

(No Model.)

E. C. SCOTT.
ROLL BOX FOR COTTON GINS.

No. 475,988.

Patented May 31, 1892.

Fig. 1.

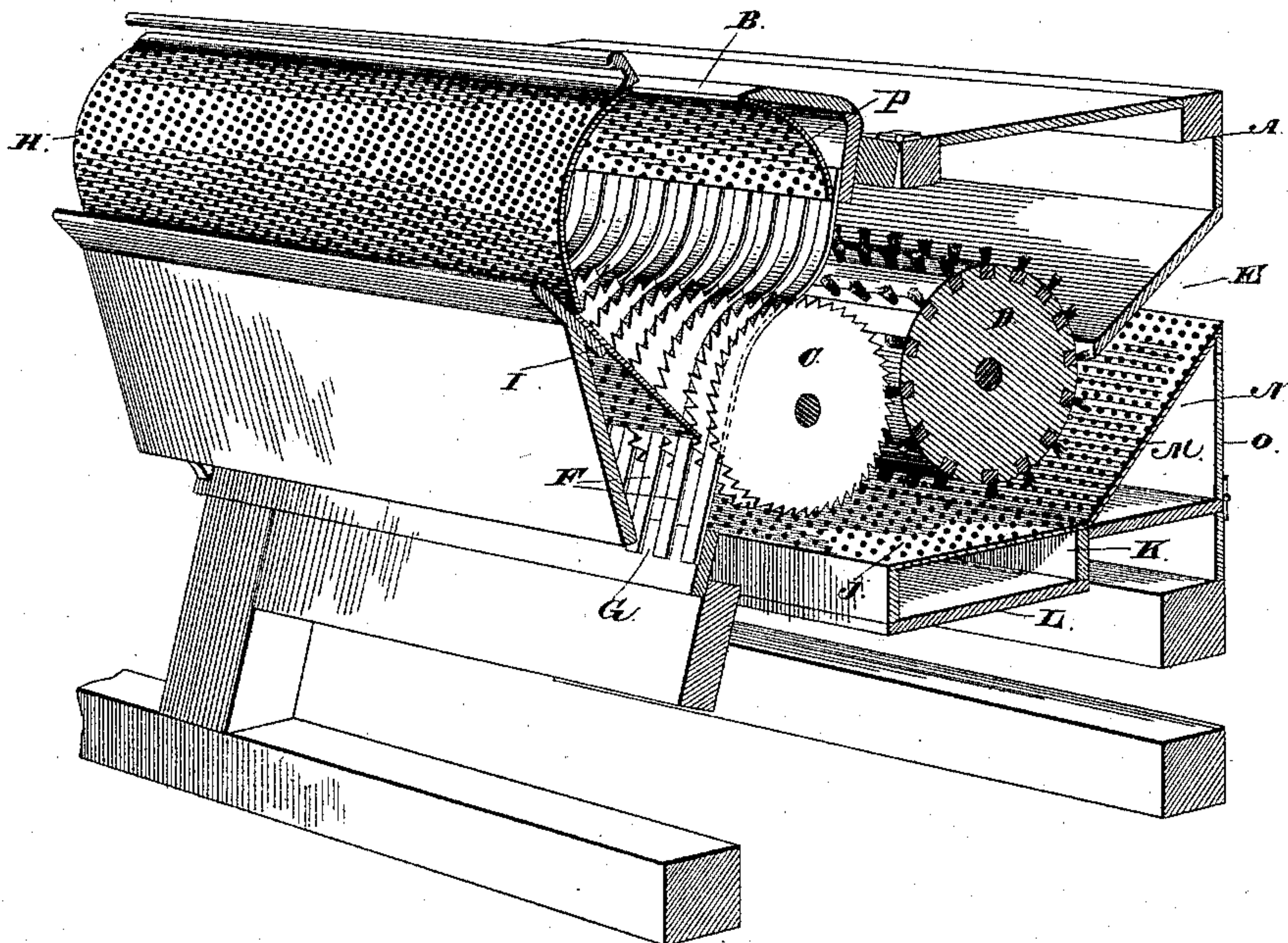
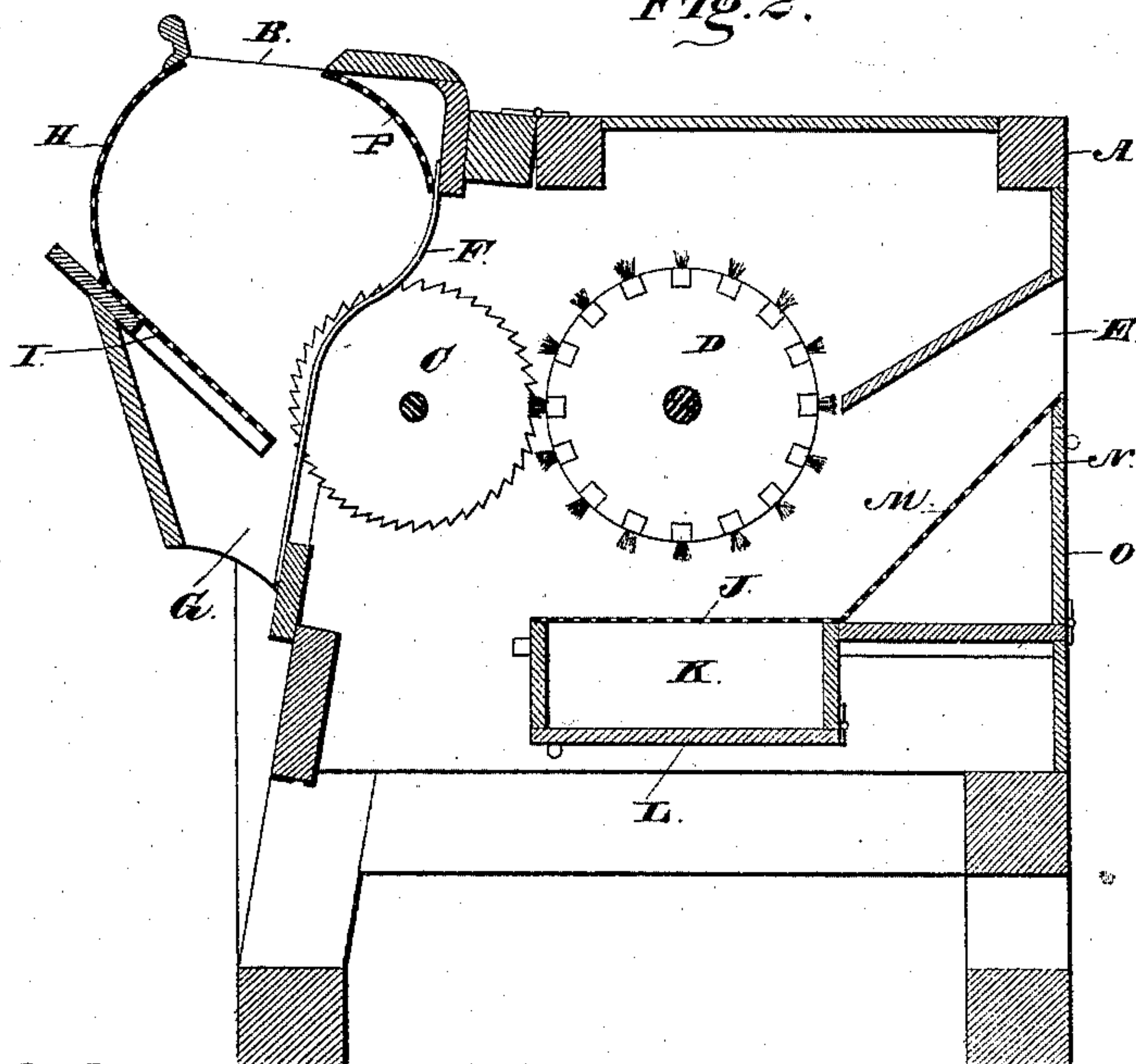


Fig. 2.



Witnesses

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EUGENE C. SCOTT, OF ELDERVILLE, ASSIGNOR OF ONE-HALF TO GEORGE A. KELLY, OF LONGVIEW, TEXAS.

ROLL-BOX FOR COTTON-GINS.

SPECIFICATION forming part of Letters Patent No. 475,988, dated May 31, 1892.

Application filed December 22, 1891. Serial No. 415,889. (No model.)

To all whom it may concern:

Be it known that I, EUGENE C. SCOTT, a citizen of the United States, residing at Elderville, in the county of Gregg and State of Texas, have invented a new and useful Improvement in Roll-Boxes for Cotton-Gins, of which the following is a specification.

This invention relates to cotton-gins; and it has for its object to provide an attachment therefor which will remove from the cotton as it enters the gin the main portion of the sand and dirt clinging thereto before the seed is removed from the lint and allowed to fall out of the gin in the usual manner, while the lint torn from the seed by the ordinary saws after leaving the first cleaning-chamber is the second time subjected to a cleaning process, which effectively removes every particle of sand or other foreign matter which may remain in the lint, and thus as it leaves the flue of the gin the same is in a perfectly-cleaned condition.

The primary object of this invention, as stated, is to provide for a cleaning of the seed-cotton at its first stage of ginning, and thus prepare the same for a more effectual cleaning at the second stage of the process after the same leaves the saws.

With these and many other objects in view, which will readily appear to those skilled in the art, the invention consists in the cleaning attachment for cotton-gins, as will be hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a gin provided with a cleaning attachment constructed in accordance with my invention, one end of the gin being removed to expose the interior construction. Fig. 2 is a vertical longitudinal sectional view of the same.

Referring to the accompanying drawings, A represents the casing of an ordinary cotton-gin, constructed in the usual manner and provided with the ordinary top receiving-opening B, through which the seed-cotton is fed within the gin in order to have the lint separated from the seed and subject the same to a cleaning process, as provided for by my invention. Located within the gin are the or-

dinary saws C, arranged in a transverse series, as in all gins of the type illustrated, and adjacent to and parallel to the saws C the brush D is journaled within the gin and is designed to tear the lint from the saws and impel the same through the flue E, located in one side or end of the gin. This construction is well known, and the gin is further provided at the feeding side thereof and directly below the receiving-opening B with the vertical series of separating and saw ribs F, between which the edges of the saws project, and as the same revolve drag the lint through said ribs, while the seed being separated from the lint drops through the ordinary seed-spout G without the gin.

Immediately in front of or directly opposite the vertical ribs F is arranged a perforated breast-board H, which forms, with the ordinary top of the gin, the upper receiving-opening B, while at the same time forming the usual breast-board, which incloses the seed-cotton chamber, which receives and holds the said cotton while the revolving saws are continually tearing the lint from the seed and carrying it to the brush within the body of the gin. The said perforated breast-board H is preferably rounded in shape, in order to better accommodate the revolving wad or roll of seed-cotton which is continually revolved by the saws, and is thus rubbed forcibly against said breast-board, which, being perforated, allows the superficial dirt and foreign matter of the cotton to pass therethrough and out of the gin. The said perforated board may be made of perforated sheet metal, wire fabric, or, in fact, any material provided with perforations will answer the purpose for allowing the first separation of foreign matter to pass out of the seed-cotton chamber.

Secured within the feeding side of the gin and directly below the lower end of the perforated breast-board is the downwardly-inclined perforated seed-board I, which not only forms the bottom of the inclosed seed-cotton chamber, but also forms a slide, over the end of which the seed from the cotton passes out through the ordinary spout G, the inner end of the seed-board of course terminating short of the ribs F, as usual. Now it

will be more apparent that as the wad or roll of seed-cotton is revolved by the saws in an opposite direction thereto the said cotton is pressed against and upon both the perforated breast-board at the front side of the gin and the bottom perforated seed-board, thus subjecting the same to a cleaning process from its very entrance into the inclosed cotton-chamber before any of the lint is drawn through the ribs by the saws.

Directly beneath the revolving brush D, which removes the lint from the revolving saws, is arranged a perforated mote-board J, which receives the lint from the brush as it tears it from the saws. Thus the lint is thrown upon the mote-board under force, which serves to remove any sand or dust remaining therein. The sand, dust, or other foreign matter passing through the perforated mote-board may be conveniently collected in the collecting-box K, arranged beneath said mote-board and which may be readily emptied through the door L in said box. Under the impulsion or force given the lint by the revolving brush the same, leaving the perforated mote-board, next strikes against the perforated angle-board M, forming the bottom of the flue E, and any dust or sand which has not been removed by the perforated mote-board must pass through the flue angle-board M and into the collecting-box N, arranged below the same, and which is also provided with a door O, through which the accumulations of said box may be readily removed. Leaving the angle-board, the lint passes out of the gin in a thoroughly-cleaned condition, which has been effected by the successive stages of cleaning from its very entrance into the feeding side to the rear flue of the gin.

The perforated mote-board and angle flue-board, just described in connection with the saws and brush, are more fully described in and form the subject-matter of a previous application filed by me and serially numbered 412,823.

The construction, operation, and advantages of my improved attachment are now thought to be apparent without further description.

To complete the cleaning-seed cotton chamber, a supplemental perforated cleaning-board P is secured in place within said chamber directly above the top of the ribs F and oppo-

site to the perforated breast-board H, thus providing a seed-cotton-receiving chamber, inclosed on all sides and the bottom by perforated inclosing walls, with the exception of the spaced ribs F, through which the lint is dragged by the saws, and thus provides for a very efficient preliminary cleaning of the seed-cotton upon its entrance to and within the gin.

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

1. In a cotton-gin, the combination, with the revolving saws, of an unyielding perforated breast-board located at the front side of the gin in front of said saws and a perforated seed-board arranged below the lower end of said breast-board, substantially as set forth.

2. In a cotton-gin, the combination, with the gin-ribs and the revolving saws working between said ribs, of an unyielding perforated breast-board arranged in front of said ribs and a supplemental perforated cleaning-board above said ribs opposite said breast-board, forming an inclosed seed-cotton chamber, substantially as set forth.

3. In a cotton-gin, the combination, with the gin-ribs and the revolving saws working between said ribs, of the curved perforated breast-board arranged in front of said ribs and forming an inclosed seed-cotton chamber and a downwardly-inclined perforated seed-board arranged within said chamber below the lower end of said breast-board, substantially as set forth.

4. In a cotton-gin, the combination, with the revolving saws and the seed-cotton chamber in front of said saws, of a perforated seed-board arranged within said chamber and forming the bottom thereof, substantially as set forth.

5. In a cotton-gin, the combination, with the revolving saws, of the seed-cotton chamber in front of said saws and having inclosing unyielding perforated walls and inclined perforated bottom, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EUGENE C. SCOTT.

Witnesses:

JNO. H. SIGGERS,
M. E. FOWLER.