

(No Model.)

W. B. BURDINE & J. E. BREWER.

COTTON GIN CONDENSER.

No. 258,849.

Patented May 30, 1882.

Fig. 1.

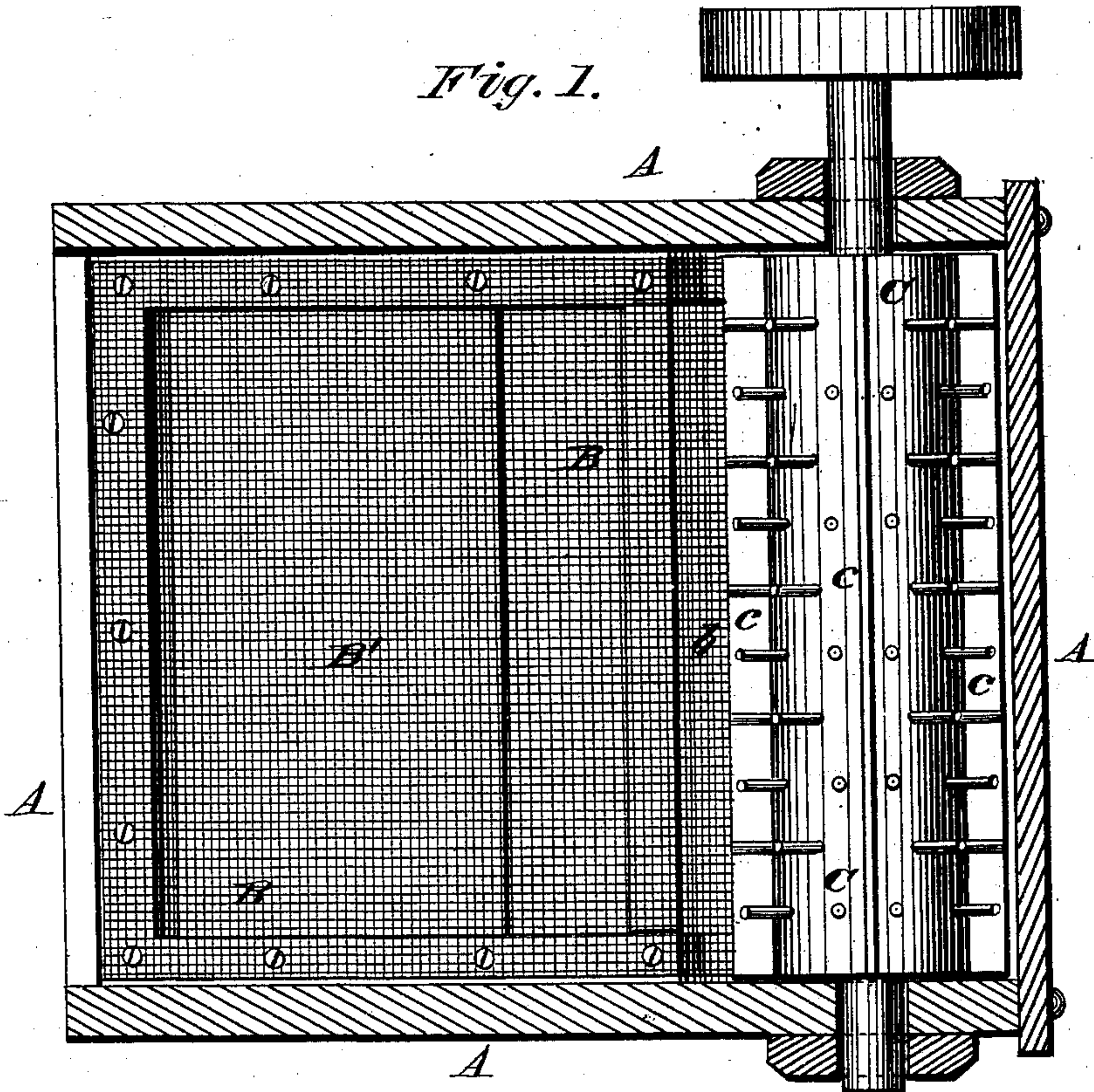
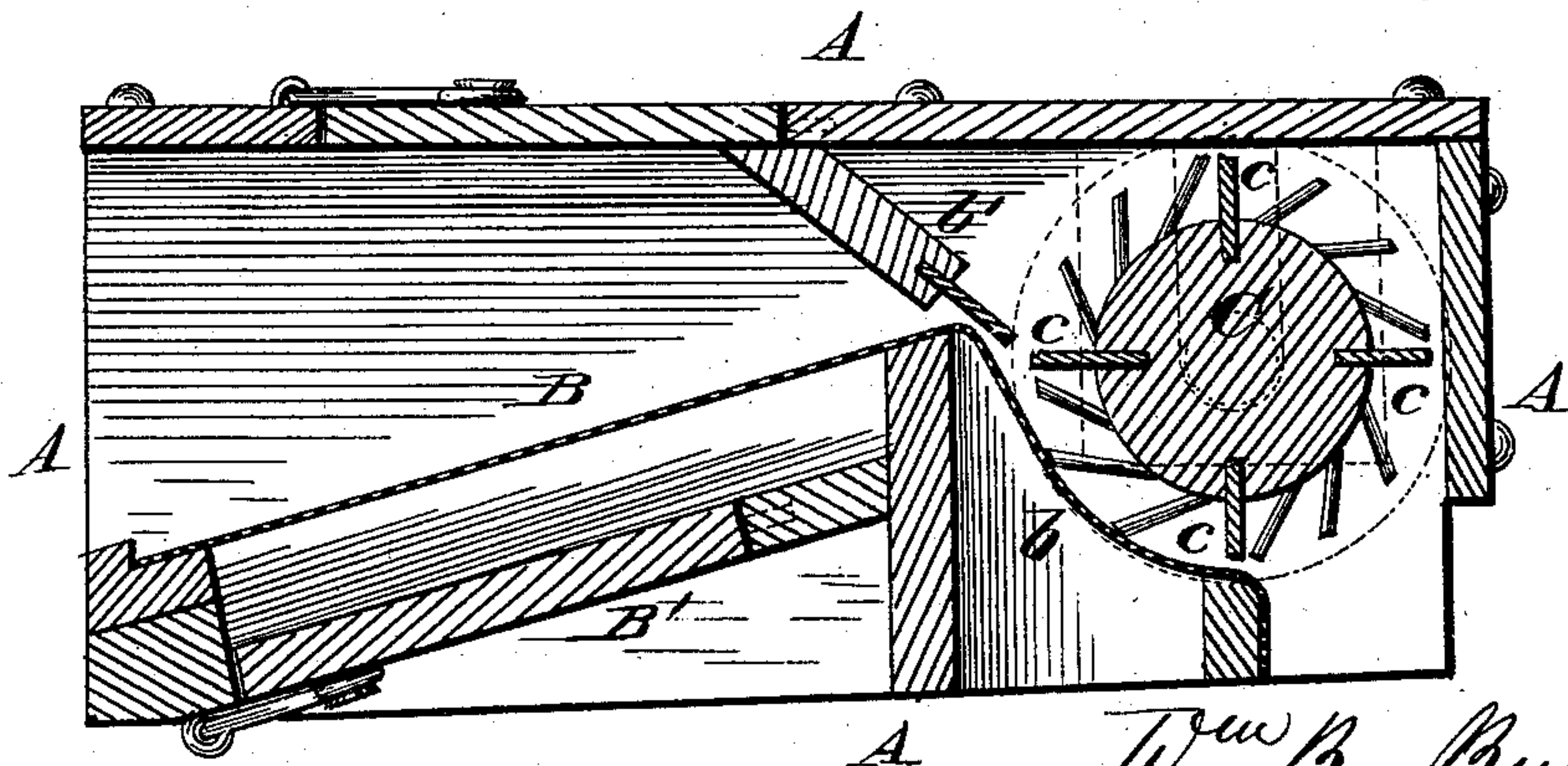


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM B. BURDINE AND JESTER E. BREWER, OF TROY, ALABAMA; SAID
BURDINE ASSIGNOR TO FRANK BALTZELL, OF SAME PLACE.

COTTON-GIN CONDENSER.

SPECIFICATION forming part of Letters Patent No. 258,849, dated May 30, 1882.

Application filed October 24, 1881. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM B. BURDINE and JESTER E. BREWER, of Troy, in the county of Pike and State of Alabama, have invented certain new and useful Improvements in Cotton-Gin Condensers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a horizontal section of our improved cotton-gin condenser, and Fig. 2 is a vertical section thereof.

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

This invention appertains to improvements in cotton-gin condensers, its object being to render the air current or blast twofold in its action—viz., to form a counter-current to drive the extraneous particles eliminated from the cotton by the direct blast or current through the perforated bottom, precipitating them upon the inclined supplemental bottom or chute below, and to permit the leaving of the cleaned cotton from the machine in a loose and fleecy state; and it consists in the combination and arrangement of parts, substantially as herein-after more fully set forth and claimed.

Referring to the accompanying drawings, A is a receptacle adapted to be supported in position with one end disposed toward and in close proximity to the saws of the gin. Between the saws of the gin and this end of the receptacle is located the blast-generating brush or fan. Within this receptacle is an inclined perforated bottom, B, with its upper end curved or inclined downward, as at *b*. A deflector, *b'*, is located at this end of the receptacle, narrowing it at a point contiguous to the condensing-cylinder.

Underneath the perforated bottom is a supplemental imperforate hinged bottom, B', to receive the sand or other extraneous particles

falling or passing through the perforated bottom.

In the forward end of the receptacle A is hung the condenser-cylinder C, which is armed with a series of teeth and provided with radial longitudinal strips of leather *c*, or other suitable material, to act upon the cotton. This cylinder is driven by a belt encompassing a pulley upon its shaft and a pulley upon the saw-shaft.

It will be noticed that as the blast from the brush or fan drives the cotton up the inclined perforated bottom, causing its accumulation against the condenser-cylinder, which, at the same time, by means of its teeth taking away and discharging at a point beneath it portions of the cotton, the backing of the direct current or blast by the accumulated cotton will produce a return or counter current, driving the sand or other extraneous particles eliminated from the cotton by the direct blast or current through the perforated bottom and precipitating it upon the hinged bottom below.

The sand and refuse matter falling upon the bottom can be removed by swinging the bottom down, thus emptying it.

The cotton is permitted to be taken up and discharged in a loose and fleecy state by the cylinder.

Having thus fully described our invention, we claim and desire to secure by Letters Patent of the United States—

The combination, in a cotton-gin condenser, of the receptacle A, having hinged bottom B', perforated false bottom B, having concave *b*, deflector *b'*, and toothed cylinder C, provided with the flexible strips *c*, substantially as and for the purpose herein shown and set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

WILLIAM B. BURDINE.
JESTER E. BREWER.

Witnesses:

OGLETHORPE WORTHY,
WILLIAM PATTERSON.