

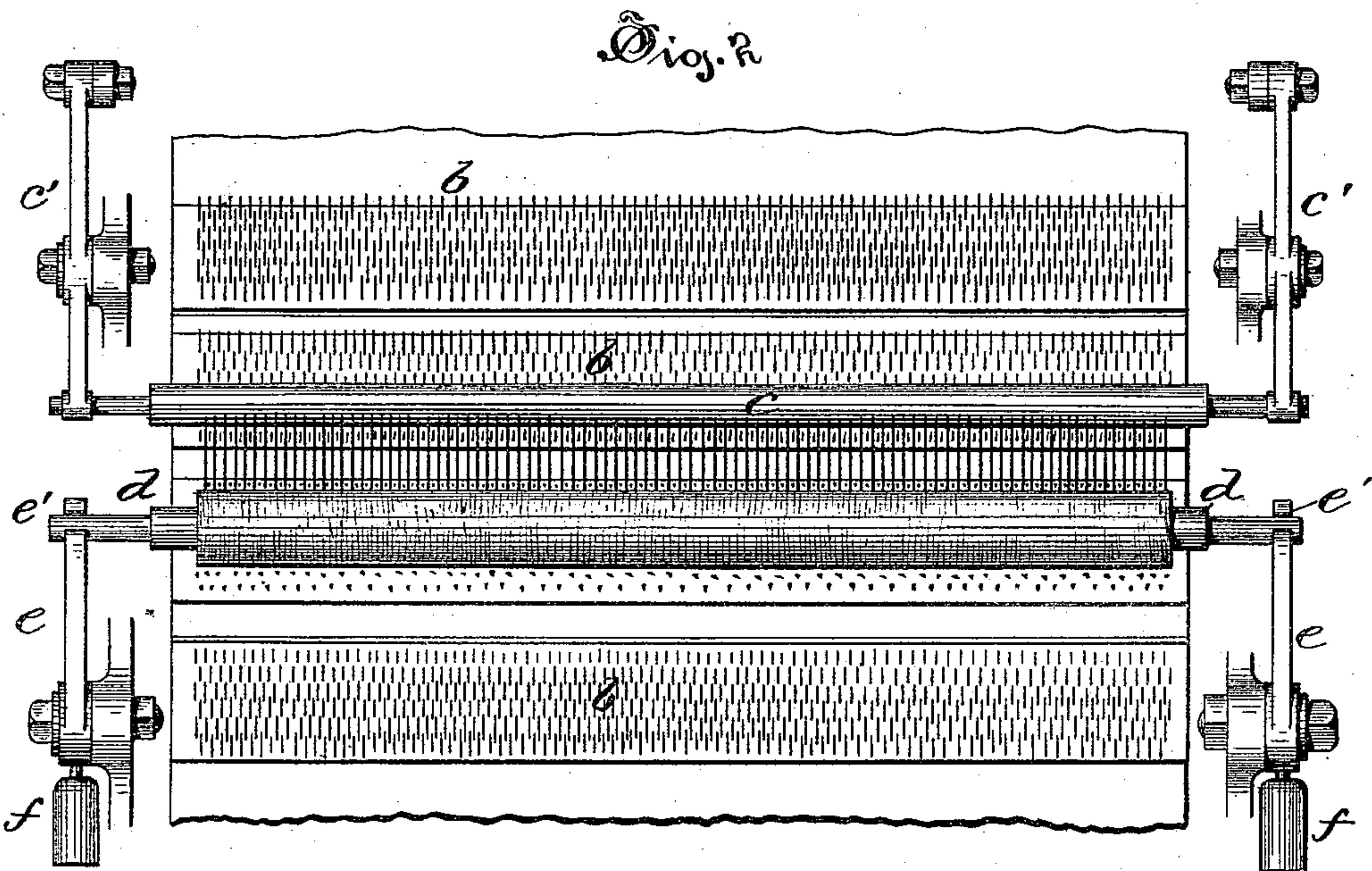
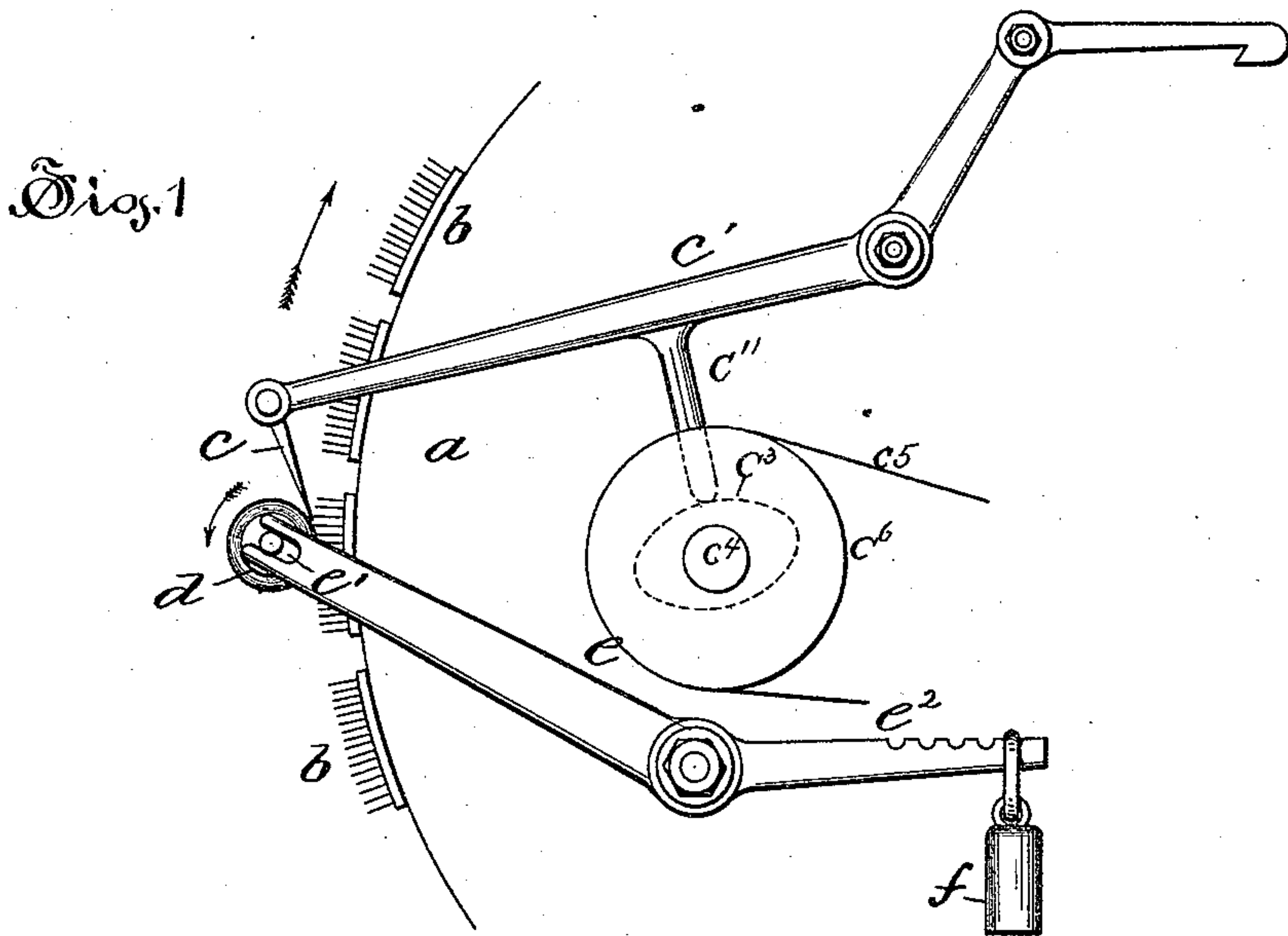
(No Model.)

J. THOMSON, Jr.

STRIPPING MECHANISM FOR CARDING MACHINES.

No. 430.200.

Patented June 17, 1890.



Witnesses:

Harry R. Williams,
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UNITED STATES PATENT OFFICE.

JAMES THOMSON, JR., OF WILLIMANTIC, CONNECTICUT.

STRIPPING MECHANISM FOR CARDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 430,200, dated June 17, 1890.

Application filed July 10, 1889. Serial No. 317,089. (No model.)

To all whom it may concern:

Be it known that I, JAMES THOMSON, Jr., of Willimantic, in the county of Windham and State of Connecticut, have invented certain
5 new and useful Improvements in Stripping Mechanism for Carding-Machines, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

10 The object of my invention is to provide a device which, used in a carding-machine, will more effectually clean the carding-surfaces; and it is particularly adapted for use on a carding-machine in which the card-clothing
15 is borne on traveling flats, as in the type of machine shown in United States patent to Leigh, of February 9, 1886, No. 335,760, although it is also adapted for use on the present type of cylinder that is covered with card-
20 clothing.

My invention consists in the combination of the card-clothed cylinder or like part, the reciprocating comb, and the clearer or collector roll held in contact with the card-cloth-
25 ing by yielding pressure and adapted to be struck by the teeth of the comb in its reciprocation; and it further consists in details of the several parts making up the apparatus as a whole, and in their combination, as more particularly hereinafter described, and pointed
30 out in the claims.

Referring to the drawings, Figure 1 is a side view of the traveling card-clothing, reciprocating comb, and the collector-roll. Fig.
35 2 is a front view showing the relative arrangement of the same parts.

In the accompanying drawings only so much of a carding-machine has been shown as is necessary to the understanding of the object
40 of my invention and its relation to the apparatus as a whole, and in said drawings the letter *a* denotes the path of movement of the working-face of a cylinder or a series of traveling card-clothed tops or flats.

45 *b* denotes the card-clothing; *c*, the comb supported on the comb-lever *c'* and connected to the mechanism of the card in the usual manner, whereby the intermittent reciprocating movement of the comb along the face of
50 the card-clothing is obtained. On the lever

c' and in advance of the pivot there is a downward-projecting arm *c''*, the lower end of which rests against the face of a rotary cam *c³*, borne on the shaft *c⁴*, that extends across
55 the machine from side to side and is driven, as by means of a belt *c⁵*, passing over the pulley *c⁶*, fast to the shaft. This construction of the comb-operating mechanism is a common one and well known in the arts.

The letter *d* denotes the clearer or collector
60 roll supported on the roller-supporting levers *e*, that are pivoted to opposite sides of the frame of the machine. These levers have, preferably, forked ends *e'*, that being the most convenient form of bearing for the axes of
65 the roller to permit the ready removal or insertion of a roller. A weight *f* is suspended from the arm *e²* of each lever *e* in such manner as to hold the collector-roll *d* with a yielding pressure against the clothing on the card
70 tops that are borne on the cylinder. The weight *f* is made adjustable along the arm *e²* of the lever, so as to readily change the degree of this yielding pressure. It is evident that a spring may be substituted for the weight
75 as a means of producing this yielding pressure, but the weight is preferred, as being more positive in operation and more readily adjustable.

In the operation of the machine the collector-
80 or-roll, which is preferably of wood, is seated in the bearings in the levers and with its surface in position to be encountered by the card-teeth, by the contact with which the roller is caused to turn in the same direction as the
85 cylinder, as shown by the arrows in Fig. 1 of the drawings. The filaments of material, as cotton, adhere to the surface of the collector-roll *d* and are wound on it as the card rotates. This action of the collector-roll in accumulating
90 the waste fibers upon it is aided by the contact of the comb with the mass of the waste material on the collector-roll. In fact, the movement of the latter is intermittent, and is aided by the contact of the comb with
95 the mass of material. The comb has its usual function as a cleaning device; but its efficacy is greatly increased by the use of the collector-roll, so that a new carding-machine, or one newly dressed, is thoroughly cleaned by the
100

operation of the collector-roll and the comb at once as soon as the machine is put in operation.

I claim as my invention—

5 1. In a carding-machine, in combination with the traveling card-clothing, the reciprocating comb, the collector-roll located in the path of movement of the comb, and the means, substantially as described, whereby the said
10 roll is held with its surface in yielding contact with the card-clothing, all substantially as set forth, and for the purpose specified.

2. In a carding-machine, in combination with the traveling card-clothing, the reciprocating comb and means for operating the

same, the collector-roll mounted on the roller-levers in slotted bearings that permit the outward and inward movement of the roll, the roller-levers pivoted to the frame of the machine and provided with a counterbalance- 20 weight, whereby the collector-roll is held in yielding contact with the card-clothing, all substantially as described.

JAMES THOMSON, JR.

Witnesses:

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