

J. W. BARBOUR.
FEEDING DEVICE FOR CARDING MACHINES.

No. 107,751.

Patented Sept. 27, 1870.

Fig. 1

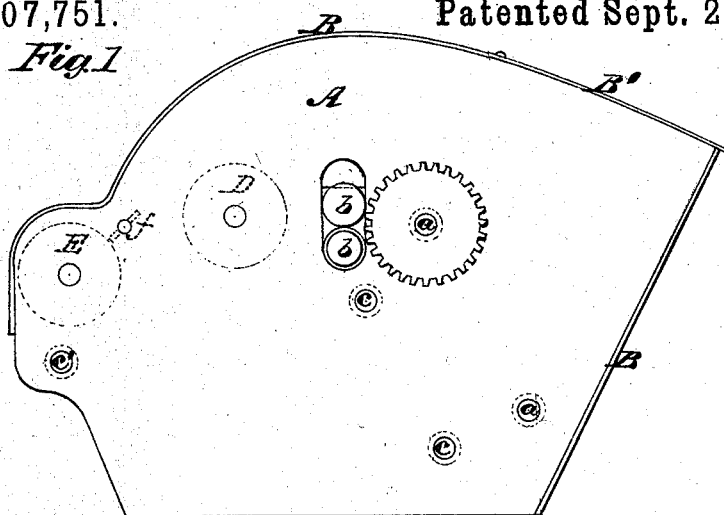


Fig. 2

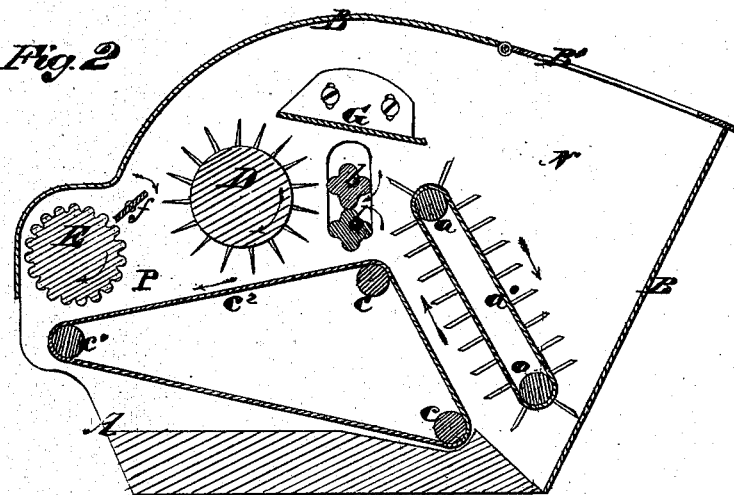
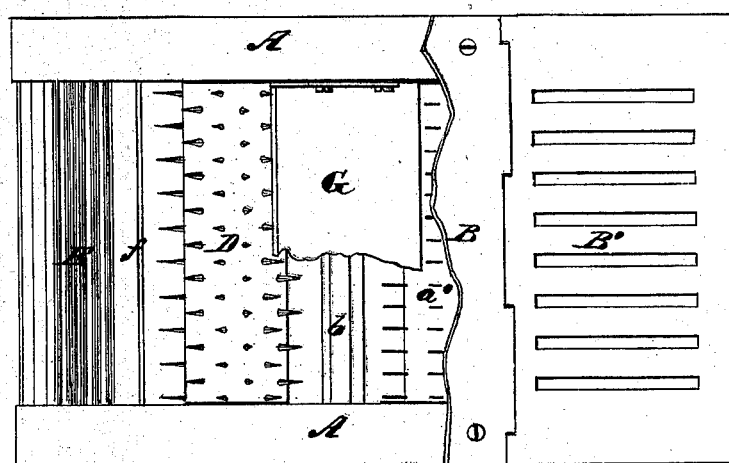


Fig. 3



Witnesses.
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Marion, Plunkett & Lawrence.

United States Patent Office.

JOSEPH W. BARBOUR, OF WINOOSKI FALLS, ASSIGNOR TO HIMSELF AND WILLIAM EARL, OF NASHUA, VERMONT.

Letters Patent No. 107,751, dated September 27, 1870.

IMPROVEMENT IN FEEDING DEVICES FOR CARDING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH W. BARBOUR, of Winooski Falls, in the county of Chittenden and State of Vermont, have invented a new and improved Feeder for Carding-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a view of one side of the machine.

Figure 2 is a section taken longitudinally and in a vertical plane through the center of the machine.

Figure 3 is a top view of the machine, in which portions of the cover and guard are broken away.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to feed wool to carding-machines, by means of endless aprons, a picker, spreader, and condenser combined, as will be hereinafter explained.

In the year 1864 Letters Patent, numbered 43,959, were granted to Jean Sebastian Bolette for an improved wool-feeder, wherein the wool was elevated from a receptacle, into which it is placed, by means of an endless belt armed with hooked teeth, and delivered upon another endless belt, which carried it up to feed-rollers, from which it is delivered to the carding-engine.

In this machine a roller armed with teeth is employed for the purpose of removing the excess of wool raised by the vertical belt, and returning it to the receptacle.

In this machine of Bolette there is no provision made for picking open the thick and matted locks of wool, nor for spreading the wool so that it will be delivered to the carding-engine in a layer of uniform width and thickness.

The following description will enable others skilled in the art to understand my invention and improvements.

The frame of the machine consists of two inclosing sides, A A, suitably secured together, and covered, as shown at B B B'.

This frame is adapted for being applied to a carding-engine, so as to deliver the wool thereto at the proper point.

N is the receiving-chamber for the wool put into the machine, which chamber is provided with a hinged cov-

er, B', and has for its bottom an endless traveling belt, *a'*, armed with teeth, and placed upon horizontal rollers *a*, and inclined in such a manner as to elevate the wool from the receiving-chamber N to and beneath a guard, G.

Beneath this guard are two ribbed rollers, *b b*, which take the wool from the endless belt *a'* and deliver it to the picker D, which separates and opens the matted locks of wool, and at the same time throws any excess of the wool back over the guard G, to be again returned by the studded belt *a'* between the rollers *b b*.

The wool is removed from the teeth of the picker D by means of a rapidly-revolving blade, *f*, which is arranged between the picker and a feed-roller, E, and over an endless feed-apron, *c'*. This blade *f* not only operates to clear the picker, but it also serves to beat down the loose wool into a receptacle, P, which I term the packing-box, and from which the wool is fed between the roller E and belt *c'* into the carding-engine.

I term the receptacle P a packing-box, because the wool is fed therein in such quantities as will keep the carder always supplied with a given quantity of wool which has been picked and uniformly distributed from end to end of the feed-roller E, and packed into this receptacle.

Having described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The studded elevating-belt *a'*, fluted rollers *b b*, picker D, and guard G, combined and operating substantially as described.

2. The rollers *b b*, picker D, and rotating doffing-blade *f*, in combination with the elevating-belt *a'*, and the guard G, substantially as described.

3. The packing-box P, in combination with the picker D, doffing-blade *f*, and feed-roller E, substantially as described.

4. The endless feed-apron *c'*, arranged below the picker D, doffing-blade *f*, and feed-roller E, and forming the floor of the packing-box P, substantially as described.

JOSEPH W. BARBOUR.

Witnesses:

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