

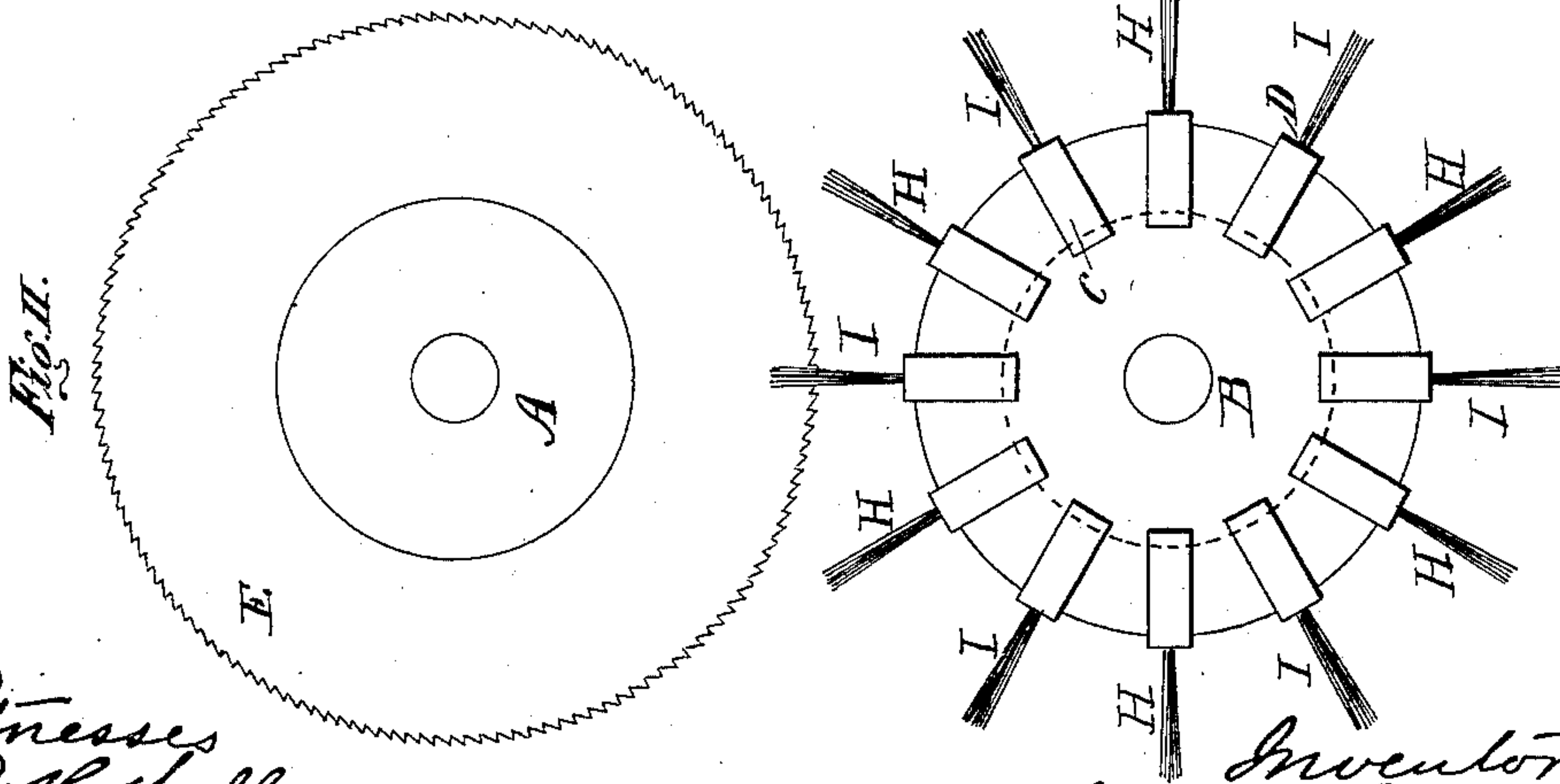
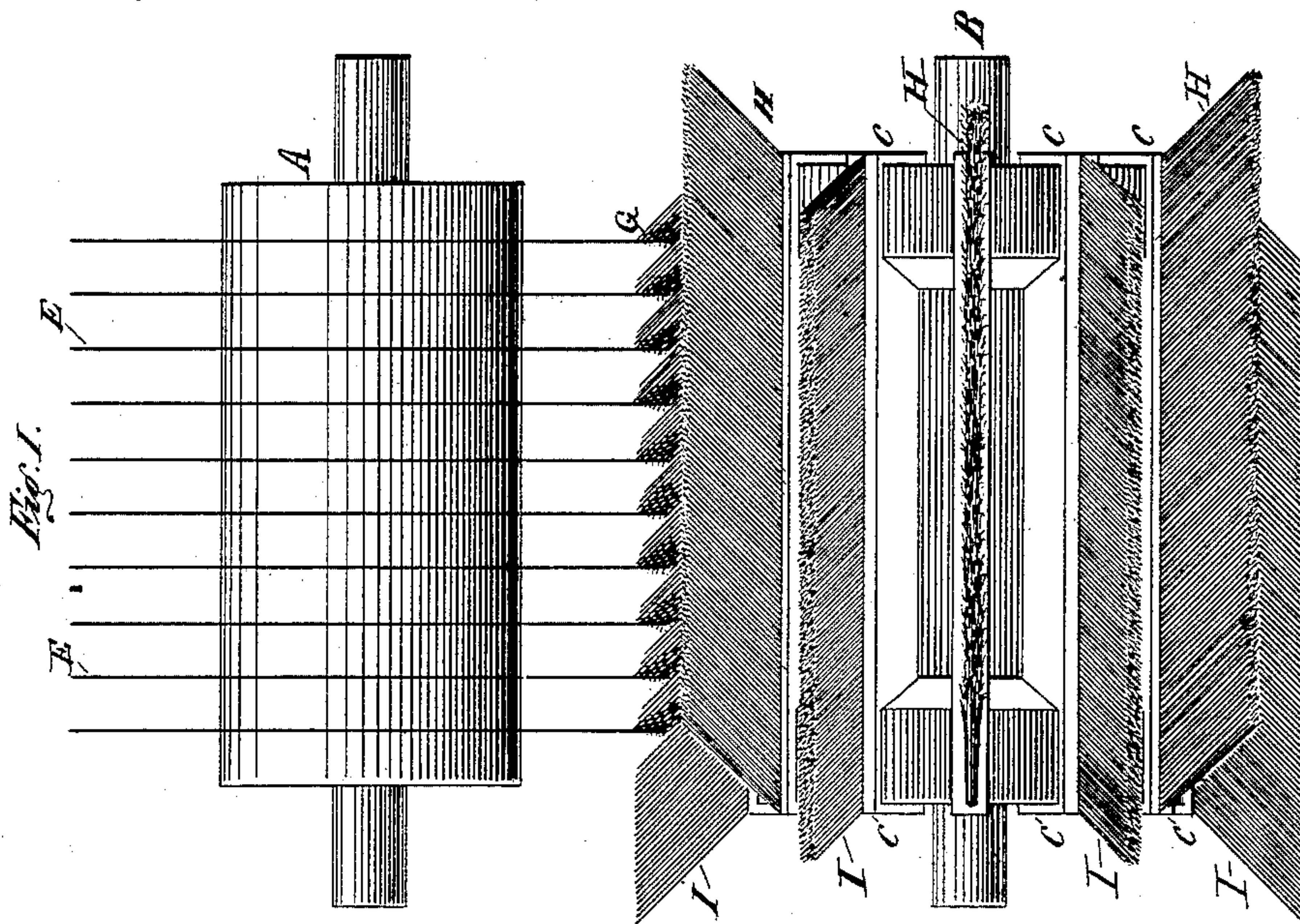
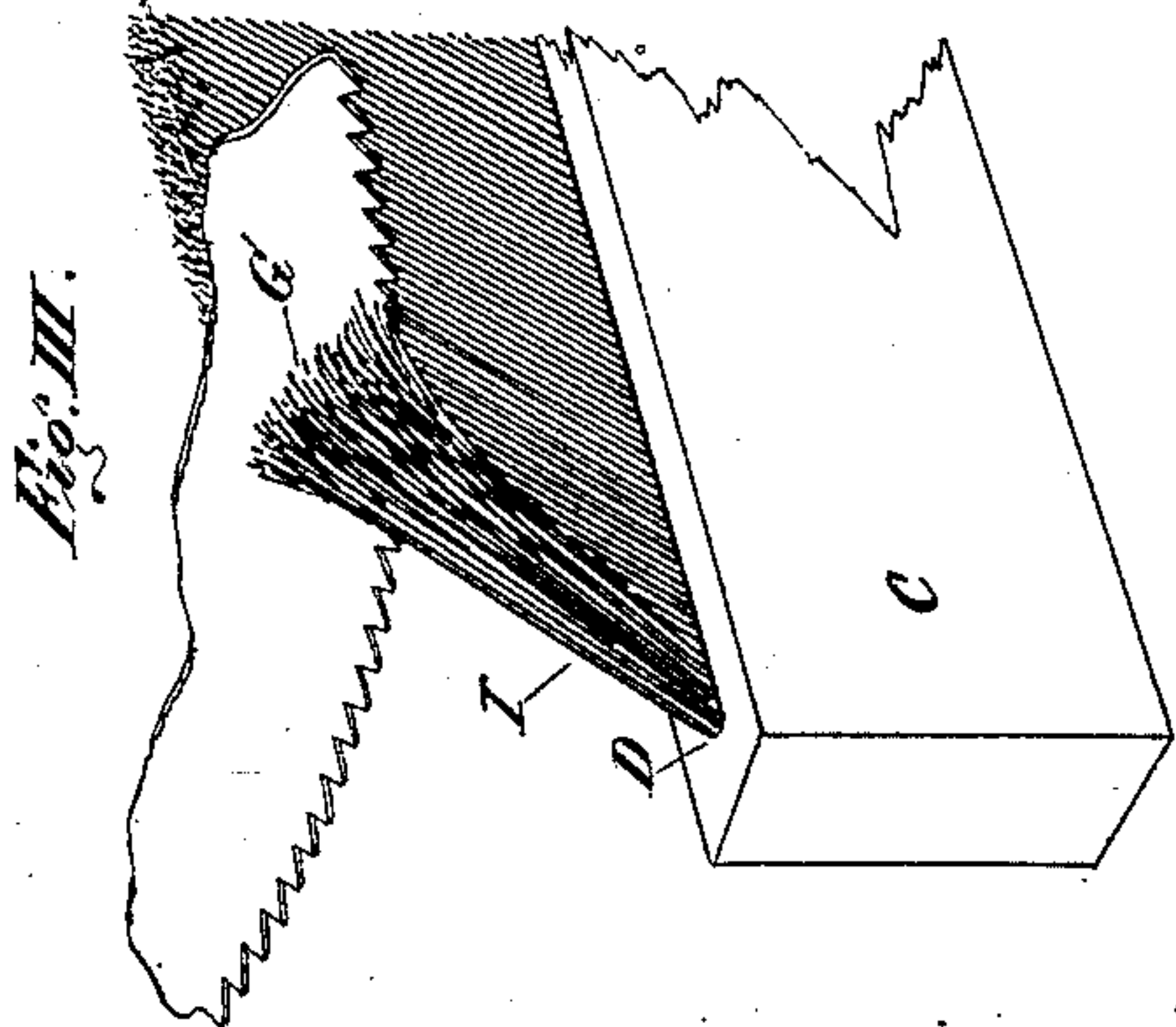
(No Model.)

R. F. SPANGENBERG.

BRUSH FOR GIN SAWS.

No. 360,486.

Patented Apr. 5, 1887.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT F. SPANGENBERG, OF NEW ORLEANS, LOUISIANA.

BRUSH FOR GIN-SAWS.

SPECIFICATION forming part of Letters Patent No. 360,486, dated April 5, 1887.

Application filed January 26, 1886. Serial No. 189,873. (No model.)

To all whom it may concern:

Be it known that I, ROBERT F. SPANGENBERG, a citizen of the United States, and a resident of New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Brushes for Gin-Saws; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

For many years after the discovery of the cotton-gin the doffing or cleaning brushes were located in such relationship to the saw-disks that the bristles interposed in the path of the disk-peripheries would lie in planes substantially parallel to the disk-surfaces. The disadvantage of this arrangement is due to the fact that the bristles immediately in front of the disks and those directly adjacent thereto are in a comparatively short time either broken off or given a permanent inclination in opposite directions outside of the range of effective action. It has been proposed to obviate this defect by locating the brushes upon directly-opposite sides of the several disks, so that the bristles should extend at or nearly at right angles to the disk-surfaces and in contact therewith. Aside from the difficulty of establishing and maintaining the proper adjustment of the bristle ends with respect to the disk-surfaces, this construction had the further disadvantage that the opposed bristles, acting simultaneously on opposite sides of the disks, had a tendency to mutilate and tear the fiber of the cotton, thereby deteriorating it and lessening its value.

It is the object of my invention to substitute for these old forms of brushes a construction obviating their defects, removing the fiber from the saws in substantially the same condition as when extracted from the burrs, completely cleaning the saw-teeth at each revolution, and maintaining its efficiency for a great length of time. With these ends in view I have devised the means illustrated in the accompanying drawings, wherein—

Figure I represents a front elevation of my improved brush as applied to ordinary gin-saws. Fig. II represents a side elevation thereof, and Fig. III represents an enlarged fractional perspective view of the same.

Similar letters of reference indicate similar parts throughout the several views.

A indicates an ordinary cylinder having a series of saw-disks, E. B indicates a brush-cylinder constructed in accordance with my invention, and consisting of a central shaft upon which are suitably supported a series of lags, C, longitudinally recessed at D for the reception of the bristles H I. These bristles are placed at an incline, as shown in Figs. I and III, so that their outer portions, G, will with their sides sweep the saws, their inclination keeping them constantly pressed against the saw-surfaces.

All of the series of rows of bristles H are inclined in one direction, while the alternate series of rows, I, are inclined in the opposite direction.

It will be readily seen that in the operation of my invention the brushes act alternately upon opposite sides of the saw-disks, thereby successively loosening and disengaging the fiber from the saw-teeth without breaking or tearing said fiber.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with gin-saw disks, of a brush provided with a series of bristles sweeping one side only of the several saw-disks and a second series of bristles sweeping the opposite side only of said disks, the members of each series being located one in advance of the other in the direction of the rotation of the brush and alternating with those of the other series, substantially as described.

2. The combination, with gin-saw disks, of a brush provided with alternating series of rows of longitudinally-disposed bristles, the bristles of one of the series being inclined in one direction with respect to the brush-axis and the bristles of the other series being inclined in the opposite direction thereto, substantially as described.

3. A brush for gin-saws, consisting of the cylinder B, provided with the lags C, longitudinally recessed, and the alternate series of oppositely-inclined bristles H I, the whole arranged so as to alternately sweep the opposite sides of the saws, substantially as described.

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

ROBERT F. SPANGENBERG.

Witnesses:

G. M. CLOSE,
L. P. PAQUET.