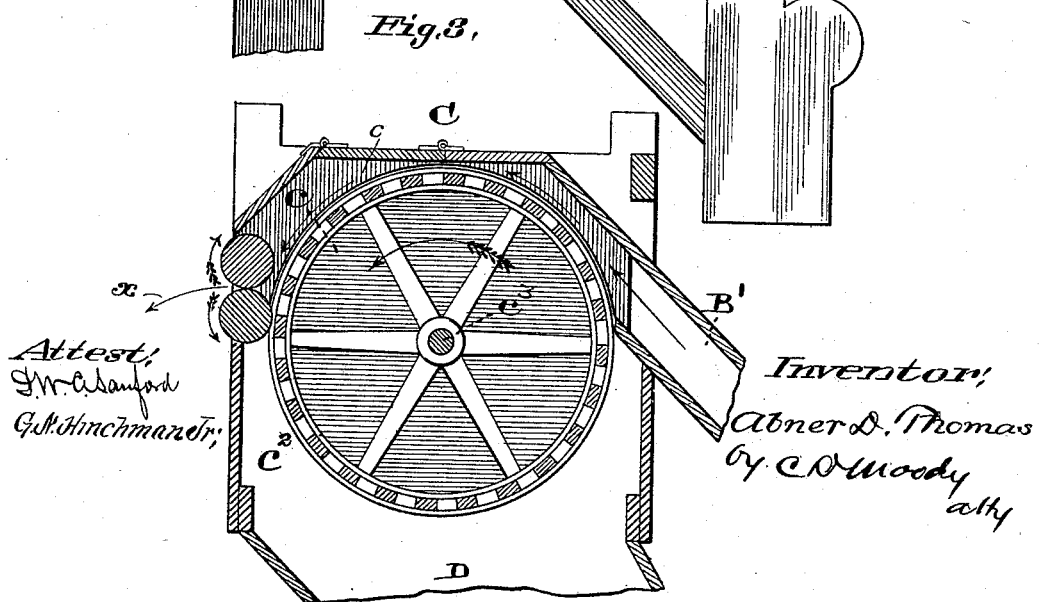
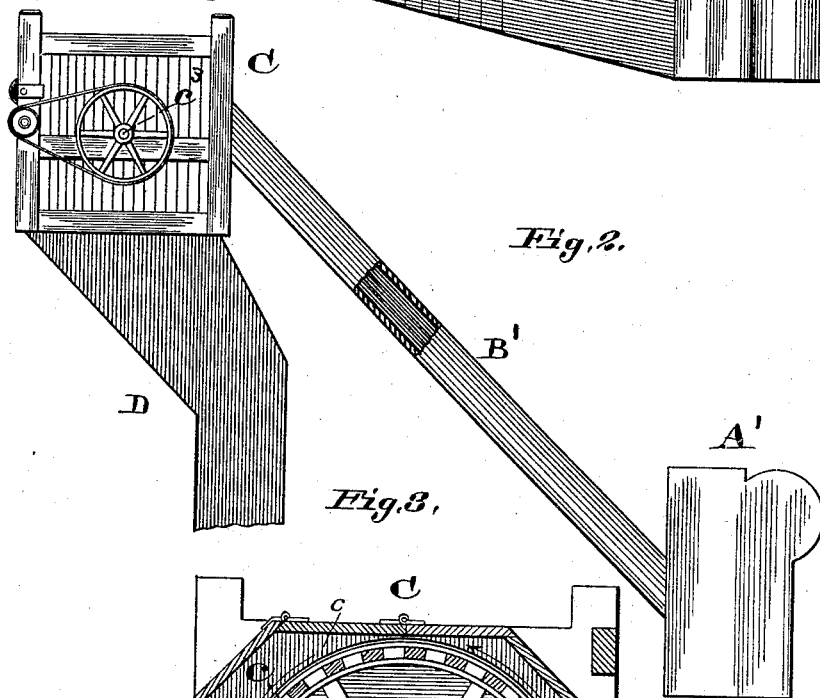
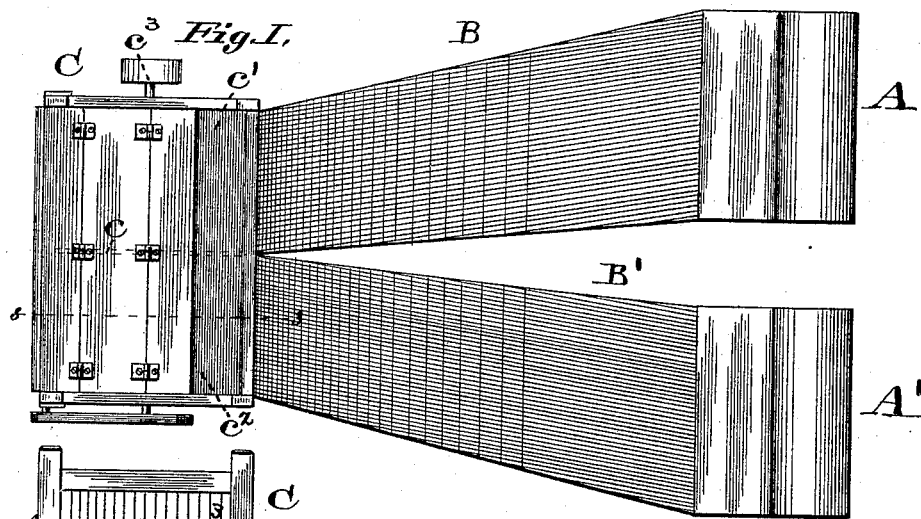


(No Model.)

A. D. THOMAS.
CONDENSER FOR COTTON GINS.

No. 418,088.

Patented Dec. 24, 1889.



Attest:
J. M. C. Sanford
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Inventor:
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by C. D. Moody
att'y

UNITED STATES PATENT OFFICE.

ABNER D. THOMAS, OF LITTLE ROCK, ARKANSAS.

CONDENSER FOR COTTON-GINS.

SPECIFICATION forming part of Letters Patent No. 418,088, dated December 24, 1889.

Application filed February 25, 1889. Serial No. 301,009. (No model.)

To all whom it may concern:

Be it known that I, ABNER D. THOMAS, of Little Rock, Arkansas, have made a new and useful Improvement in Condensers for Cotton-Gins, of which the following is a full, clear, and exact description.

Prior to the date hereof a single condenser has received the product of two or more cotton-gin stands—that is, the delivery from the gin-stands was into a common flue, which in turn led to a single condenser having but a single apartment, into which the entire product of the gin-stands was delivered.

In the present improved construction the condenser, while having but a single shaft and whose drum is rotated as a single part, has its drum divided into compartments, which respectively belong to the gin-stands, and are respectively connected therewith by independent flues, the advantages whereof being that the cotton is delivered more evenly to the condenser. The operation of the remaining gin-stands is not interfered with in the event of the flue leading from some one of the gin-stands being inoperative, and any excess of air-pressure from certain of the gin-stands does not work backward into the flue or flues leading from the remaining gin-stands of the series and clog the operation of those remaining gin-stands, and at the same time the benefit of a positive free delivery of the output of the gins derived from the operation of one large condenser in combination with several gin-stands is fully obtained.

The most desirable mode of carrying out the improvement is exhibited in the annexed drawings, making part of this specification, in which—

Figure 1 is a plan showing two gin-stands, the condenser, and the independent flues which respectively lead from the gin-stands to the condenser; Fig. 2, a broken side elevation of the same; and Fig. 3, a vertical longitudinal section, upon an enlarged scale, taken on the line 3 3 of Fig. 1.

Only those parts of the mechanism essential to an understanding of the improvement are shown, and the same letters of reference denote the same parts.

A A' represent the two gin-stands.

B B' respectively represent the flues leading from the gin-stands to the condenser C. The gin-stands are made and operated in the usual manner. The condenser in length is approximately if not quite equal to the combined lengths of the gin-stands, and by means of a cross-partition *c* it is divided within and without the drum into two compartments *c'* *c*², Fig. 1, with which respectively the flues B B' connect. The flues are not connected with each other, but they respectively connect the gin-stands with the condenser-compartments *c'* *c*², and the product delivered from the gin-stand A passes solely into the compartment *c'* and the product delivered from the gin-stand A' passes solely into the compartment *c*². The condenser-shaft *c*³ is driven in the usual manner, and in its rotation it carries around the entire condenser-drum, and, saving as the condenser is modified or supplemented by the improvement under consideration, its construction and operation are of the usual character, and the cotton is discharged from each compartment *c'* or *c*², as indicated by the arrow *x*, Fig. 3, and in a manner analogous to that in which cotton is discharged from an ordinary condenser, and the dust passes into the dust-flue D. When more than two gin-stands are connected with the condenser, that part is divided into as many compartments as there are gin-stands and as there are flues.

By the term "condenser" herein used is meant the combination of the condenser-drum and the inclosing-casing, and the condenser-compartments include the interior of the drum as well as the annular space between the drum and the casing.

I claim—

The combination of two or more gin-stands, a condenser divided into compartments, and independent flues connecting said gin-stands with said compartments, respectively, substantially as described.

Witness my hand this 31st day of January, 1889.

ABNER D. THOMAS.

Witnesses:

L. B. McDONALD,
B. L. WILLIAMSON.