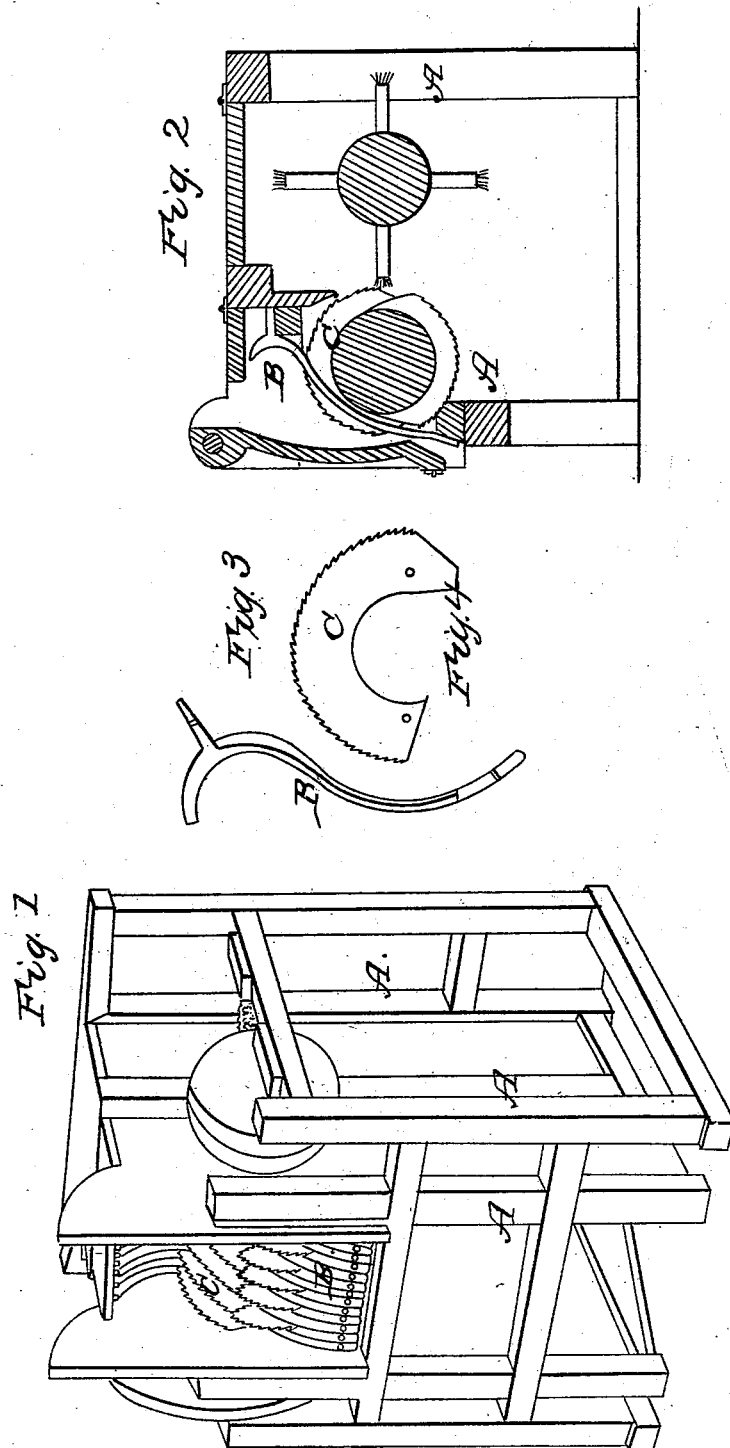


W. B. STEWART,
Cotton Gin.

No. 3,097.

Patented May 19, 1843.



UNITED STATES PATENT OFFICE.

WM. B. STEWART, OF CINCINNATI, OHIO.

IMPROVEMENT IN SAW-GINS FOR GINNING COTTON.

Specification forming part of Letters Patent No. 3,097, dated May 19, 1843.

To all whom it may concern:

Be it known that I, W. B. STEWART, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Saw Cotton-Gins; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine; Fig. 2, a vertical longitudinal section; Fig. 3, rib detached; Fig. 4, saw.

The frame of my machine is constructed similar to that of the common saw cotton-gin now in use. This frame is marked A in the drawings. The ribs B are curved pieces of iron, shaped like the letter S, somewhat, which are fastened to the frame by the lower end and curve up over the cylinder on which the saws are fixed. They then curve in the opposite direction, and just above the saws have a projection from the under side, by which they are attached to the frame, the ribs continuing up and curving backward, a space being left between them at this point to prevent their choking. The ribs are placed side by side in the usual way, leaving a space between them to admit the segments of saws, hereinafter de-

scribed. A cylinder is formed similar to those of common saw-gins. The saws are segments C, not extending entirely around the cylinder, but occupying one-fourth or one-half its circumference. Each of the segments C occupies the space between two ribs, and every other saw is placed in a different part of the circumference of the cylinder, by which arrangement one-half or one-quarter of the saws only are brought into action at once, alternately seizing the cotton in the hopper and cleaning the cotton with less injury to the staple, and much greater rapidity than the gin of the common construction, the cotton being drawn through every other space between the ribs at once.

What I claim as my invention, and desire to secure by Letters Patent, is—

Making the saw-cylinder of a cotton-gin with segments of saws arranged around its periphery, so that one segment only shall revolve in each space between the ribs, constructed in the manner and for the purpose above described.

WILLIAM B. STEWART.

Witnesses:

A. C. BROWN,
EBENEZER HARRISON.