J. E. CARVER.

Cotton-Gin Saws.

No. 213,169 Patented Mar. 11, 1879.

Fig. 1.

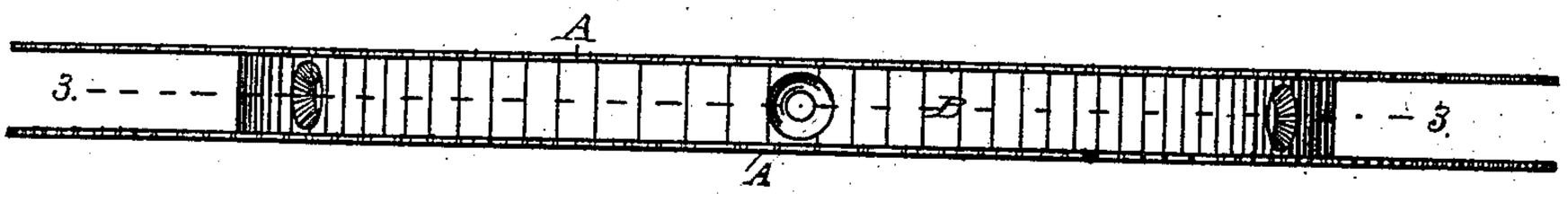

Fig. 2.

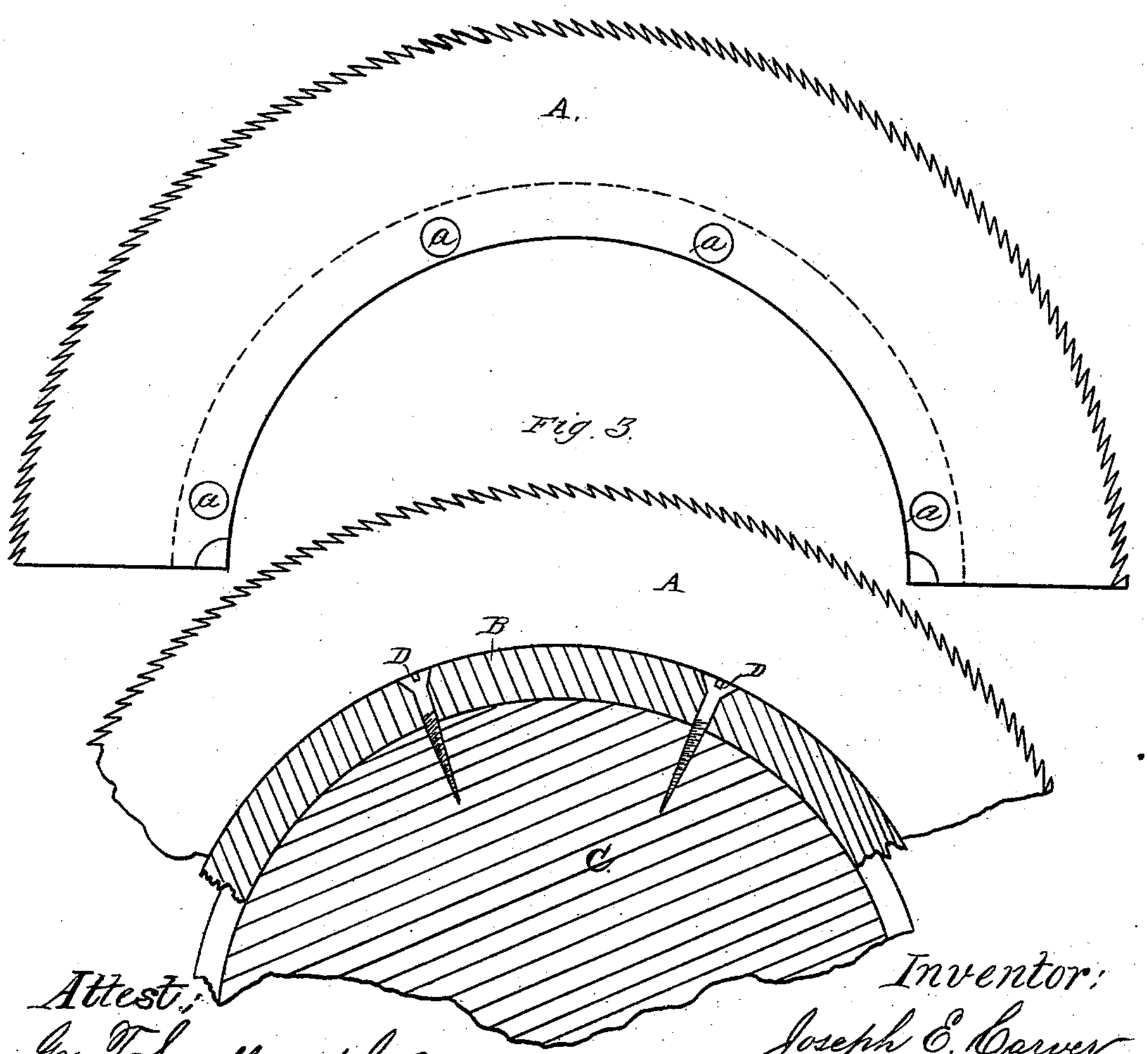

Fig. 3.

Attest:

Geo. T. Smallwood Jr.

Walter Allen

Inventor:

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By Knight Bros

Attys.

UNITED STATES PATENT OFFICE.

JOSEPH E. CARVER, OF MEMPHIS, TENNESSEE, ASSIGNOR TO CARVER GIN AND MACHINE COMPANY, OF SAME PLACE.

IMPROVEMENT IN COTTON-GIN SAWS.

Specification forming part of Letters Patent No. **213,169**, dated March 11, 1879; application filed July 30, 1878.

To all whom it may concern:

Be it known that I, JOSEPH E. CARVER, of Memphis, in the county of Shelby and State of Tennessee, have invented a new and improved mode of applying and securing saws to the cylinders of cotton-gins, of which the following is a specification:

The ordinary mode of applying saws to the cylinder in cotton-gins consists in cutting circumferential grooves or kerfs, properly spaced, in the wooden exterior of the cylinder, inserting the semicircular saws in these grooves or kerfs, and fixing them with oblique screws.

This common mode is objectionable on account of the liability of the screws to warp the saws, the difficulty of removing the saws for sharpening, and for other reasons.

My invention consists in connecting the semicircular saws in pairs to a semi-collar or semicircular bar of iron, which is placed between their inner margins, and is then secured to the periphery of the cylinder by radial screws introduced between the coupled saws and inserted perpendicularly to the surface of the cylinder, the cylinder having circumferential grooves of the necessary width to receive the coupled saws and the semi-collar to which they are fixed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a plan view of a pair of saws fixed to their coupling-bands. Fig. 2 is a side elevation of the same. Fig. 3 is a section in a plane coincident with the axis of the cylinder and on the line 3 3, Figs. 1 and 2.

A A represent saws of customary semicircular shape, fixed by rivets or screws *a a* to a semicircular bar, B. The pair of saws so coupled are applied to the periphery of the cylinder C in a circumferential groove prepared to receive them, as illustrated in Fig. 3, and are firmly secured by screws D D inserted radially.

By this method the saws are held rigidly in place, and cannot warp. They are not strained or otherwise injuriously affected by the screws, as the screws pass through the semi-collar and not through the saws, and their pressure is parallel with the planes of the saws and not transverse thereto.

The saws are thus rendered stiffer, stronger, more durable, more readily adjusted to the saw-cylinder, and more easily removed for repairs, sharpening, &c.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The saws A A, coupled together by means of collars B, and secured to the cylinder C by radial screws D, substantially as and for the purposes set forth.

In testimony of which invention I hereto set my hand.

JOSEPH E. CARVER.

Witnesses:
JAMES B. COOK,
J. C. BERNARD.