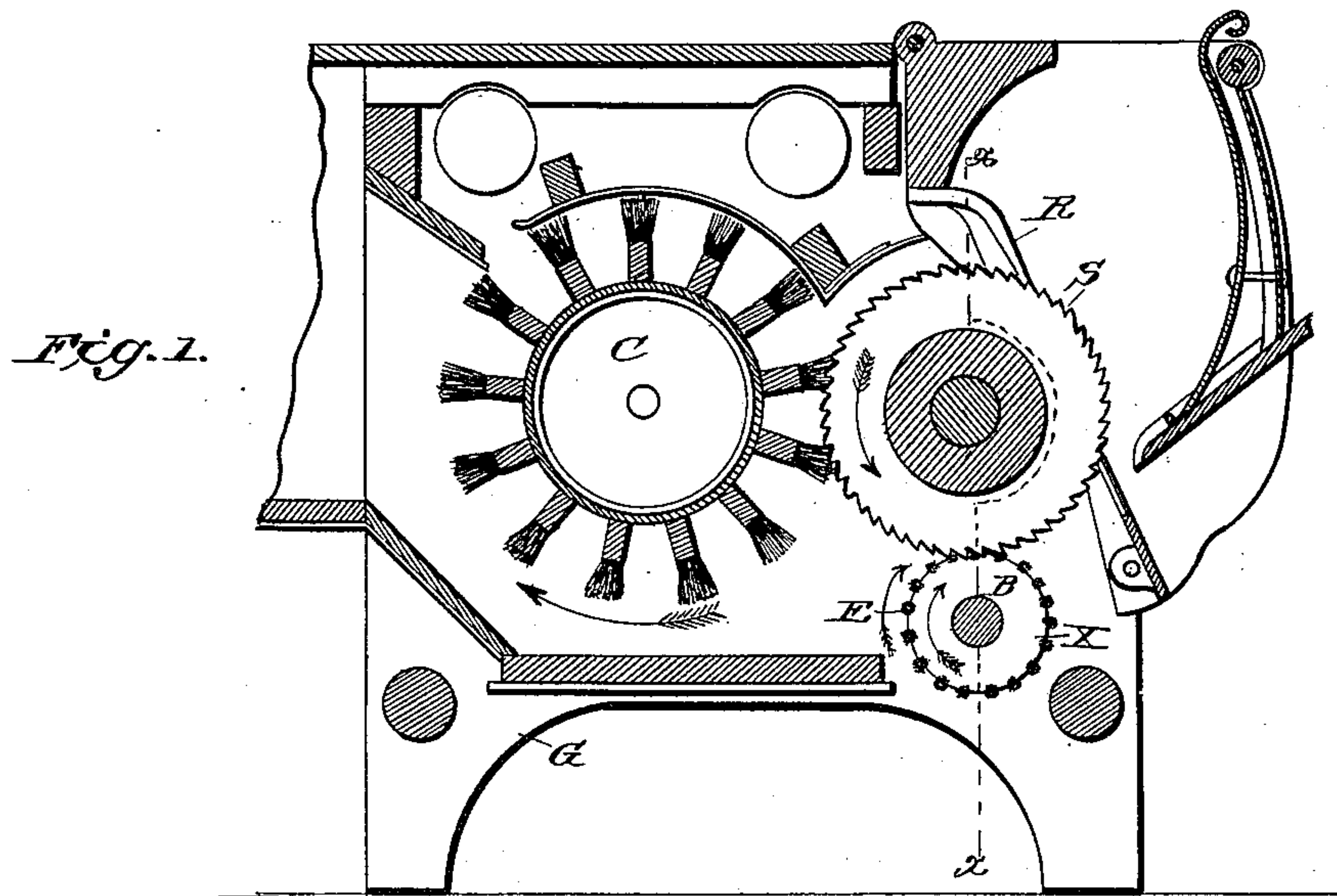


(No Model.)

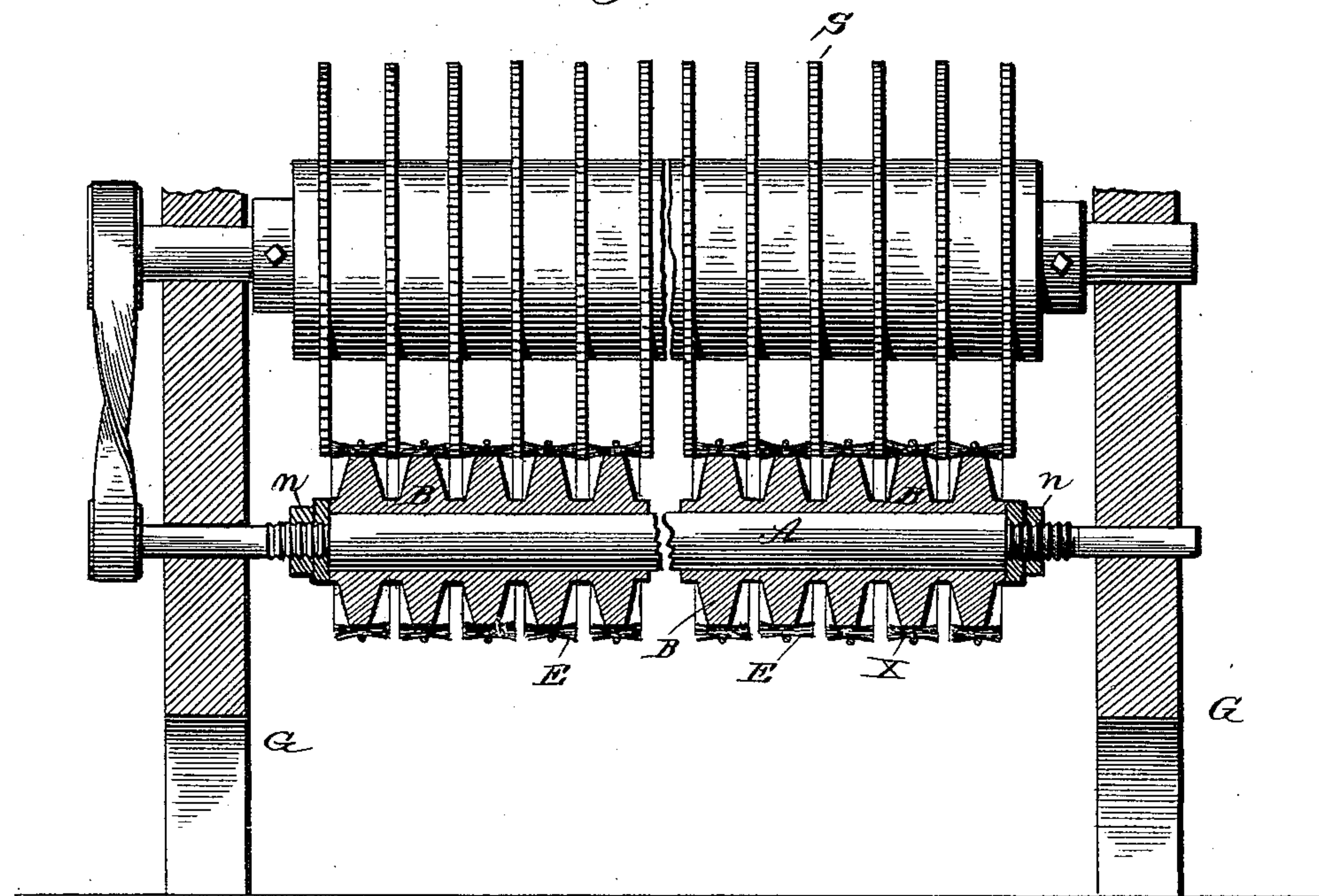
G. P. MELCHIOR.  
GIN SAW CLEANER.

No. 403,686.

Patented May 21 1889.



*Fig. 2.*



WITNESSES:

*Fred G. Dietrich*  
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INVENTOR,  
*G. P. Melchior*

BY *Munn & Co.*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

GEORGE P. MELCHIOR, OF BELLEVUE, MISSISSIPPI.

## GIN-SAW CLEANER.

SPECIFICATION forming part of Letters Patent No. 403,686, dated May 21, 1889.

Application filed July 21, 1888. Serial No. 280,683. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE P. MELCHIOR, of Bellevue, in the county of Bolivar and State of Mississippi, have invented a new and  
5 useful Improvement in Gin-Saw Cleaners, of which the following is a specification.

The object of my invention is to provide an attachment to a cotton-gin which will permit the latter to successfully operate upon  
10 wet or damp cotton without clogging the saws and ribs and without injuring or napping the lint; also reducing the liability to fire and keeping the saws clean, bright, noiseless, and effective.

15 It consists in the peculiar construction and arrangement of cleaning-brush arranged beneath the gin-saws, as hereinafter fully described.

20 Figure 1 is a vertical longitudinal section of a cotton-gin with my improvement, and Fig. 2 is a vertical transverse section through line *x x*.

In the drawings, G is the gin-frame; S, the saws; R, the gin-ribs; C, the brush-cylinder,  
25 and X the gin-saw-cleaner attachment. The latter consists of a shaft, A, journaled in boxes in the gin-frame and provided with a series of wooden disks, B, whose outer peripheries are of less thickness than the hub  
30 portion, and are provided with rings, E, of laterally-projecting bristles or tufts of whalebone or bristles alternating with whalebone, between which the teeth of the saws revolve. These disks are clamped upon the shaft A by  
35 means of screw-threaded clamp plates or nuts *n* at the ends of the shaft. These wooden disks are preferably arranged in sections of ten, (more or less,) so that they may be placed upon or removed from the shaft in groups.

40 This cleaner-brush is placed just below the gin-saws, with the teeth of the saws extending about one-fourth of an inch between the

adjacent rows of bristles, or just deep enough to enable the bristles to sweep from the throat of the saw-teeth to the points thereof. By attaching the rings of bristles to the periph- 45 eries of the disks B so that the bristles lie transversely across the said disks, the greatest efficiency of the brush is secured, the ends of the bristles acting with certainty against the sides of the saw-teeth to remove all mat- 50 ters therefrom, and the wear upon the bristles is greatly reduced. It will be seen that each ring of bristles acts upon the adjacent sides of two saws. Clearance for the saw- 55 teeth is afforded by the spaces between the disks. The cleaner is geared to revolve in an opposite direction to the gin-saws by means of a cross-belt or otherwise, and at a higher rate of speed, so that the surface of 60 the cleaner adjacent to the saws will be moving in the same direction as the teeth and will sweep the same clean.

Having thus described my invention, what I claim as new is—

65 1. A cleaning attachment for cotton-gins, consisting of a shaft, A, having a series of disks, B, arranged thereon, and formed with peripheries of reduced thickness provided with laterally-projecting rings of brushes, 70 substantially as shown and described.

2. The combination, with the series of gin-saws in a cotton-gin, of a cleaner located just below the saws, and consisting of a shaft, A, having a series of disks, B, mounted thereon, 75 and formed with peripheries of reduced thickness provided with laterally-projecting rings of brushes, substantially as shown and described.

GEORGE P. MELCHIOR.

Witnesses:

J. C. LAUDERDALE,  
JOHN B. HOLLAND.