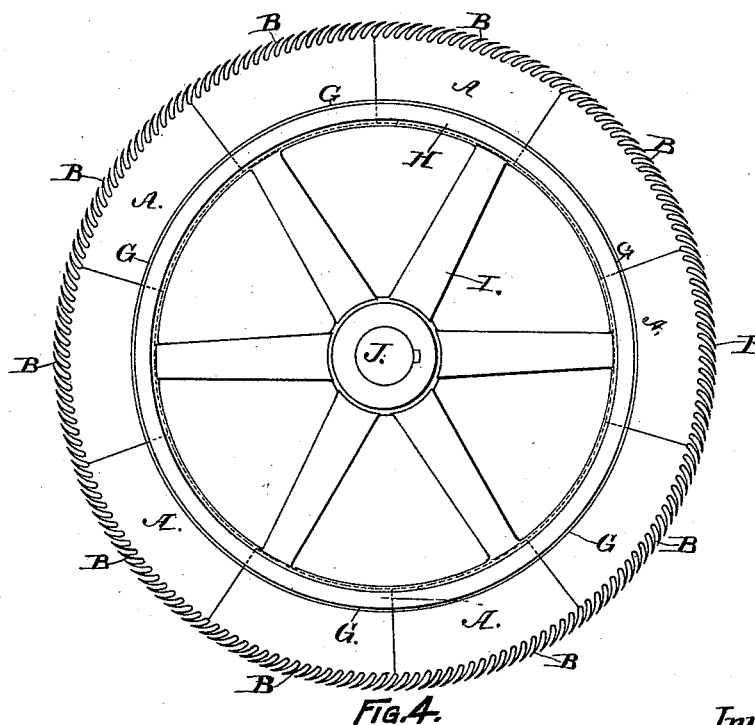
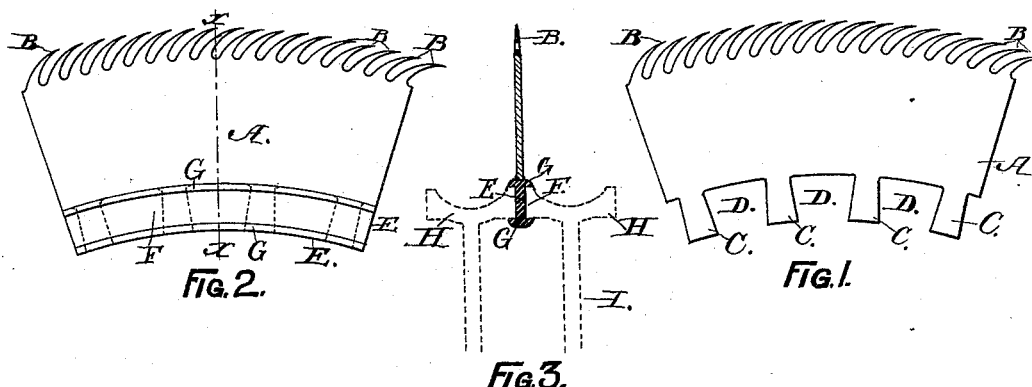


(No Model.)

H. V. SCATTERGOOD.
SECTIONAL SAW FOR COTTON GINS.

No. 420,666.

Patented Feb. 4, 1890.



Witnesses:

S. B. Bauer.

E. M. Whitney.

Inventor:

HENRY V. SCATTERGOOD,

by William W. Low,

Attorney.

UNITED STATES PATENT OFFICE.

HENRY V. SCATTERGOOD, OF ALBANY, NEW YORK, ASSIGNOR TO WALTER M. BROWN, OF SAME PLACE.

SECTIONAL SAW FOR COTTON-GINS.

SPECIFICATION forming part of Letters Patent No. 420,666, dated February 4, 1890.

Application filed July 29, 1889. Serial No. 319,041. (No model.)

To all whom it may concern:

Be it known that I, HENRY V. SCATTERGOOD, of the city and county of Albany, in the State of New York, have invented new and useful Improvements in Sectional Saws for Cotton-Gins, of which the following is a specification.

This invention relates to improvements in sectional saws for cotton-gins; and it consists in forming the segmental sections for said saws of sheet metal, providing the inner portion of each section with tongues or other suitable means of holding a re-enforcing rim of a softer metal, and casting said re-enforcing rim on said sections so as to be held by said tongues or other holding devices, so that when the required number of said sections are joined together end to end the said re-enforcing rims will form a continuous circular seat that will lock upon the rims of the intermediate spiders which compose the cylinder of the cotton-gin.

In the accompanying drawings, which are herein referred to and form part of this specification, Figure 1 is a side elevation of one form of the sheet-metal segmental section of my gin-saw, showing the preferred form of tongues for holding the soft-metal re-enforcing rim. Fig. 2 is a like elevation of said section after the soft-metal re-enforcing ribs have been cast thereon. Fig. 3 is a vertical section at the line X X of Fig. 2, showing in dotted lines the rims of intermediate spiders; and Fig. 4 is a side elevation of a complete circle for a cotton-gin saw composed of my segmental sections attached to a spider of a ginning-cylinder.

As represented in the drawings, A designates the sheet-metal blank for a segmental section, which is preferably made to be equal to one-tenth of a complete annulus of the required outer diameter of a saw; but, if preferred, the annulus may be separated into a greater or less number of parts without departing from the scope of my invention. Care should be taken to have the grain of the metal run parallel with the central radial line of the

segment, so that said grain will not run crosswise of the teeth B, and for that reason the sections should be as short as they can be conveniently made. The inner edge of each of said blanks is preferably made with a series of tongues C, so as to leave a series of spaces D, for the purpose of allowing the molten metal of which the re-enforcing ribs are composed to unite and form a solid body between the tongues C. When preferred, a series of holes may be substituted for the spaces D, the essential feature required being to allow the molten metal from the opposite faces of the blank to unite in a homogeneous body in said spaces or holes, so as to hold the oppositely-located re-enforcing ribs securely in place on the blank.

E designates the re-enforcing ribs, which are formed on the opposite sides of the blank by running molten metal into a mold in which said blank is temporarily placed, so that the molten metal will fill the spaces D and form the groove F and curved flanges G at each side of the blank, said re-enforcing ribs conforming to the curvature required at the inner edge of the section. The groove F is made to lock onto the rim H of the spider I, the rims of two contiguous spiders being indicated by dotted lines in Fig. 3, so as to retain the several sections in position to form an entire circle, as shown in Fig. 4, the spiders being fixed upon the shaft J with a complete series of the sections interposed between each two contiguous spiders to form a complete ginning-cylinder for a cotton-gin.

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

The improved saw-section consisting of the segmental plate having teeth on its outer curved edge and provided on its inner edge with tongues or the equivalent thereof, as described, and having the cast re-enforcing ribs, all substantially as set forth.

HENRY V. SCATTERGOOD.

Witnesses:

WM. H. LOW,
S. B. BREWER.