

No. 850,532.

PATENTED APR. 16, 1907.

C. R. LEE.
BROOM MACHINE.
APPLICATION FILED SEPT. 5, 1906.

Fig. 1.

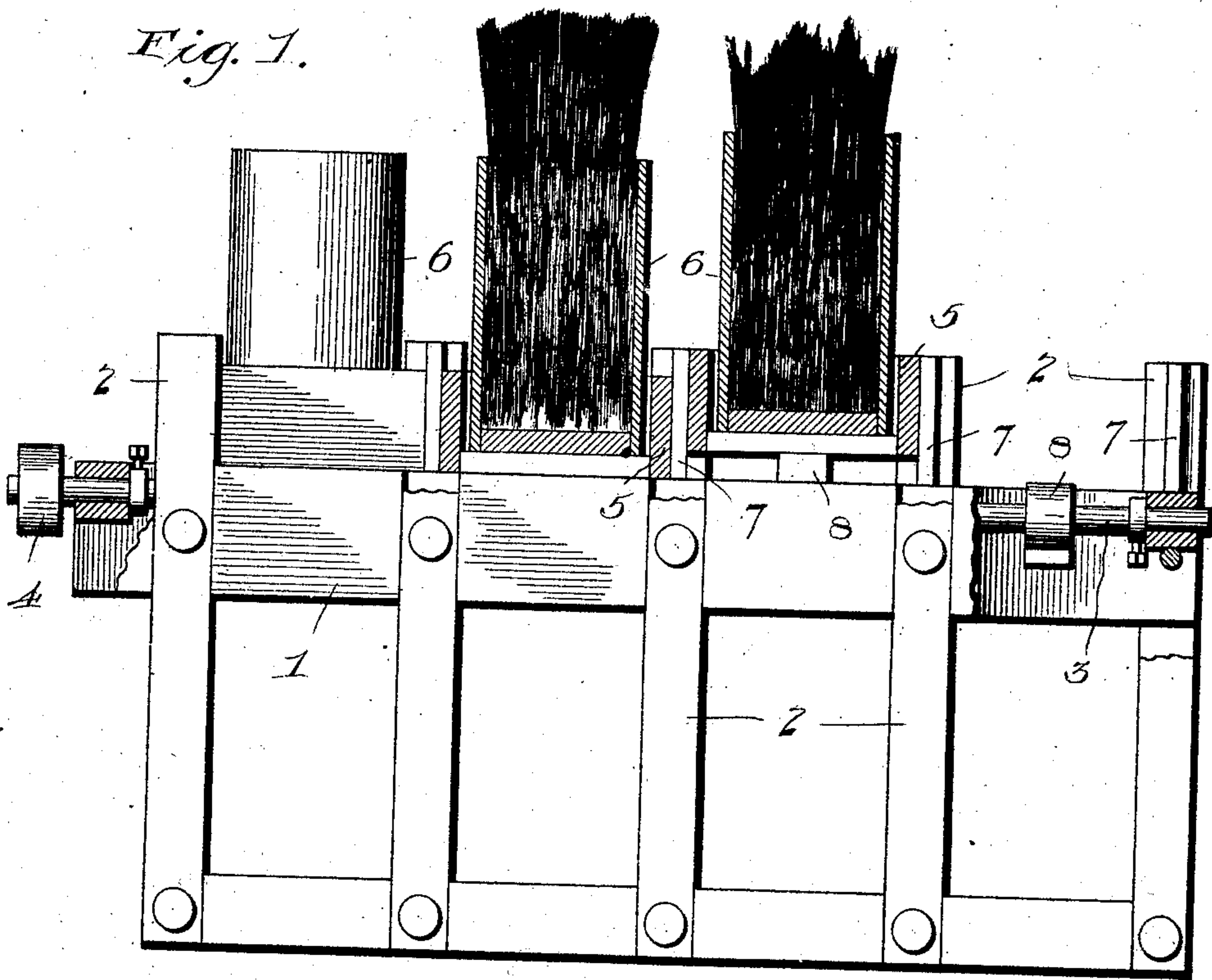


Fig. 2.

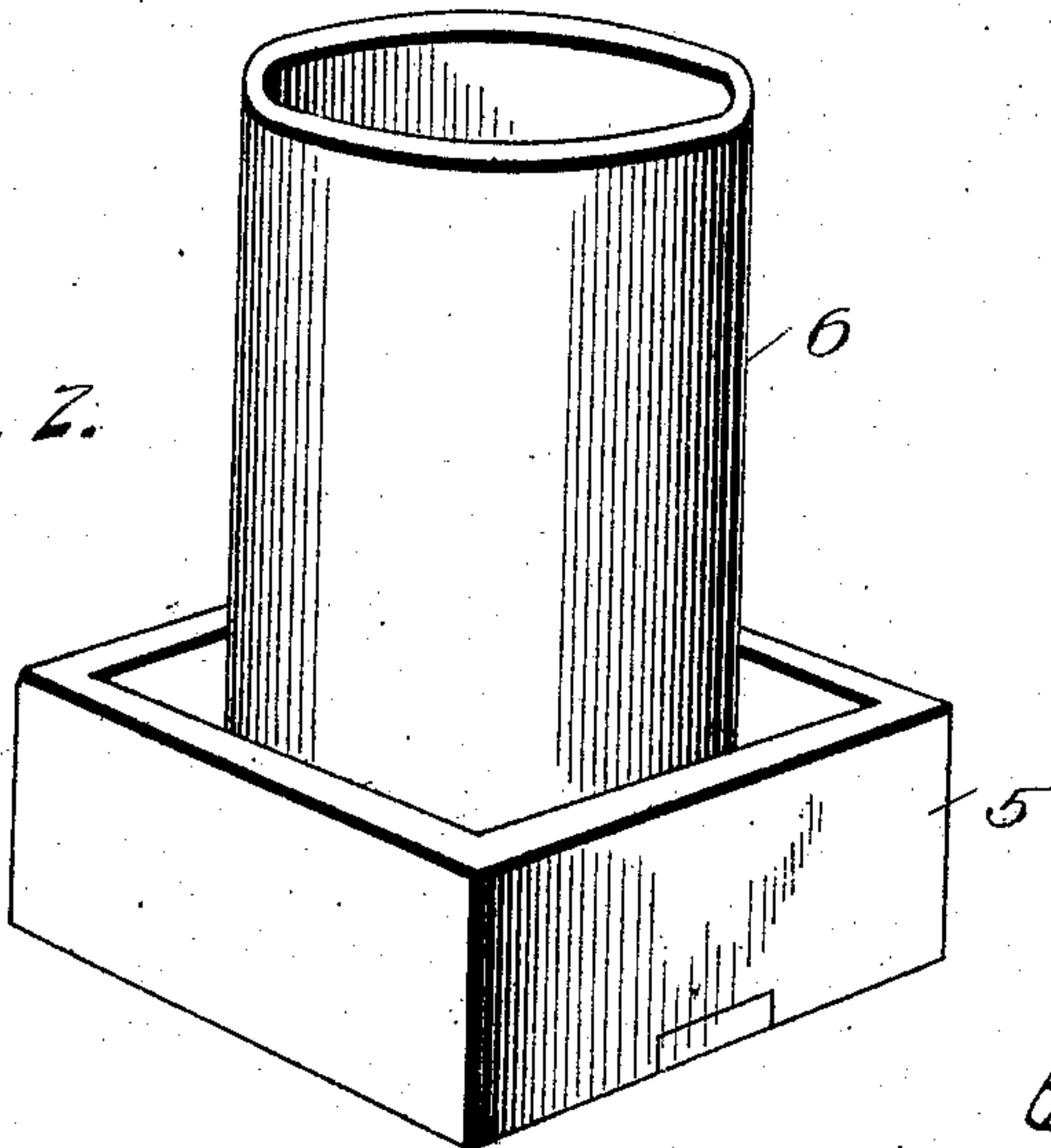
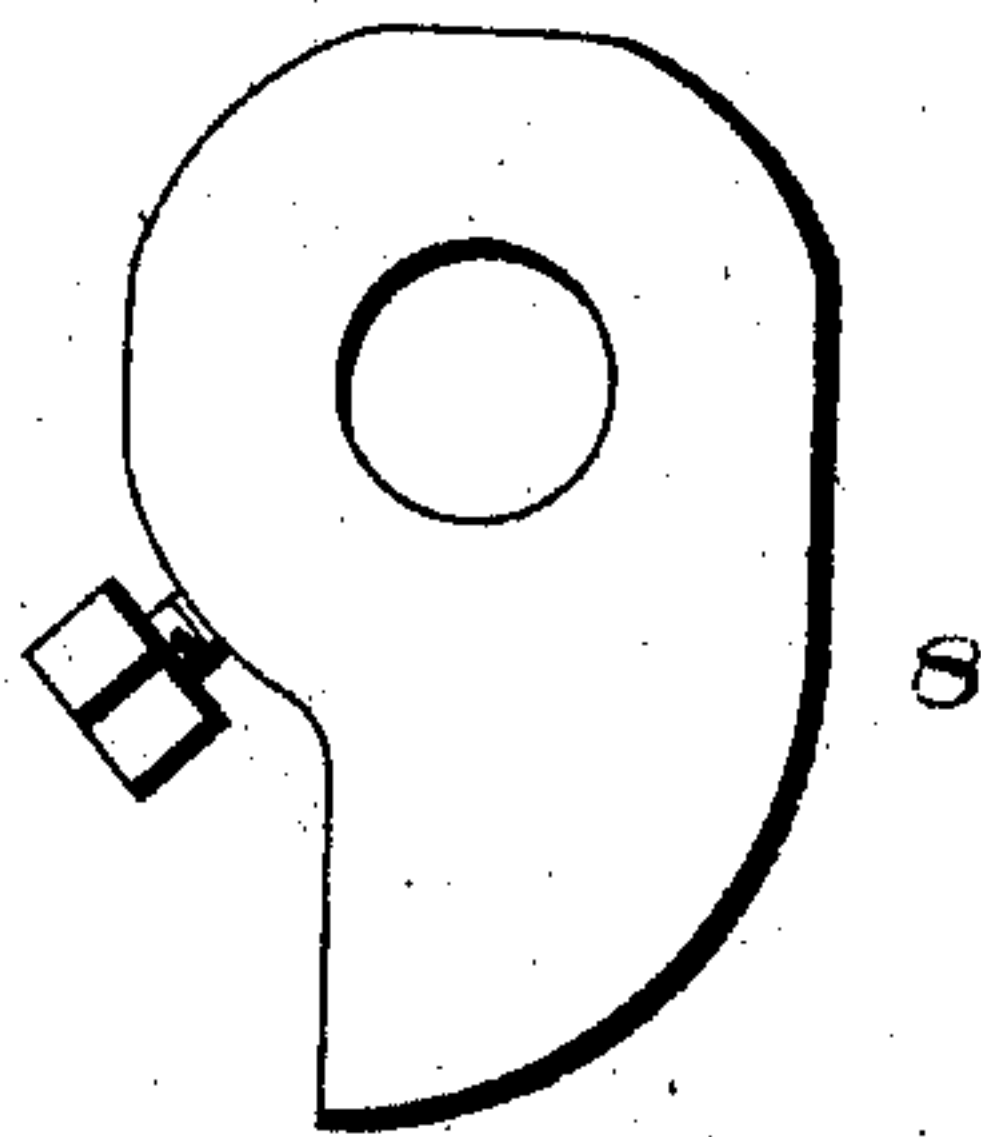


Fig. 3.



Witnesses
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CLINTON R. LEE, OF LINCOLN, NEBRASKA.

BROOM-MACHINE.

No. 850,532.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed September 5, 1906. Serial No. 333,329.

To all whom it may concern:

Be it known that I, CLINTON R. LEE, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Broom - Machines and Processes for Evening the Brush Ends of Broom-Corn, of which the following is a specification.

10 This invention relates to a process of evening the brush ends of broom-corn to be used in the manufacture of brooms and an improved apparatus for carrying this process into effect.

15 The object of the present invention is to even up by a mechanical means the tips or brush ends of broom-corn, so that when the same is bound up into a broom the tips or brush ends of the brooms would be full and
20 practically even.

A further object of the invention is to provide a device whereby this process may be carried into effect in an expeditious and practical manner.

25 To this end the invention consists in the process and in the novel construction, arrangement, and combination of the several parts of the device, as hereinafter described, illustrated in the drawings, and more particularly pointed out in the claims hereunto
30 appended.

In the drawings, Figure 1 is a view of the device for carrying out my process, in elevation, partly broken away and partly in section, to show the arrangement of the broom-corn in the broom-corn-jouncing holders and the means for giving said holders a jouncing movement. Fig. 2 is a perspective view of one of the broom-corn-jouncing holders and the frame or block by which it is carried, and
40 Fig. 3 is a side elevation of one of the jouncing-cams for operating one of the jouncing-holders.

Referring to the drawings, the numeral 1
45 indicates the supporting-frame of the device, which may be of any suitable or approved construction; 2, standards projecting above the top of said supporting-frame, and 3 a shaft suitably journaled in said supporting-
50 frame near the top thereof.

The numeral 4 indicates a pulley or other suitable means secured to said shaft for the purpose of transmitting rotation thereto.

Inasmuch as in the operation of this device
55 vice it is necessary in order to insure the best

results that the shaft 3 shall have a very rapid rotation, I prefer the use thereon of a pulley, as shown, in order that it may be easily and economically and smoothly operated from a motor or engine.

60 The numeral 5 indicates a suitable frame or block carrying a suitable broom-corn holder 6, adapted to be jounced or vertically reciprocated, preferably between the upwardly-extending standards 2 in guides 7 7, secured
65 thereto. It will be apparent that it is not absolutely necessary that the upwardly-extending ends of the standards 2 be utilized to guide the jouncing movement of said holders, as other means may be employed or substituted for this purpose. On the shaft 3 immediately beneath each of the blocks or frames
70 5 is rigidly secured a cam 8, adapted when said shaft is rotated to strike the bottom of said block or frame and drive the same upward. The said block and holder carried
75 thereby will, as soon as the long end of said cam passes out of engagement, fall back to its normal position, thus producing a reciprocatory or jouncing movement of said holder, 80
and which jounces or jolts the tips or brush ends of the broom-corn carried in said holder to become even by reason of contact with the solid flat bottom of the containing-holder, as
85 is evident. This holder 6 is provided with a solid flat bottom upon which the tips or brush ends of the broom-corn contained
90 therein rest. When a bunch of material is placed in one of these holders, tips or brush ends down, the jouncing of said holder will cause all or nearly all the tips or brush ends
95 in said bunch to settle down and rest on said bottom, where said ends are evened up, as desired. When this end is accomplished, the bunch of material is removed from said holder
and is then ready to be bound up into a broom or whisk.

The operation of the device is as follows: After the broom-corn has been bunched the tips or brush ends thereof are then ready for
100 evening. This evening of the tips or brush ends of a bunch of broom-corn has been heretofore done by hand, and of course a considerable amount of time has been consumed
105 in the operation, and even when thus completed was not always satisfactory for the manufacture of fine whisks and brooms. At this stage of the process my device is brought
into play, and instead of doing the evening by
110 hand bunches of broom-corn thus prepared

are placed in the broom-corn-jouncing holders 6 with the tips or brush ends down, so that the longest projecting ends of the bunch will rest upon the solid flat bottom of said holder.

5 The shaft 3 is then rapidly rotated, which by means of the cams thereon will rapidly jounce the holders 6 and cause the tips or brush ends of the broom-corn contained therein to even up. When this has been accomplished, the
10 bunches of broom-corn are then removed from said holders and are then ready to be bound up into a broom or whisk.

Having thus fully described my invention, what I claim, and desire to secure by Letters
15 Patent of the United States, is—

1. In a broom-straw evener, a straw-holder having a solid flat bottom, in combination with a suitable mechanism adapted to jounce said holder to cause the tips or brush ends of

the straws contained therein to assume a uniform evenness. 20

2. In a broom-straw evener, the combination with a rotatable shaft provided with one or more cams rigidly secured thereon, of a loosely-seated broom-straw holder having a
25 solid flat bottom, and means for imparting rotation to said shaft to cause said cams to contact with said holders, whereby a jouncing movement is imparted to said holders to cause a uniform evenness of the tips or brush
30 ends of the broom-corn contained therein.

In testimony whereof I affix my signature in presence of two witnesses.

CLINTON R. LEE.

Witnesses:

C. E. BAUER,
IRA G. LEE.