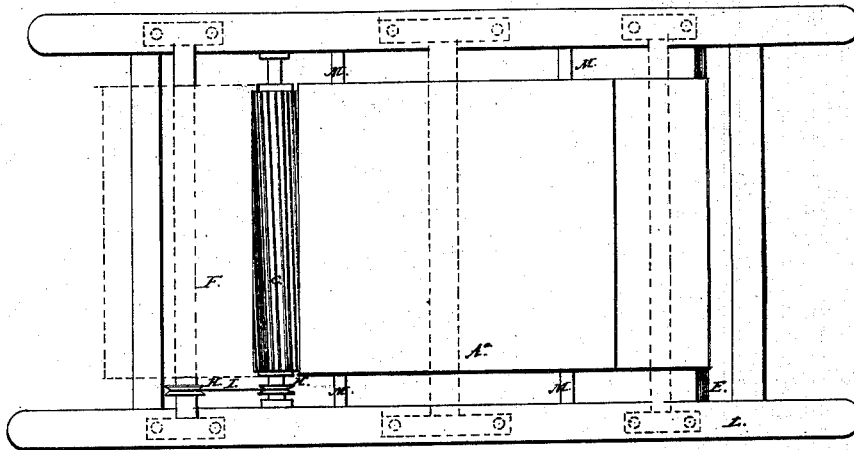


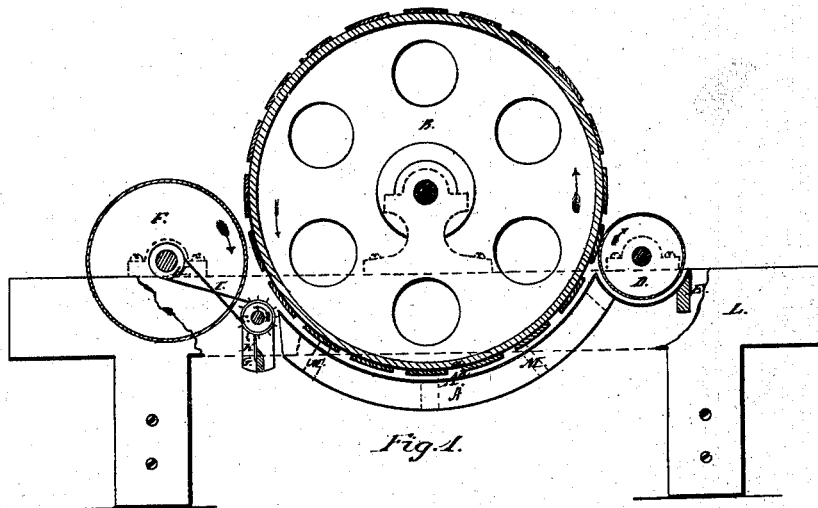
*A. A. Bennett*  
*Carding Mach.*

*No. 47,274.*

*Patented Apr. 18, 1865.*



*Fig. 2.*



*Fig. 1.*

*Witnesses:*  
*W. Fine*  
*A. H. Camp*

*Inventor:*  
*A. A. Bennett*

# UNITED STATES PATENT OFFICE.

ANTHONY A. BENNETT, OF NORWALK, CONNECTICUT.

IMPROVEMENT IN WASTE-SAVING ATTACHMENT TO CARDING-ENGINES.

Specification forming part of Letters Patent No. 47,274, dated April 18, 1865.

*To all whom it may concern:*

Be it known that I, ANTHONY A. BENNETT, of the town of Norwalk, county of Fairfield, and State of Connecticut, have invented a new and useful Improvement in the Construction of Carding-Engines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the arrangement and application of a curved frame-work or shell, with a plain metallic or other face, to be placed under the main cylinder, and a revolving receptacle guard-roller, to retain the short waste fiber escaping from the revolving of the main cylinder.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a side view of a portion of a carding engine and frame with part of the frame removed to show my improvements. Fig. 2 is a plan or surface view showing the metal face and the receptacle guard-roller.

The mechanical arrangements and the various rollers and attachments belonging to a carding engine will all remain without alteration. My improvements will not interfere with them or their operations. I make a curved frame, A, to be placed under the main cylinder B, of nearly the same radius as the cylinder and of the same length horizontally, extending from the receptacle guard-blade roller C to the tumbler-roller D. On the upper side of this frame or the inner periphery of the same, I bend and attach sheet metal A<sup>a</sup>, or some other substance, to form a plain surface, extending the whole distance of the curved frame A, and following under the tumbler-roller D, and which is then fastened to the cross-bar E. The curved surface is placed in close proximity to the periphery of the cylinder and tumbler, and is attached to the main frame L by the supporting-brackets M.

I make the receptacle guard-roller C of the same length as the main cylinder, and on the periphery of the same I attach a series of

thin metal blades edgewise, running in a spiral direction, as shown in the drawings. This roller C is placed so that the edges of the blades will revolve close to the back edge of the curved metal-covered frame A beneath this roller. I attach to the frame L a bar, G, and on the side of this bar I fasten vertically a strip of leather, or its equivalent, as a brush, rising a certain distance above the upper edge of the bar, so that when the roller C revolves the edges of the blades will touch the same, and the heavy dirt or dust falling on and between the blades will be brushed off and fall on the floor.

The object of the blade-roller C is to prevent the current of air caused by the quick revolution of the main cylinder from drawing the short fine fiber away from the doffer F, in consequence of the current of air being broken by the close proximity of the blades of the roller C to the edge of the frame of the curved shell A, and at the same time the heavy dirt or dust will fall on and be retained by and between the blades of the receptacle-roller C, and be brushed off and cleared by the leather K. The receptacle guard-roller C is revolved at any required speed by the belt and pulleys I, connected with the doffer F or by gear-wheels. By these arrangements the short fiber is retained with the long fiber, and passes directly on to the doffer F without waste, effectually cleared from dust or other impurities.

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

1. The combination of the curved shell waste-saver A, having a plain face, and the receptacle guard-roller C, or their equivalents, in the manner and for the purpose substantially as herein described.

2. The clearing-brush G, or its equivalent, operating in combination with the waste-saver A and the guard roller C, for the purpose described.

A. A. BENNETT.

Witnesses:

WM. VINE,  
A. H. CAMP.