

A. M. Lanyer.
Picker and Spreader.

Nº 21,568.

Patented Sept. 21, 1858.

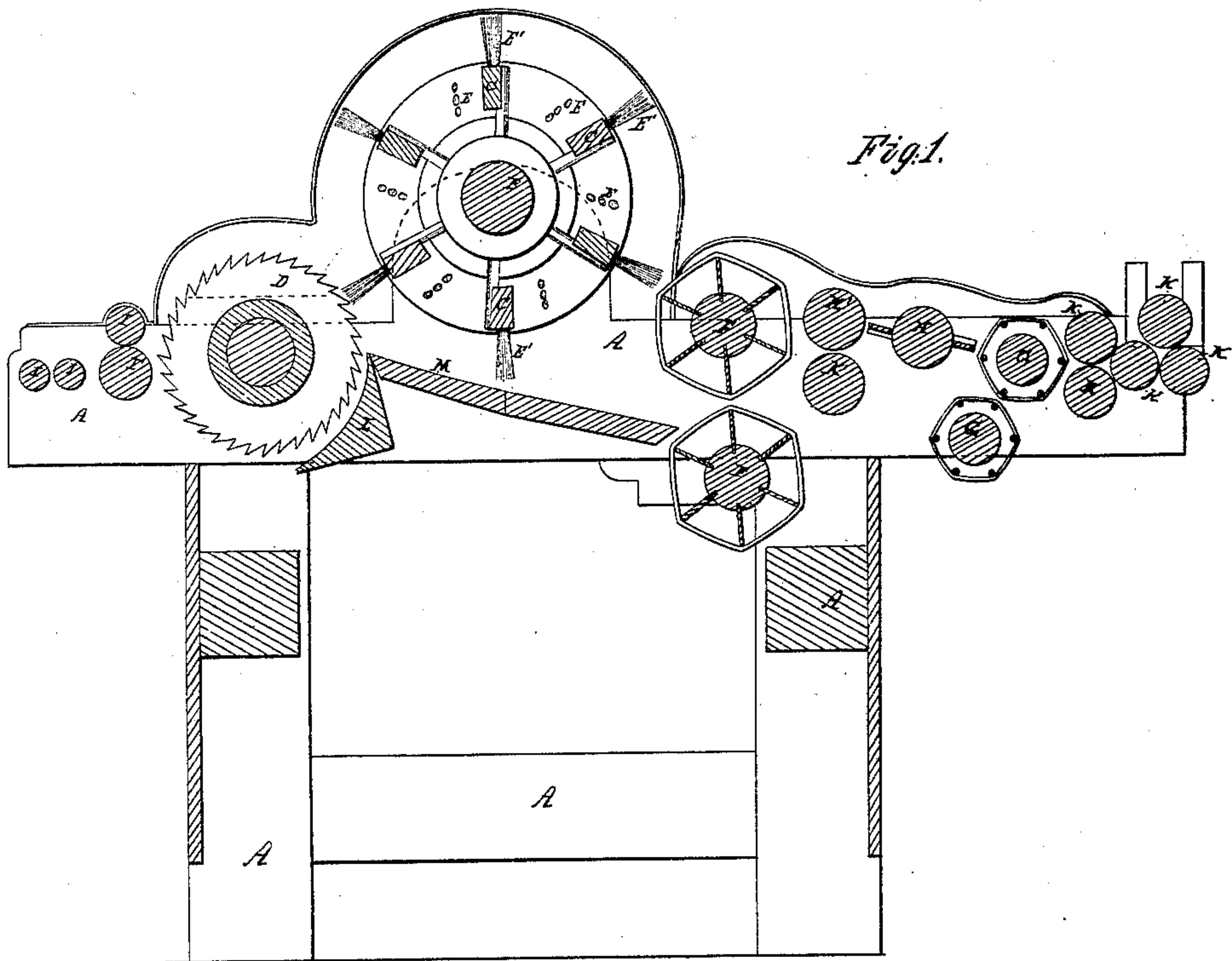
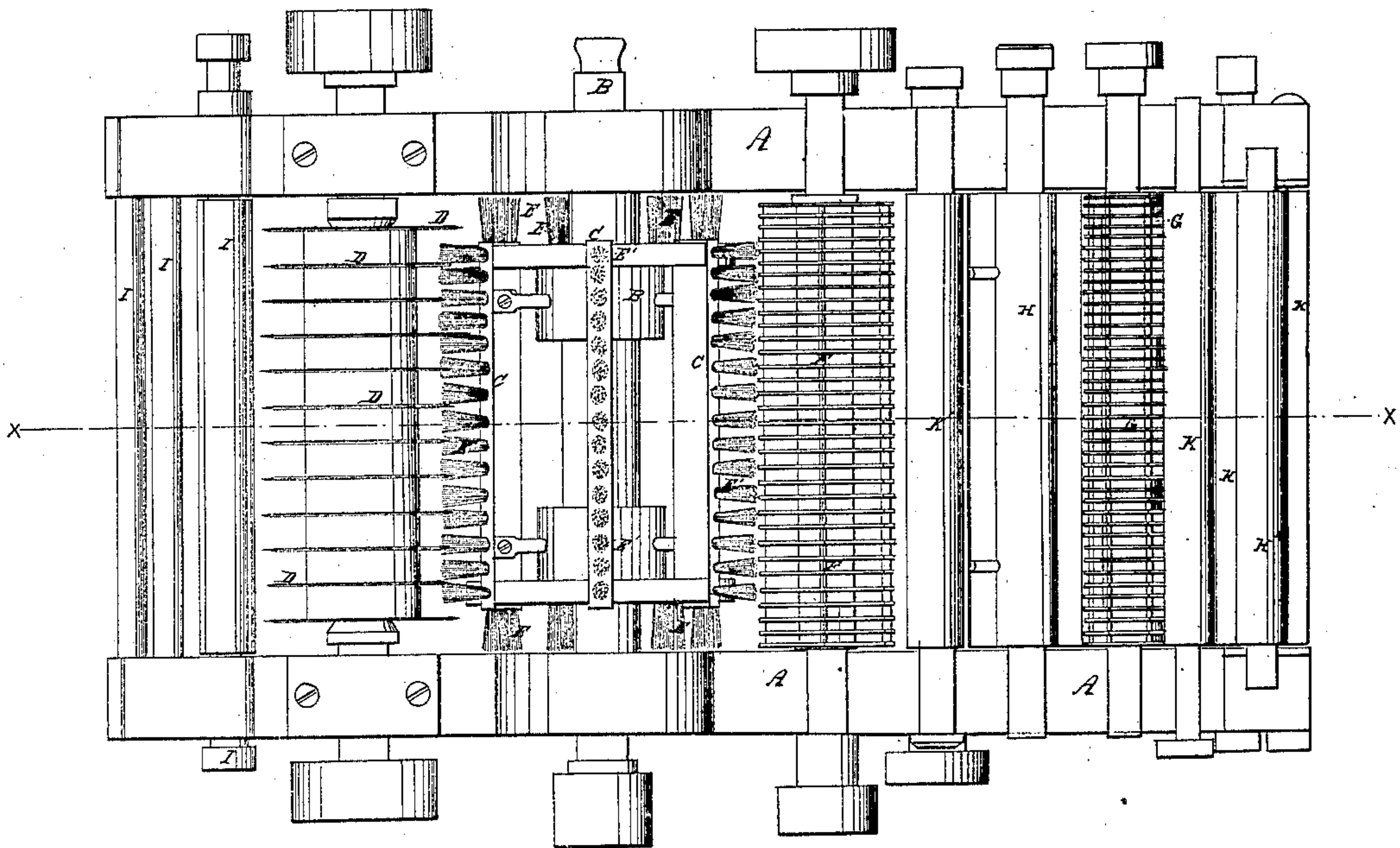


Fig. 2.



UNITED STATES PATENT OFFICE.

A. M. LANPHER, OF GLOUCESTER, NEW JERSEY.

BRUSH-CYLINDER FOR SPREADERS, COTTON-GINS, &c.

Specification of Letters Patent No. 21,568, dated September 21, 1858.

To all whom it may concern:

Be it known that I, A. M. LANPHER, of Gloucester, New Jersey, have invented a new and useful Improvement in the Art of
5 Constructing Machines for Picking and Spreading Cotton and other Fibrous Substances; and I do hereby declare the following to be a clear and exact description of the same, reference being had to the annexed
10 drawings, made part of this specification, and lettered to correspond therewith, similar letters referring to similar parts in the several figures.

My invention relates to that class of machines which are used in cotton mills, for picking and spreading the cotton, as it is taken from the bales, and passed on to the rollers, preparatory to carding; and consists in the application and use of a cylindrical brush, constructed and arranged as described, whereby the brush in combination with the saw cylinder, not only performs the office of the "willow," but that of the beater and blower at the same time, without danger of setting fire to the mill.

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

Figure 2, in the accompanying drawings, represents a plan of the improved picker and spreader, and Fig. 1 is a longitudinal vertical section of the same, through the center line x, x .

A, A, A, represent the frame work of the machine; I, I, are rollers over which the feeding apron passes when it conveys the unpicked cotton, or other fibrous material, to the feeding rollers I', I'; D, is the cylinder carrying a series of circular saws whose teeth engage the cotton, as it passes through the feeding rollers I', I', and separating the fibers, carries it over until it is doffed by the revolving brushes arranged on the cylinder B; E', E', E', represent these
45 brushes extending along the face of the cylindrical frame work, and E, E, E, represent brushes arranged on the ends of the same frame work, in radial lines nearly, and in a direction nearly parallel with the brushes
50 on the face.

C, C, C are the brush frames, attached

to radial arms, extending from the cylinder B; F, F, are wire cylinders, which are arranged as usual, for conveying the fibrous material to the spreader; K', K', the feed rollers; H, the beater; Z, Z, wire cylinders; K, K, K, K'', the different rollers, have nothing peculiar in their construction or arrangement to distinguish them from those in use in the common spreaders. But the brushes E, E, E, arranged on the ends of the revolving cylindrical frame, are the distinguishing features of my invention; and constitute my improvement in the brushes used for analogous purposes. It is well known to those who have used these revolving brushes in cotton mills and in cotton gins, that they frequently take fire from the friction between their ends and the frame work; and so common has this accident become in the mills, that it has become exceedingly difficult to obtain insurance while they were used. To obviate this difficulty was one of the ends aimed at in my invention, therefore; and the other, was to prevent the filaments of the cotton from becoming engaged in the journals of the revolving brush.

I am aware that metallic fans have been used on the ends of a cylindrical brush, in the cotton gin, as described in E. Carver's patent; and I am also aware that brushes have been arranged around the periphery of the end of the cylinder, and that such an arrangement was patented by B. D. Gullet, in 1858; but, while I believe that I can prove priority of invention over Gullet, I deem my arrangement essentially different from, and an improvement upon, his; as it combines the advantages of the fans of Carver, with the protection against fire, attained by Gullet. I therefore claim—

The brushes on the ends of the cylinder, when arranged substantially as above described, for the purpose of preventing the filaments of cotton, or other fibrous substances, from becoming entangled in the journals, and for preventing accidents from fire.

A. M. LANPHER.

Witnesses:

A. HERBERT,
EDW. F. BROWN.