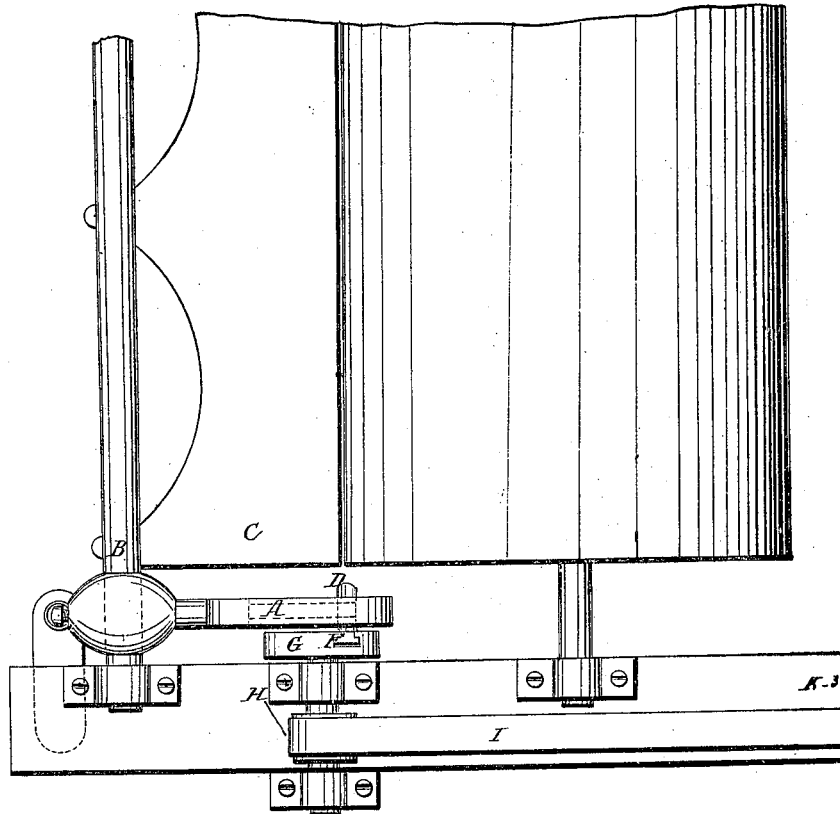


*A. A. Bennett.*  
*Carding Engine.*

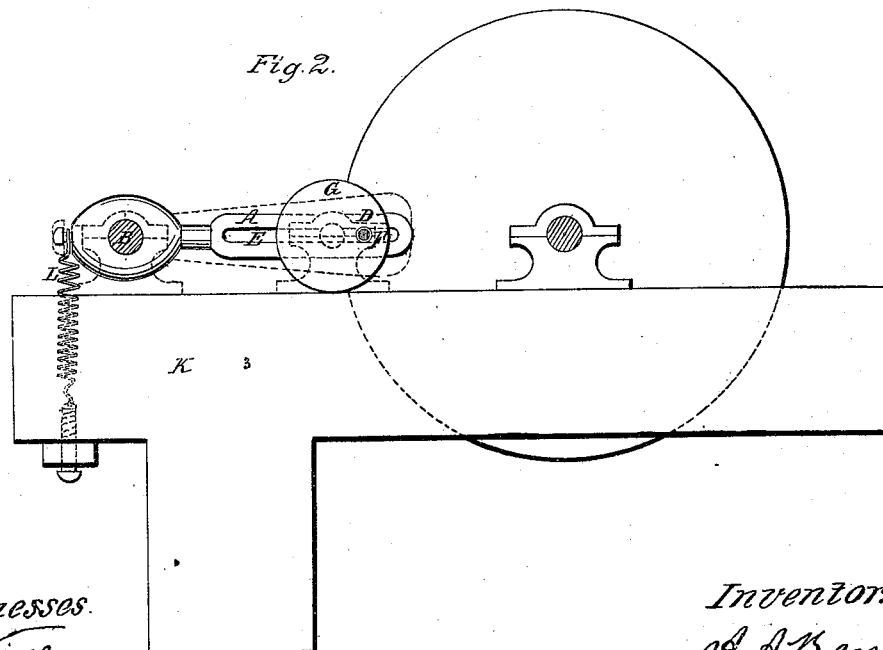
*N<sup>o</sup> 55,046.*

*Patented May 29, 1866*

*Fig. 1.*



*Fig. 2.*



*Witnesses.*  
*Wm. Vine.*  
*Cs. J. Frost.*

*Inventor.*  
*A. A. Bennett.*

# UNITED STATES PATENT OFFICE.

ANTHONY A. BENNETT, OF NORWALK, CONNECTICUT.

IMPROVEMENT IN MEANS FOR OPERATING THE DOFFER-COMB OF CARDING-ENGINES.

Specification forming part of Letters Patent No. **55,046**, dated May 29, 1866.

*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 Carding-Engines for Oscillating the Doffer-Comb; and I do hereby declare that the following is a correct description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in an improved mechanical arrangement for oscillating the doffer-comb.

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

In the drawings, Figure 1 is a plan view of a part of the carding-engine, illustrating the new improvement, and Fig. 2 is an end view of the same.

Like letters designate like parts in all the figures.

In many machines the oscillating comb of the doffer is worked by a peculiar crank arrangement, which gives an unsteady and shaking motion. To obviate and remedy this unsteady motion is the object of this my present invention and improvement.

The slotted vibrating arm A is attached to the shaft B of the comb-board C and extends forward to the eccentric-pin D. This pin D passes through the slot E of the arm A, to

give the required oscillating movement to the same, and is adjustable in the groove F of the pulley G, which will give more or less throw to the arm A, as circumstances may require. At the outer end of the arm A, I attach a spiral and adjustable spring, L, or its equivalent, as shown in the drawings, to balance the motion of the arm and relieve the weight of the comb-board C on the bar B.

The standards and bearings for the eccentric-pulley G and driving-pulley H are permanently attached to the main frame K of the carding-engine, as shown in the drawings, and the driving-belt I may run on any convenient and properly-speeded pulley of the carder.

This independent arrangement for oscillating the doffer-comb works with a smooth, easy, and quiet motion, and is a great relief to the machinery of the engine by avoiding all the shaking and rattling. The doffer-cylinder is marked 4 in the drawings.

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

The arrangement, with the comb-shaft B and its oscillating slotted arm A, of the crank-pulley G, constructed as described, and its adjustable pin D, in the manner and for the purpose set forth.

A. A. BENNETT.

Witnesses:

WM. VINE,  
JOS. F. FOOTE.