

W. B. LINDSAY.

Cotton Gin.

No. 14,965.

Patented May 27, 1856.

Fig. 1.

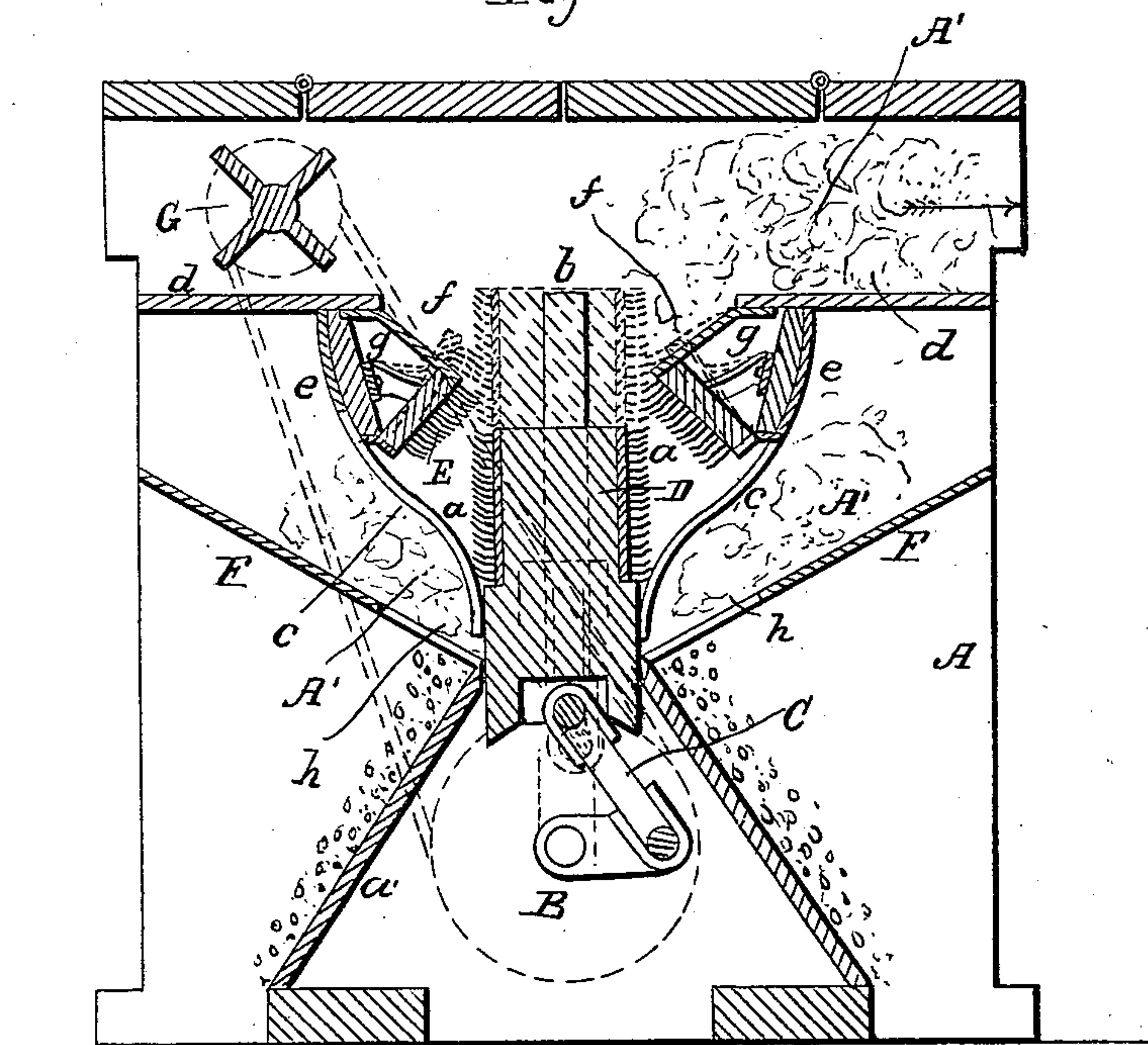
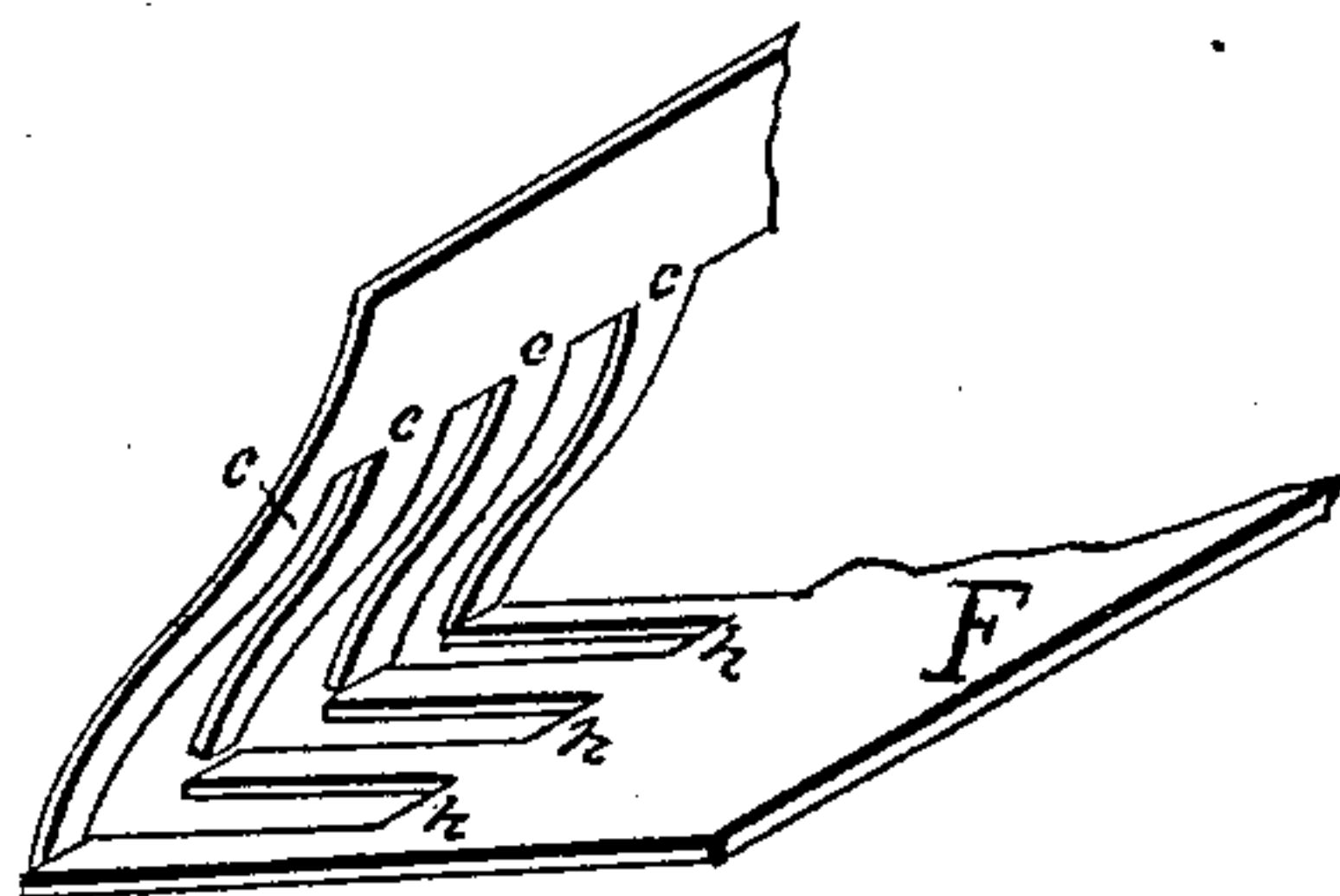


Fig. 2.



UNITED STATES PATENT OFFICE.

WILLIAM B. LINDSAY, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN COTTON-GINS.

Specification forming part of Letters Patent No. 14,965, dated May 27, 1856.

To all whom it may concern:

Be it known that I, W. B. LINDSAY, of New Orleans, in the county of Orleans and State of Louisiana, have invented a new and Improved Cotton-Gin; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical section of my improvement, the plane of section being through the center. Fig. 2 is a detached perspective view of a portion of the ribs and perforated plate at the inner ends of the hoppers.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists in the employment or use of a reciprocating card and two vibrating stripping-cards, in combination with "breasts," the above parts being arranged and operating as will be hereinafter fully shown and described.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a rectangular chest or box, through the lower part of which a crank-shaft, B, passes. C C are pitmen attached to the crank of said shaft, the upper end of the pitmen being attached to the lower end of a block, D, which has cards *a a*, of the usual construction, attached to it, one at each side. (See Fig. 1.) The ends of the blocks D are fitted and work on suitable guides, *b*, on the inner sides of the chest or box A, the block extending the whole width of the chest or box. Within the chest or box A there are secured ribs *c*, forming breasts, a breast being at each side of the block D. The ribs are curved, as clearly shown in Fig. 1, their lower ends being nearly in contact with the sides of the block D, and their upper ends branching off from it. The upper ends of the breasts are attached to horizontal plates or partitions *d* within the chest or box at its upper part.

E E are vibrating cards, the lower ends of which are attached by joints or some flexible material, with strips *e* at the upper ends of the breasts. A covering, *f*, of cloth or other suitable material, is attached to the upper ends of the cards E, and to the inner edges of

the plates or partitions *d* springs *g* are placed at the back sides of the cards E E. There is a card, E, at each side of the block D, as shown in Fig. 1.

F F represent inclined plates, which are fitted within the chest or box A. The inner ends of these plates are slotted, as shown at *h*, (see more particularly Fig. 2,) and the inner ends of the plates nearly touch the sides of the block D.

G is a fan, which is placed in the upper part of the chest or box A over one of the plates or partitions *d*.

The operation is as follows: The cotton (represented by A', Fig. 1,) is placed upon the plates F F, and a reciprocating motion is given the block D by applying power to the crank-shaft B. When the block D is down or at the end of its downward stroke, the cards *a a* will catch the cotton, and as the block ascends the cards will draw the cotton between the ribs *c*. The spaces between the rods being too narrow to allow the seed to pass up, seed will fall through the slots *h* in the plates E, and the cotton will be carried upward by the cards and between the cards E E, the latter cards being pressed against the cards *a* by the springs *g*. The cards E E are forced back by the block D and cards *a*, and serve to strip and loosen the cleansed cotton in the cards *a*, and at the same time preventing the machine from being choked. The fan G by its rotation generates a blast which forces the ginned or cleaned cotton out from the upper part of the box. The fan may be rotated by a belt, *a'*, from the crank-shaft B.

The above machine has been practically tested and operates well. Short as well as long staple cotton may be perfectly ginned by it. It operates rapidly, and is peculiarly adapted for ginning sea-island cotton.

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

The combination of the reciprocating cards *a a*, vibrating stripping-cards E E, and ribs *c*, arranged and operating substantially as shown and described, for the purpose specified.

WM. B. LINDSAY.

Witnesses:

JOHN P. MOORE,
P. GRANDPRÉ.