D. & G. T. Jones.

Wool Burring Mach.

No. 45,047. Patented Nov. 15, 1864.

Fig. 1.

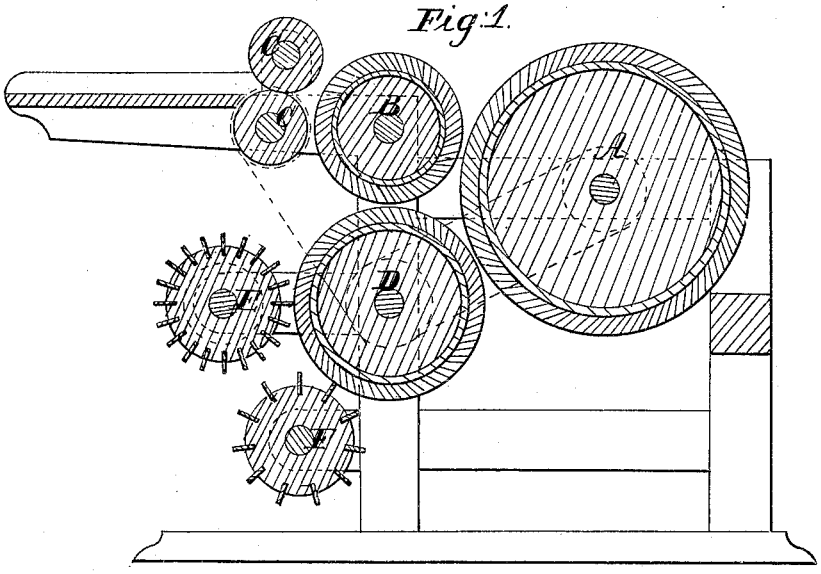
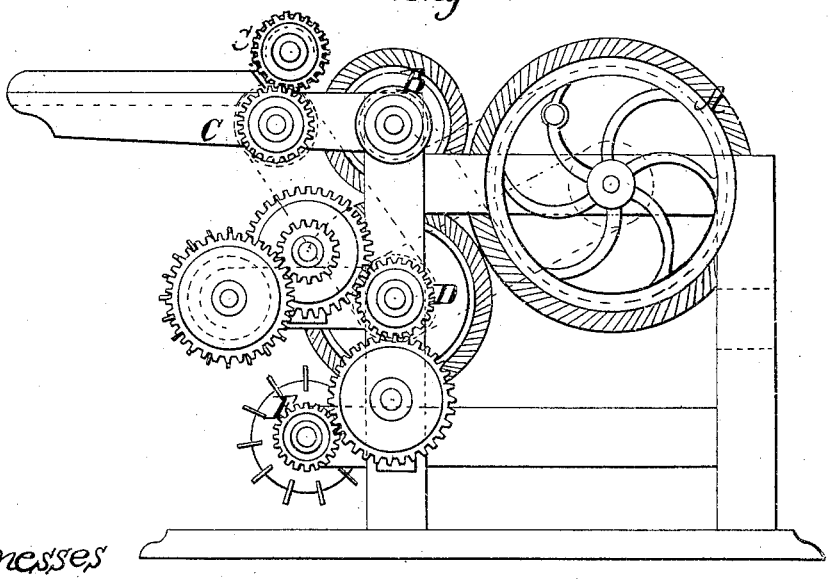


Fig. 2.



Witnesses

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DANIEL JONES AND GEORGE T. JONES, OF PHILADELPHIA, PA.

IMPROVEMENT IN WOOL-BURRING MACHINES.

Specification forming part of Letters Patent No. **45,047**, dated November 15, 1864.

To all whom it may concern:

Be it known that we, DANIEL JONES and GEORGE T. JONES, of Philadelphia, and State of Pennsylvania, have made a new and useful Improvement in Burring-Machines; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, in which—

Figure 1 is a cross-section of a burring-machine, showing our improvement. Fig. 2 shows the gearing by which the cylinders are driven.

Hitherto much of the wool has been carried away with the burr. Our machine is intended to obviate this defect.

A is the cylinder by which the clearing is done.

C C are the feed-rollers.

B and D are burring-cylinders.

E is the fluted roller.

F is the fan.

In the old machines the roller B is the only one used for burring. The fan, being placed on the top or bottom center of the burring-roller and run at a higher speed than the cylinder, thus beats the burr off. At the same time, however, a portion of the wool is carried away with it. In our plan, in order to save this wool we use a second burring-cylinder, D, which serves as a carding-roller to the roller B, and is run at a higher speed. A fluted roller, E, is placed on the side of the cylinder D, so that a pocket is formed between the two, which will hold the burr as long as any fibers remain attached to it, the roller D, running at a greater velocity than the roller E. When the fiber is entirely taken off, the fluted roller E will carry the burrs away. Should any of the burrs pass this roller an ordinary fan, F, will knock them off, as in ordinary machines.

The operation is as follows: The wool is passed in between the feeding rollers *c c*, is then taken down by the cylinder B, and, coming in contact with the roller D, forms a carding point. A portion of the wool passes around the cylinder B and is cleared by the clearer. The cylinder D, running at a higher speed than the cylinder B, acts as a carder to it, and at the same time prevents the burrs from passing between them. The burrs, which fall into the pockets formed by the roller E, are cleared of all the fibers of wool adhering to them by the cylinder D, and carried away by the fluted roller E, and, in case any of the burrs should pass the fluted roller E, the fan F will knock them from the cylinder D.

This burring-machine may be attached to a card, or it may be used as a separate machine and cleared by a brush. The drawings represent it as cleared by a cylinder of a carding-machine.

Instead of applying the fluted roller E to the second cylinder, D, it may be applied to the cylinder B, and the cylinder D omitted altogether, or as many cylinders like D may be used as deemed expedient, and the fluted roller applied to any one of them. The roller F may also be omitted.

This machine may also be used equally well for ginning cotton as for burring wool.

Having thus described our improvement, what we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the fluted roller E, or its equivalent, and one or more burring-cylinders, so arranged as to form a pocket between the fluted roller and one of the cylinders, the roller E running at a less velocity than the cylinder D, thereby more fully cleaning the burrs.

2. The combination of the two burring-cylinders B and D, when used in conjunction with a carding engine or cylinder, A, the cylinder D being caused to run at a higher rate of speed than cylinder B, and acting to cylinder B as a clearer of the burrs with the small portion of wool which adheres to them, the main portion of the wool being stripped from cylinder B by the carding-cylinder A.

DANIEL JONES.
GEORGE T. JONES.

Witnesses:
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