J. L. NORTON.

Machine for Making Cotton Batting.

Patented April 2, 1878. No. 201,940.

UNITED STATES PATENT OFFICE.

JOHN L. NORTON, OF MEMPHIS, TENNESSEE.

IMPROVEMENT IN MACHINES FOR MAKING COTTON BATTING.

Specification forming part of Letters Patent No. 201,940, dated April 2, 1878; application filed January 10, 1878.

To all whom it may concern:

Be it known that I, John L. Norton, of Memphis, in the county of Shelby and State of Tennessee, have invented a new and Improved Machine for Making Cotton Batting, of which the following is a specification:

Figure 1 is a transverse vertical section of my improved machine, taken on line x x in Fig. 2. Fig. 2 is a front elevation, with parts broken away to more clearly show the construction.

Similar letters of reference indicate corre-

sponding parts.

My invention relates to the class of machines employed in making cotton batting and wadding; and it consists of a pair of compressing-rolls, an accumulating-cylinder, around which the cotton is wound under the pressure of rollers, a steaming or moistening device, and a hot pressing roll, all combined and arranged as hereinafter more fully described and claimed.

Referring to the drawing, A is an ordinary gauze cylinder, B, journaled in the frame C, and having a heavy roller, D, resting upon its upper surface. This condenser receives the cotton from a cotton-gin, with which it is connected through the flue E. A curved cover, F, rests upon the gin-flue E, and extends to the roller D. A frame, G, is placed in front of the condenser A, and contains compressing-rolls H I, between which cotton passes as it is discharged from the cylinder B of the condenser.

The lower roll I is stationary, and its shaft is provided with a spur-wheel, a, which is driven through an intermediate wheel, b, by

the spur-wheel c on the shaft d.

The upper roll H is provided with journalboxes e, which are capable of moving vertically in the slotted standards that support both rolls. The journal-boxes e are pressed down by the hooked rods f, which rest upon the top of the journal-boxes, and are provided with springs g, which force the roll \mathbf{H} downward toward the roll I. Upon the shaft d an accumulating-cylinder, J, is secured, above and in contact with which three weighted rollers, K L M, revolve.

Below the cylinder J a hollow metallic steam heater-roll, N, is journaled in movable boxes, which are supported by springs k, so as to bear the roll up into contact with the cylinder J.

In front of the hollow roll N there is a perforated steam-pipe, O, which is parallel with

the face of the cylinder J.

.Cotton is delivered from the brush of the cotton-gin through the flue E, and the wire-cloth cylinder is rotated by a belt running from the gin, or from any convenient rotating shaft, and motion is imparted to the shaft d by a belt running from a pulley, Q, on the shaft of the wire-cloth cylinder to the pulley R on the said shaft d.

The cotton is carried upward by the wirecloth cylinder, and is somewhat compressed by the roll D. It is carried forward by the cylinder B and delivered to the rollers H I, which compress it still more and deliver it to the cylinder J, around which it is wound, passing under the pressure-rolls K L M, and cotton-condenser, which consists of a wire- being pressed by the hollow heater-roll N after being slightly dampened by steam escaping from the perforations of the pipe O.

> By means of my improvement the cardingmachine is dispensed with, and the batting is rapidly and continuously made, utilizing every particle of cotton that passes through the gin.

> I am aware that it is not new to use a steamjet tube in making wadding or a solid roll in connection with a drum upon which cotton batting is formed, or a heated hollow roll in ironing-machines.

> Having thus fully described my invention, I claim as new and desire to secure by Letters

Patent—

The combination, in a batting-machine, of the compressing-rolls H I, the cylinder J, a series of pressure-rolls, K L M, a heated roll, N, and a moistening device, substantially as herein shown and described.

JOHN LEONARD NORTON.

Witnesses:

M. B. TREZEVANT, JOSEPH TOWNSEND.