

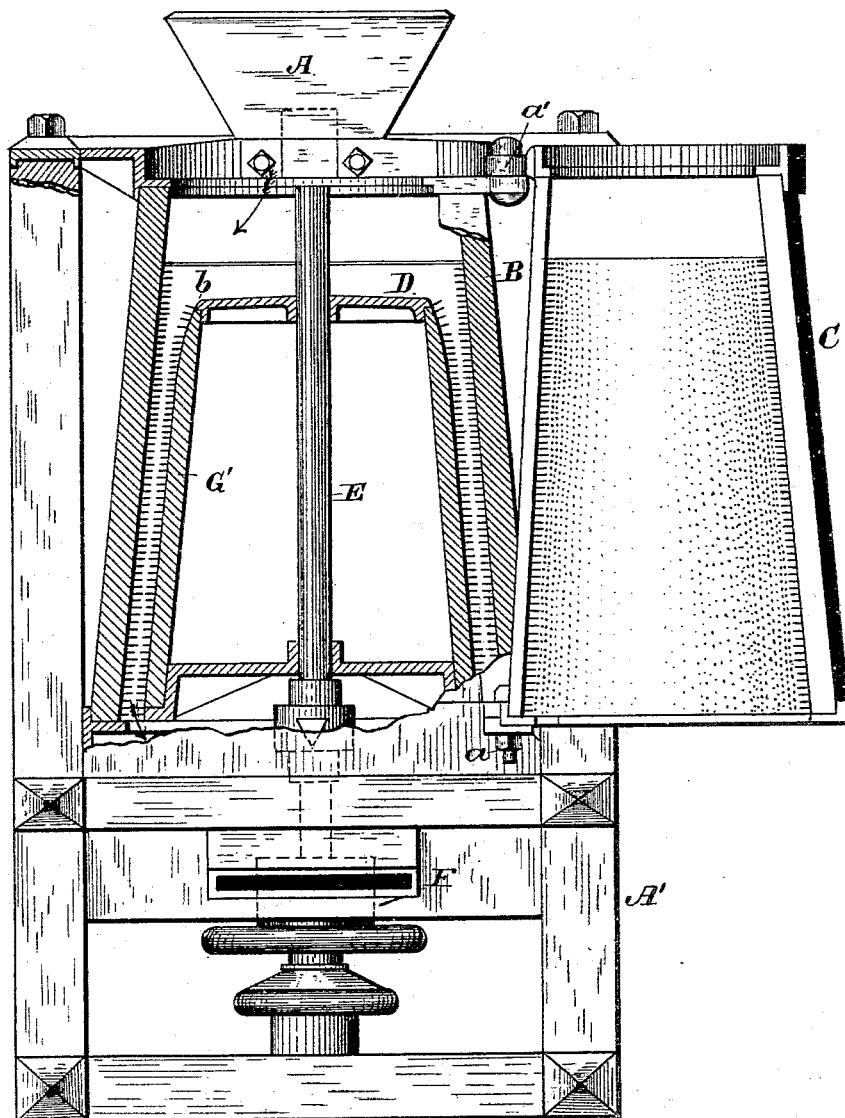
(No Model.)

J. L. WEATHERHEAD & J. S. COCHRAN.

MACHINE FOR DELINTING COTTON SEED.

No. 384,340.

Patented June 12, 1888.



ATTEST.

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INVENTOR.

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UNITED STATES PATENT OFFICE.

JAMES L. WEATHERHEAD AND JAMES S. COCHRAN, OF PHILADELPHIA,
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MACHINE FOR DELINTING COTTON-SEED.

SPECIFICATION forming part of Letters Patent No. 384,340, dated June 12, 1888.

Application filed February 28, 1888. Serial No. 265,637. (No model.)

To all whom it may concern:

Be it known that we, JAMES L. WEATHERHEAD and JAMES S. COCHRAN, citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Machines for Delinting Cotton-Seed, of which the following is a specification.

Our invention relates to improvements in machines for delinting cotton-seeds; and it consists in providing the same with an inside cone having a beveled or inclined upper end, whereby a chamber of downwardly-increasing width is formed for the purpose of separating or breaking up the masses of seed before they pass into the delinting portion of the device.

This improvement is fully shown in the accompanying drawing, which represents a broken vertical sectional view of a machine for delinting cotton seeds embodying our invention.

Referring to the drawing, A represents a hopper secured on the upper portion of the frame A' of the machine, and opens into the stationary conical casing B, which is secured in place to the frame A'. One portion of the conical casing B is composed of a door part, C, which is so secured to the other portion as to admit of its being swung outward in a horizontal direction. The means employed for this purpose consists of a hinge, *a*, the members of which, respectively, are secured to the lower portion of the side of the door and to the other or main portion of the cone, and a hinge, *a'*, the members of which are secured at the upper side portions, the members of the hinge *a'* being made larger than those of the hinge *a*, so that the pins of said hinges shall stand in the same vertical line, and the door will readily swing in a horizontal direction and remain in place when opened without a fastening device.

D represents an inner revolving cone mounted on the vertical shaft E, the latter being suitably journaled in the frame of the machine and provided with the pulley F, by means of which rotary motion can be communicated to said shaft and cone from any suitable motor connected thereto by proper mechanism. The upper end of said cone D is rounded off or beveled, or tapering toward the axis at a greater angle than the lower portion of its height, whereby a chamber, *c*, is formed between the cone D and the conical

casing of downwardly-decreasing width, surrounding the upper portion of said cone and between it and the cone B.

The outer surface of the cone D and the inner surface of the cone B have secured there-to the metallic brushes G, the wires whereof being attached to long strips of leather or other suitable material, the strip being preferably wound spirally on the inner cone, and the brushes on the inner surface of the outer cone extending above the top of the inner cone. The chamber *c* constitutes a downwardly-contracted or tapering seed-receiving chamber having brush-clothed opposite walls.

The operation is as follows: The cotton-seed is fed into the hopper A of the machine, falling on the upper end of the cone D, when, owing to the centrifugal motion of the shaft E and cone, it is forced or thrown against the brushes on the upper portion of the cone B, working down through, and falls into the chamber *c*, in which the masses of seed are separated, so that they readily and uniformly pass therefrom between the brushes of the lower or delinting portion of the machine. As the seed and lint reach the bottom of the cones they are discharged therefrom, and may be separated by any usual device, as a fan or blower, such means being common and well known, and, not being claimed *per se* herein, are not shown in the drawing.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the conical casing B, having its interior surface clothed with brushes, as described, of the cone D, having its exterior surface clothed with brushes and having its upper portion rounded off or tapered toward its axis at a greater angle than the lower portion of its height, as described, and thereby forming between the said cone and casing a downwardly-contracted or tapering seed-receiving chamber having brush-clothed opposing walls, as described, providing for the separation of the seeds and facilitating their entrance between the acting surface of the cone and casing, substantially as described.

JAMES L. WEATHERHEAD.
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Witnesses:

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