

(No Model.)

H. L. MOULTON.  
Cylinder or Roller for Carding Machines.

No. 241,051.

Patented May 3, 1881.

FIG. 1.

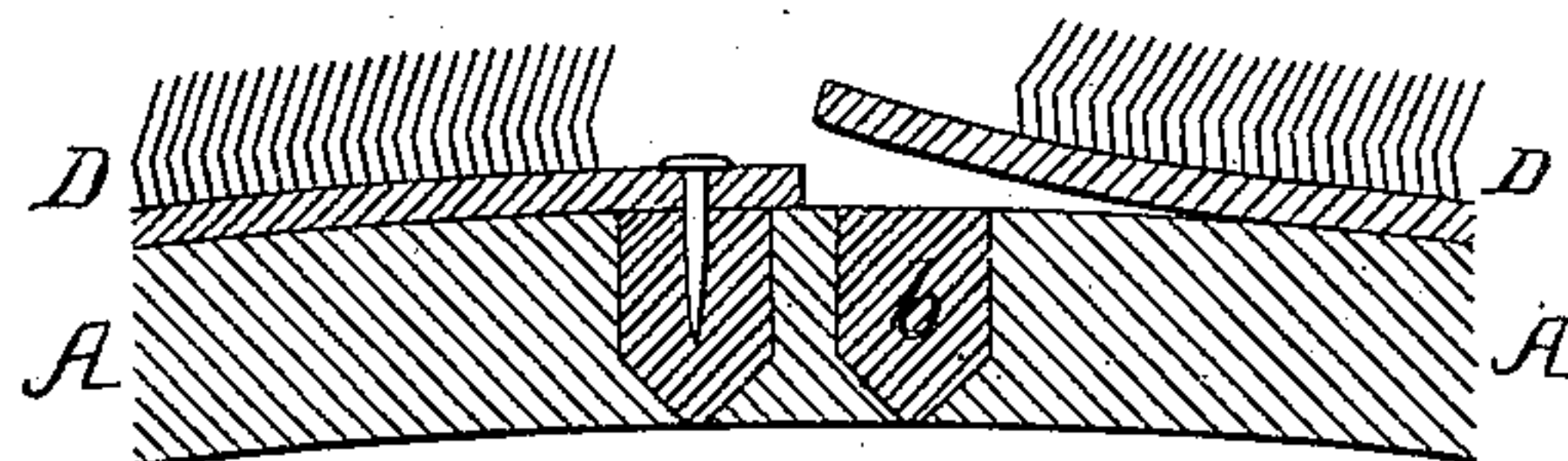


FIG. 2.

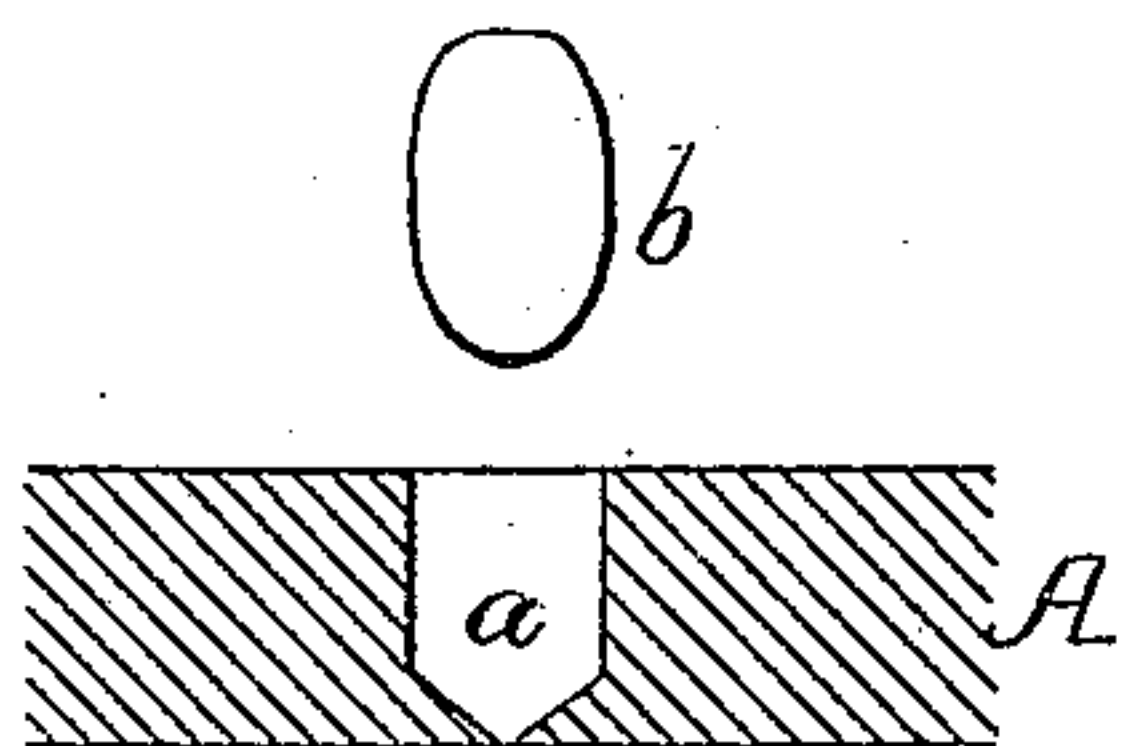


FIG. 3.



Witnesses:  
James F. Jobin.  
Harry Smith

Inventor:  
Hamilton L. Moulton  
by his attorneys,  
Howson and Son

# UNITED STATES PATENT OFFICE.

HAMILTON L. MOULTON, OF CAMDEN, NEW JERSEY, ASSIGNOR TO THE JAMES SMITH WOOLEN MACHINERY COMPANY, OF PHILADELPHIA, PA.

## CYLINDER OR ROLLER FOR CARDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 241,051, dated May 3, 1881.

Application filed November 29, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, HAMILTON L. MOULTON, a citizen of the United States, residing in Camden, New Jersey, have invented certain Improvements in Cylinders or Rollers for Carding-Machines, of which the following is a specification.

The object of my invention is the secure attachment of card-clothing to the metal cylinders and rollers of carding-machines—an object attained by embedding in the iron cylinders pieces of lead or soft alloy, into which the tacks are driven through the leather, or rubber, or other base of the card-clothing.

In the accompanying drawings, Figure 1 is a section of a part of the main cylinder of a carding-engine, showing the inlaid plugs of lead, into which the tacks for securing the card-clothing are driven; and Figs. 2 and 3, views illustrating a mode of introducing the leaden plugs into the orifices or recesses in the cylinder.

The main cylinders of carding-machines are generally made of wooden slats secured to cast-iron centers, the card-clothing being secured to the wood by tacks. The objection to this class of card-cylinders is their liability to get out of truth, owing to the warping of the wood.

Card-cylinders are sometimes made of cast-iron, the circumference being turned perfectly true, and holes being made in the cylinder for the reception of wooden plugs, into which the tacks for securing the card-clothing are driven; but these plugs are apt to shrink and become loose in the holes into which they have been driven, and the consequence of this is the loosening of the card-clothing.

In order to obviate this difficulty I drill into the cylinder A, at suitable intervals, holes *a*, into which I drive plugs *b*, of lead, the superfluous portion of each of which is cut off flush

with the surface of the cylinder. The card-clothing D is applied to the cylinder in the usual manner, and the toothless portions of the strips of clothing are secured by tacks driven into the lead, as shown in Fig. 1. I prefer to so drill the holes in the cylinder that the point only of the drill will pass through the same, as shown in Fig. 2; but simple recesses may be drilled or otherwise formed in the cylinder, as shown in Fig. 3, for the reception of the plugs; but it is immaterial how the holes or recesses are made, or how the lead is introduced into the same, providing that metal, or a soft alloy of which lead forms a part, is embedded in the cylinder at intervals, for receiving the tacks which secure the card-clothing to the cylinder. The tacks, after being driven into the lead, are effectually retained by the same, and as the lead cannot shrink, my invention results in a card-cylinder which retains its truth, and to which the card-clothing is so firmly secured that it is not liable to become detached through accident or during the working of the machine.

I claim as my invention—

1. An iron card cylinder or roller in which lead or soft alloy is embedded at intervals, substantially as set forth.

2. The combination of an iron card-cylinder or card-roller, having inlaid pieces of lead or soft alloy, with card-clothing secured to the cylinder by tacks driven into the lead, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HAMILTON L. MOULTON.

Witnesses:

J. HENRY KNOWLES,  
WILLIAM M. WHITAKER.