, a suitable wick within said

cylinder and projecting through said tube and in contact with the condenser, and an adjustable hanger connecting each end of said cylinder to the frame of the carding-machine.

In testimony whereof I affix my signature in presence of two witnesses.

CHESTER D. INGRAHAM.

Witnesses:

J. B. THURSTON, EMILE H. TARDIVEL.