

(No Model.)

J. A. SMILEY.

COTTON GIN RIB.

No. 332,296.

Patented Dec. 15, 1885.

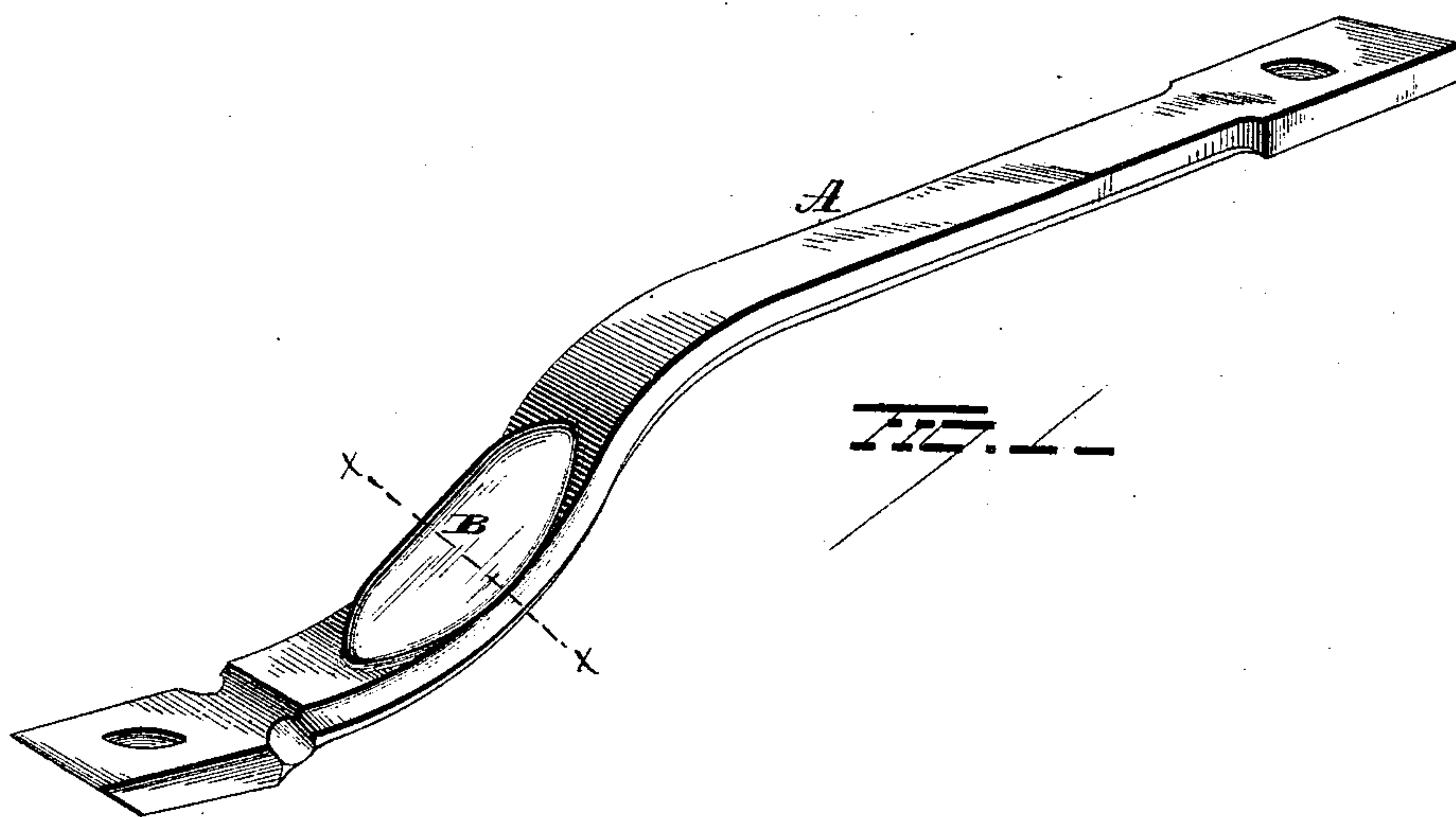


FIG. 2.

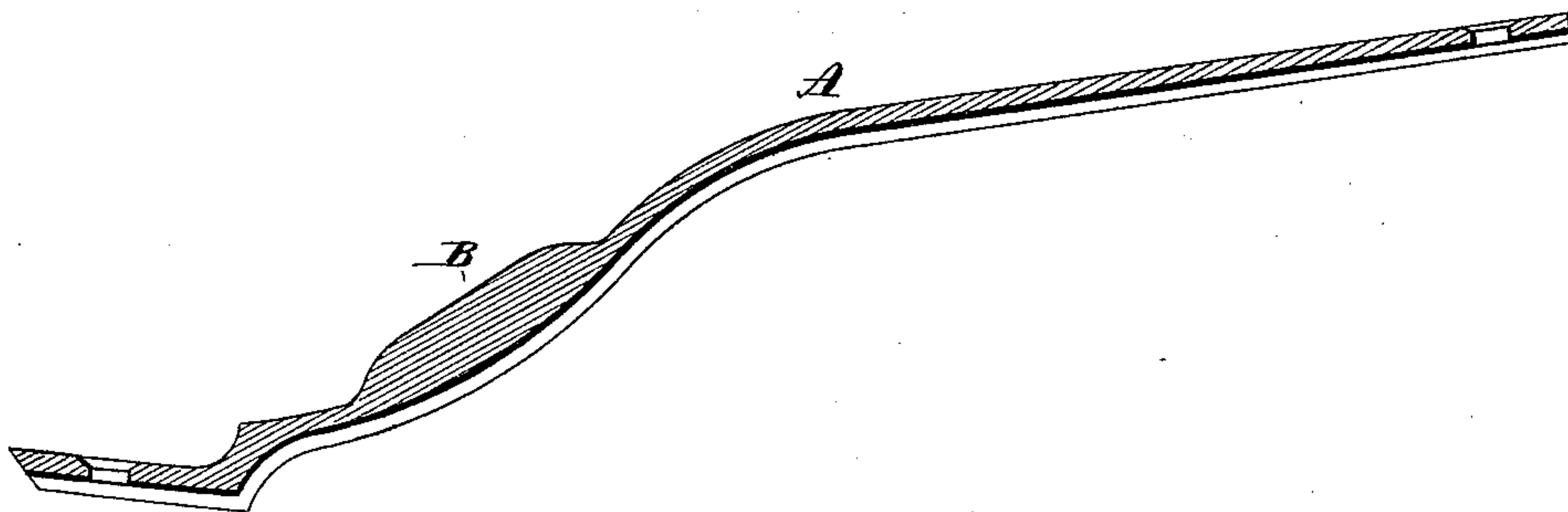
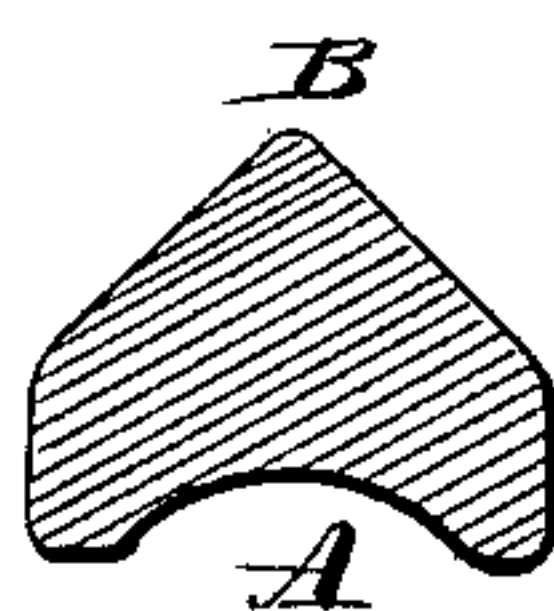


FIG. 3.



WITNESSES

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JAMES ALEXANDER SMILEY, OF MEMPHIS, TENNESSEE, ASSIGNOR TO
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COTTON-GIN RIB.

SPECIFICATION forming part of Letters Patent No. 332,296, dated December 15, 1885.

Application filed October 2, 1885. Serial No. 178,829. (No model.)

To all whom it may concern:

Be it known that I, JAMES ALEXANDER SMILEY, of Memphis, in the county of Shelby and State of Tennessee, have invented certain
5 new and useful Improvements in Cotton-Gin Ribs; and I do hereby 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
10 use the same.

My invention relates to an improvement in ribs for cotton-gins, the object of the same being to provide ribs that will permit the cotton fibers to pass between them without cutting or
15 otherwise injuring the fibers; and with this end in view my invention consists in a cotton-gin rib having an enlargement at the point where the cotton passes between the ribs, said enlargement being tapered from the center to
20 the opposite edges of the rib.

In the accompanying drawings, Figure 1 is a view in perspective of a rib embodying my invention. Fig. 2 is a view in longitudinal section through the rib, and Fig. 3 a view in
25 transverse section through the line $x x$ of Fig. 1.

A represents a cotton-gin rib of the usual shape, provided on its upper surface, at the point where the cotton is carried by the saws
30 between the ribs, with the enlargement B, formed integral with the rib. This enlargement, which is formed at or near the center of the concave portion of the upper surface of the rib, is inverted-V-shaped in cross-section,
35 the sides of the enlargement gradually sloping downwardly and terminating on a line with the side edges of the rib. The upper portion or apex of the enlargement is slightly rounded, so as to avoid sharp cutting-edges, and the

point of juncture of the enlargement with the side edges of the rib is also slightly rounded for the same purpose. By enlarging the ribs at the point where the cotton passes between them the strength of the ribs is considerably increased, and by beveling the sides of the
45 enlargement so that the latter form a continuation of the side edges of the rib all sharp edges are avoided, and the fibers of the cotton are carried through without being cut.

I am aware that it is not new to provide
50 both the upper and lower faces of a cotton-gin rib with a centrally-located strengthening-rib, and hence I make no claim, broadly, to such a construction.

It is evident that the size of the enlargement can be considerably varied without departing from the spirit of my invention; and hence I would have it understood that I do not confine myself to the exact construction
55 shown and described, but consider myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—
65

A cotton-gin rib provided on its upper surface, at the point where the cotton passes between the ribs, with an enlargement extending the entire width of the rib, the said enlargement having slightly-rounded side edges,
70 substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES ALEXANDER SMILEY.

Witnesses:

BENJN. THOMAS CARR,
THOMAS E. RODGERS.