

(No Model.)

I. F. BROWN.

COTTON GIN.

No. 343,433.

Patented June 8, 1886.

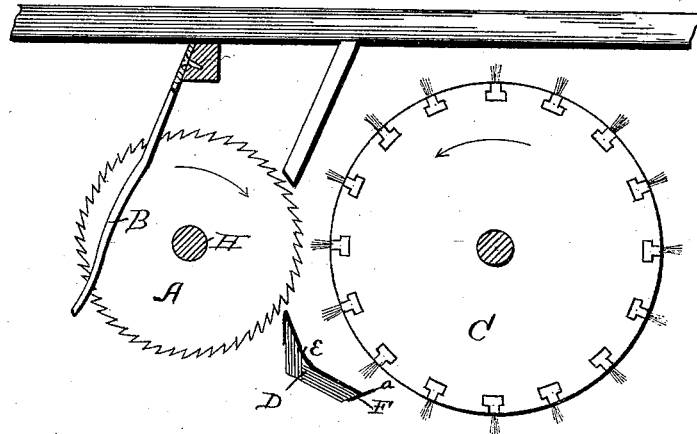


Fig. 1.

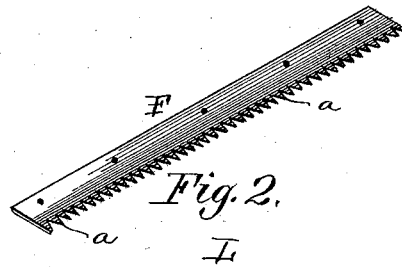


Fig. 2.

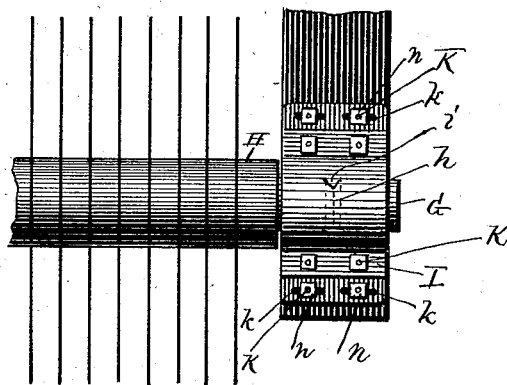


Fig. 3.

Witnesses:

B. C. Linnick.

E. H. Bradford.

Inventor

Israel F. Brown

By H. F. Tunis
Att'y

UNITED STATES PATENT OFFICE.

ISRAEL F. BROWN, OF NEW LONDON, CONNECTICUT.

COTTON-GIN.

SPECIFICATION forming part of Letters Patent No. 343,433, dated June 8, 1886.

Application filed February 19, 1886. Serial No. 192,580. (No model.)

To all whom it may concern:

Be it known that ISRAEL F. BROWN, a citizen of the United States, residing at New London, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Cotton-Gins; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to cotton-gins of the class known as "saw-gins," and the object is to improve the efficiency of the gin, whereby a better grade of cotton will be produced; and to this end the novelty consists in the peculiar construction and combination of parts, as hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same letters of reference indicate the same parts.

Figure 1 is a cross-section of a saw-gin embodying my invention. Fig. 2 is a perspective view of the motor-strip; and Fig. 3 is a plan view of one end of the gin-saw shaft, its journal, and adjustable bearing for the same.

A is one of the saws, B one of the ribs, and C the brush-cylinder.

D is a wooden frame, and E is a sheet-metal covering for the slightly concave face of the frame.

F is a metal strip provided with a series of teeth, *a*, secured to the rear or under side of the frame D so that the teeth are parallel with and removed a short distance from the periphery of the brush-cylinder. As the brush removes the fiber from the saws it carries it around until it strikes against the toothed metal strip F, which detaches the motes and at the same time causes the fibers to assume a comparatively parallel position with reference

to themselves. As the brush continues its revolution the straightened fibers are removed from the brush and condensed in the usual manner.

By reference to Fig. 3 it will be seen that the journal G of the gin-saw shaft H is provided with a V-shaped circumferential groove, *h*, into which fits a corresponding V-shaped projection, *i*, on the face of the bearing-box I, which prevents any end play of the shaft. The box I is provided with longitudinal slots *k*, through which bolts K pass, the latter being rigidly secured to the frame L. By loosening the nuts *n* it will be seen that the bearing-box I, and with it the shaft and saws, can be adjusted longitudinally, as occasion requires.

No claim is made in this application to the adjustment of the journal, as that feature will be made the subject-matter of a separate future application. The opposite end of the saw-shaft is provided with a straight journal and box, the journal having a little end play in the box to allow for the adjustment of the first-mentioned journal, G. It will be seen that the metallic strip F is made in a single piece, and therefore very simply and cheaply produced, and by reason of the peculiar or V-shaped teeth the tufts of the fiber on the brushes, striking the converging sides of the teeth cause the said fiber to assume or arrange itself in comparatively parallel lines.

Having thus described my invention, what I claim is—

The combination, in a saw-gin, of the saws and brush-cylinder, with a serrated metallic strip arranged parallel with the brush-cylinder, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ISRAEL F. BROWN.

Witnesses:

H. J. ENNIS,
E. H. BRADFORD.