

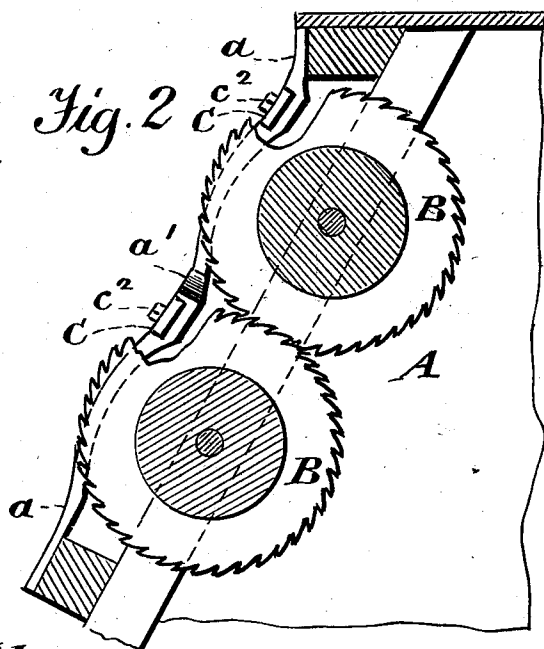
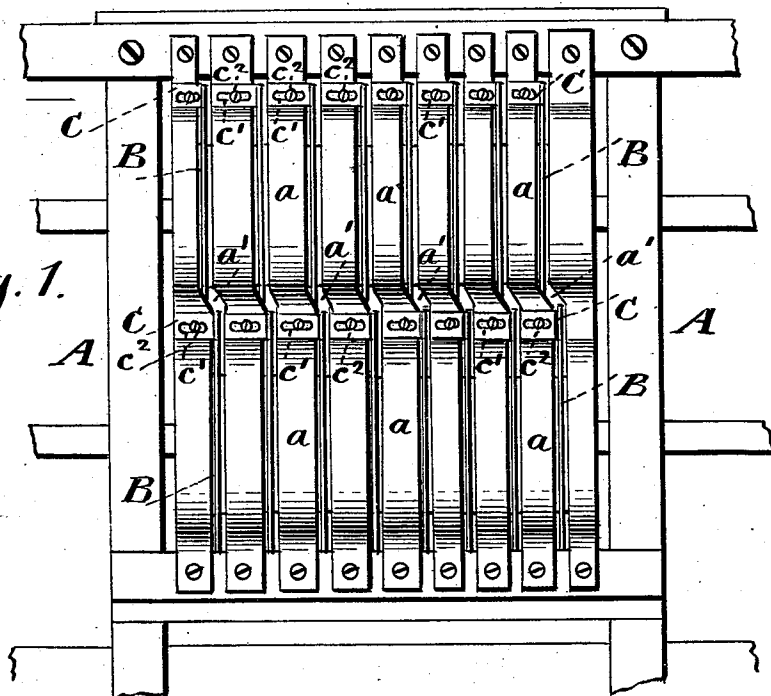
(No Model.)

J. W. COOPER.
SAW COTTON GIN.

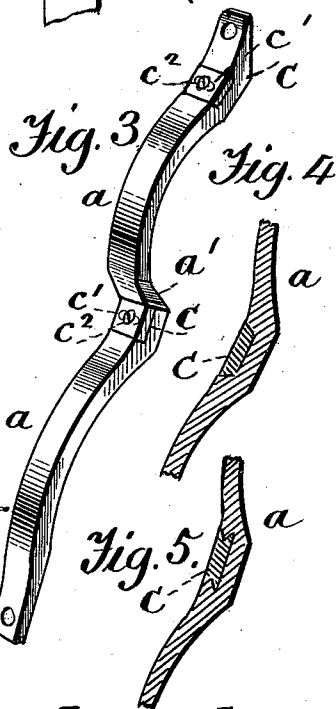
No. 533,866.

Patented Feb. 12, 1895.

Fig. 1.



Witnesses.
A. Ruppert.
H. A. Daniels



Inventor.
James W. Cooper
Per
Thomas P. Simpson
att.

UNITED STATES PATENT OFFICE.

JAMES WITHERSPOON COOPER, OF MAYESVILLE, SOUTH CAROLINA.

SAW COTTON-GIN.

SPECIFICATION forming part of Letters Patent No. 533,866, dated February 12, 1895.

Application filed September 1, 1894. Serial No. 521,899. (No model.)

To all whom it may concern:

Be it known that I, JAMES WITHERSPOON COOPER, a citizen of the United States, residing at Mayesville, in the county of Sumter and State of South Carolina, have invented certain new and useful Improvements in Saw 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 of reference marked thereon, which form a part of this specification.

The invention consists in making the breast ribs of a cotton gin with offsets and combining therewith two sets of saws arranged one above the other and in parallel planes whereby time and labor may be economized.

Figure 1 of the drawings is a front elevation; Fig. 2, a longitudinal vertical section, and Figs. 3, 4, and 5, detail views to show the wearing plates.

In the drawings, A represents a gin breast between whose ribs *a* rotate the interlapping saws B.

C are steel plates let into the outer face of the ribs, to take up the usual wear caused by the friction of the saws. They may be fixed or adjustable by means of the slots *c'* and clamp screws *c''*, while each plate may be replaced at the cost of a few cents. The gin-ribs are thus made to last a long time, by

means of these plates C which may be connected with the ribs by a rectangular, obtuse-angled or dovetail joint as shown in Figs. 3, 4, and 5 of the drawings.

The ribs *a* are themselves made with the offsets *a'* which are preferably in the form of an obtuse angle so that the saws B may conveniently run in parallel planes and between parallel guides. They are placed at such a distance from one another that the upper and lower sets cannot possibly interfere with one another, as is found to be the case where the upper and lower saws work in the same vertical plane.

In regard to the plates C, it will be observed that the wearing faces thereof slope in the direction traveled by the cotton as it goes up the ribs of the breast.

What I claim as new, and desire to protect by Letters Patent, is—

In a cotton gin, two sets of saws arranged one above another in parallel planes and having the saws of one set interlapping the saws of the other, in combination with a breast having its ribs provided with the offsets *a'* as and for the purpose specified.

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

JAMES WITHERSPOON COOPER.

Witnesses:

M. P. MAYES, Jr.,
W. B. COOPER.