

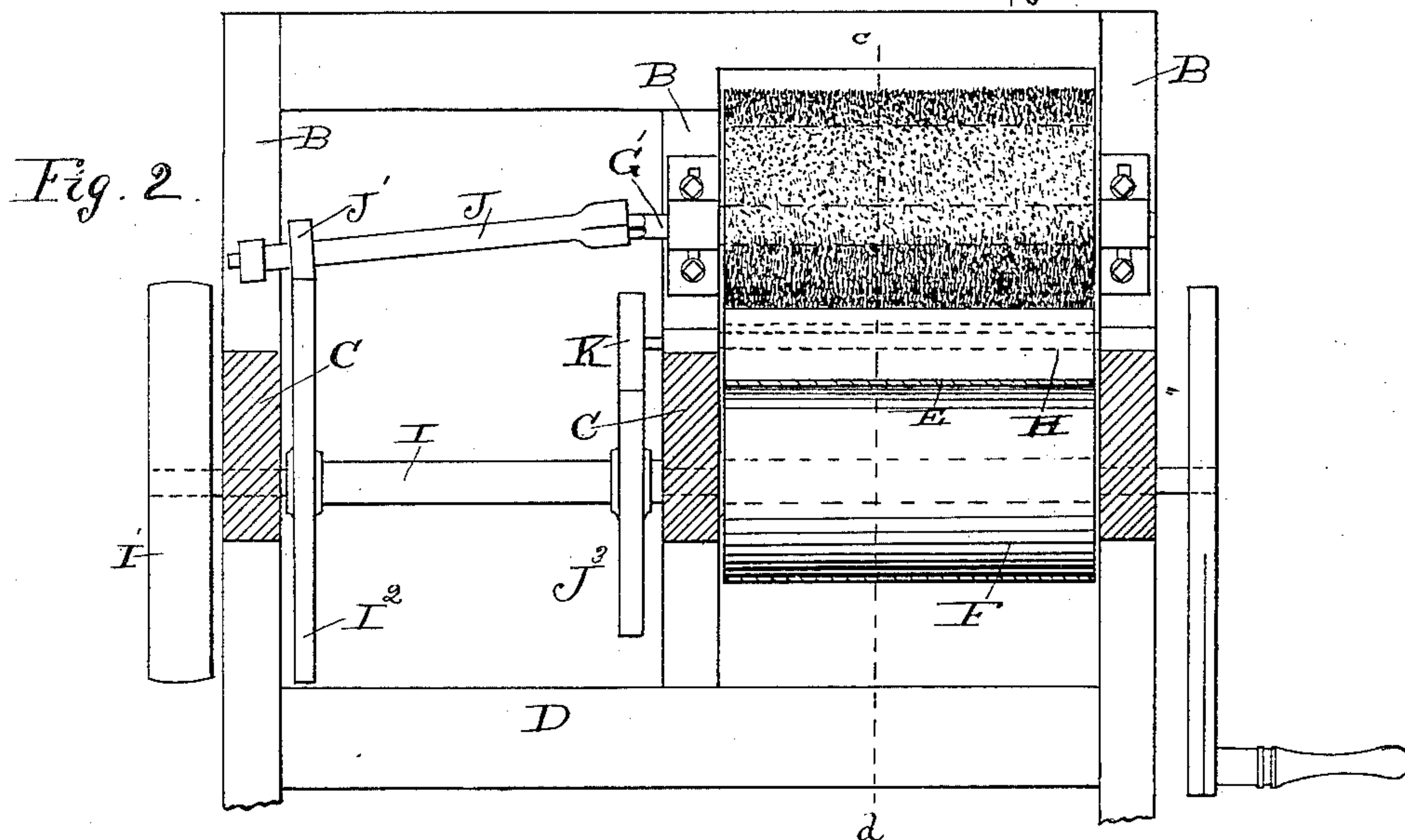
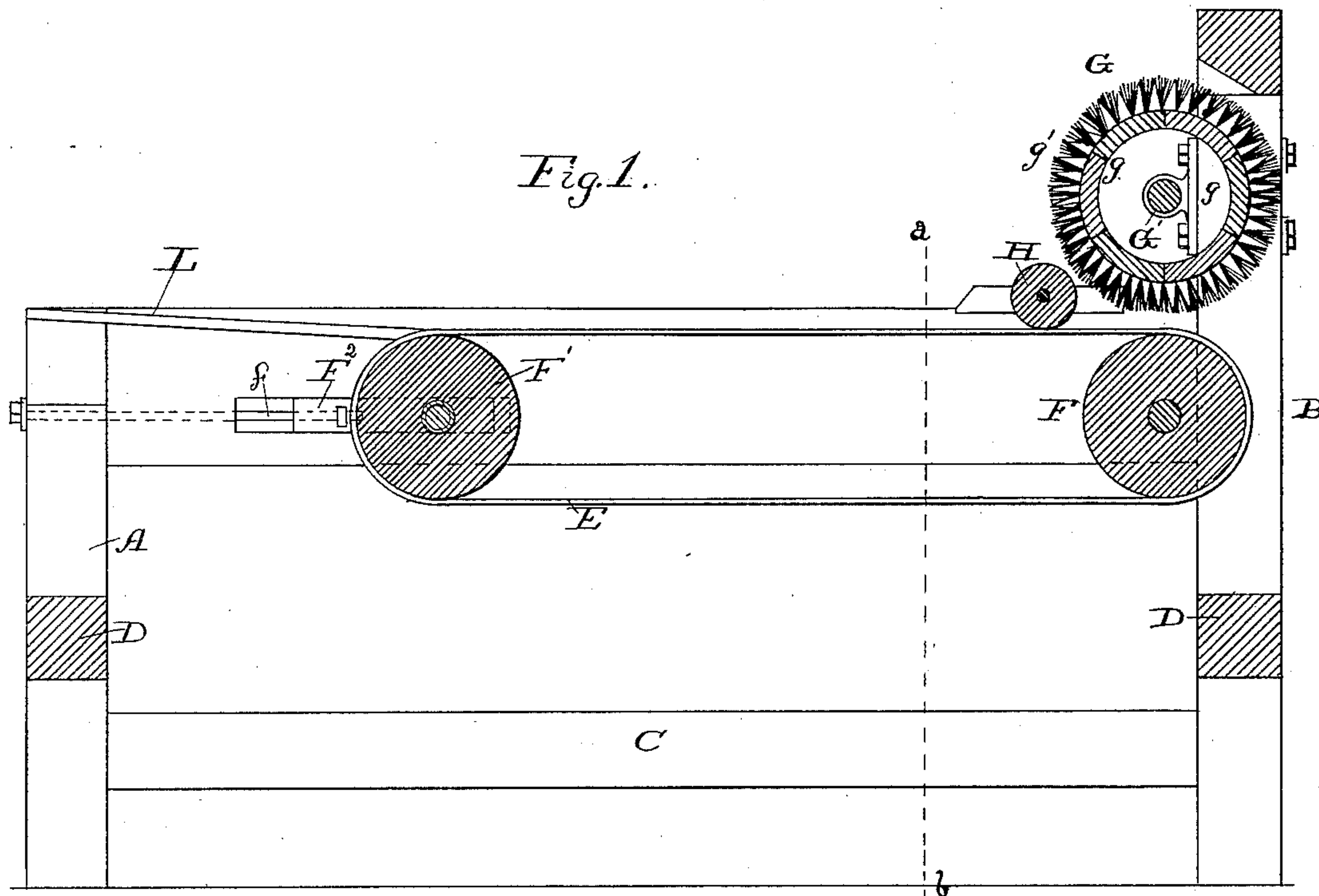
(No Model.)

J. G. DILL.

TOBACCO DUSTING MACHINE.

No. 318,549.

Patented May 26, 1885.



Witnesses:—  
H. E. Bliss —  
B. H. Sommers

Inventor:  
Joseph E. Will  
by Double day & Bliss  
attys



# UNITED STATES PATENT OFFICE.

JOSEPH G. DILL, OF RICHMOND, VIRGINIA.

## TOBACCO-DUSTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 318,549, dated May 26, 1885.

Application filed April 8, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH G. DILL, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Tobacco-Dusting Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a novel machine for dusting and cleansing tobacco-leaves, the object of the invention being to provide a mechanism of a simple character, but which shall be better adapted than those heretofore for the thorough cleansing of the tobacco without subjecting it to the disadvantageous actions that are exerted when use is made of the machines heretofore employed.

Figure 1 is a longitudinal section on the line *c d*, Fig. 2. Fig. 2 is a transverse section on the line *a b*, Fig. 1.

In the drawings the operative parts of the machine are represented as being mounted upon a frame-work, and this may be of any suitable character. The one shown has up- rights A A at the outer end of the machine, up- rights B B at the other end of the machine somewhat longer than those at A, longitudinal sills C C, and cross-girts D D, and of these any number may be used. In the frame-work thus provided there is supported an endless carrier, E, which may be of canvas, leather, or any other equivalent material. At the ends it is supported upon rollers F F', the roller F' being mounted in sliding bearing-blocks F<sup>2</sup> F<sup>2</sup>, mounted in ways or guides which permit them to move in or out. With the bearing-blocks are connected adjusting-rods, as shown at *f*, these engaging preferably with the bearing-blocks by means of screw-threads, and by means of the devices last mentioned the tension of the endless carrier can be regulated.

Above the roller F there is mounted the revolving brush, generally indicated at G. It is preferably constructed of sections *g* of a wooden or metal cylinder, each section being charged with bristles or filaments *g'*, these several sections being secured together by means of heads at the ends, or in any other approved manner. The brush is secured to a shaft, G', which latter is mounted in bearings attached to the sides of

the uprights B B. The brush should be mounted in such proximity to the traveling carrier E that the ends of the bristles or filaments shall move properly relatively to the tobacco which is carried by the apron.

In order to hold the material properly in position while being operated by the brush, I combine with the devices above described a roller, H, it being situated across the machine immediately above the carrier and just in front of the brush. This roller may be mounted in adjustable bearings, so that its distance from the carrier may be regulated as different circumstances may require, and the brush also may be arranged, if desired, so that it can be adjusted to and from the carrier. Power is imparted to the carrier-roller, the brush, and the pressure-roller by means of a shaft, I, which passes through the inner roller, F, this shaft receiving power from any suitable motor through the medium of a belt-wheel, I', or its equivalent. Upon the shaft there is a gear-wheel, I<sup>2</sup>, the teeth of which are somewhat beveled and are adapted to engage with a corresponding pinion, J', upon a tumbling-shaft, J. This shaft J engages with the end of shaft G', which carries the brush. At J<sup>3</sup> there is another gear-wheel, which meshes with the pinion K, the latter being secured to the shaft or gudgeon of the pressure-roller H. By these devices last described power is imparted by the shaft I both to the endless carrier, the brush, and the pressure-roller. At L there is a chute or feed board, preferably inclined somewhat. Over this the material is passed to the carrier E, which moves it forward under the pressure-roller and under the brush, the material while being held in place by the carrier being thoroughly brushed and cleansed, as will be readily understood.

My device differs from any heretofore employed, it embodying a brush which revolves in the longitudinal planes of movement of the tobacco; whereas in other machines the brush has been arranged to revolve in planes transverse to the path of the material, and therefore better results have been attained.

I am aware of the fact that heretofore revolving brushes have been used for the cleaning of carpets, in combination with cords, ropes, or straps, for the purpose of carrying the carpet to the brush, and I do not claim



such devices as my invention; but I am not aware of the fact that any machine intended or adapted for the purpose alluded to is capable of treating tobacco-leaves in the manner which I follow. I do not claim, broadly, the several elements of my mechanism considered without respect to each other.

I am also aware of the fact that in machines for treating hides use has been made of aprons or carriers for feeding the hides to the devices by which the "dehairing" and "working out" of the hides is effected; nor do I claim such mechanism as my invention; but the means employed for treating hides would destroy the tobacco-leaves, and it would not be practicable to use them for my purpose. Use has been made also in tobacco-stripping machines of carriers and brushes or similar devices for the purpose of removing the leaves from the carriers; but in these machines there has been no use made of brushes for the work which I aim to accomplish, they (the brushes in said prior machines) being so related to the other parts that they act merely to loosen the leaves from the aprons and insure that they shall pass properly to a second carrier or receptacle. To thus loosen them the brushes revolve in a direction opposite to the movement of the apron, so that the bristles or filaments can engage with the end or edges of the leaves to remove them as aforesaid. I arrange the brush above the end of the apron,

and hence am enabled to throw the dust, dirt, sand, &c., entirely away from the tobacco, the latter passing directly downward after being acted upon by the brush. In another respect a machine having all the parts shown is superior for this purpose to any of those used in the other arts, inasmuch as it is so constructed that the operator can readily feed the leaves to the apron, smoothing or flattening them, if necessary, this being rendered possible by the feed or chute board L, although I do not wish that the remaining features of the invention should be limited thereto.

What I claim is—

In a machine for dusting tobacco, the combination of an endless apron having a flat portion upon which the leaves can be smoothly laid, a roller, H, which holds the tobacco upon the apron, and the revolving brush G, situated above the end of the apron in proximity to said roller, whereby the dust is thrown away from the path of the tobacco, and arranged to have its filaments move substantially in the direction of the travel of the apron, as described.

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

JOSEPH G. DILL.

Witnesses:

I. T. SMITH,

I. O. McGEHEE.