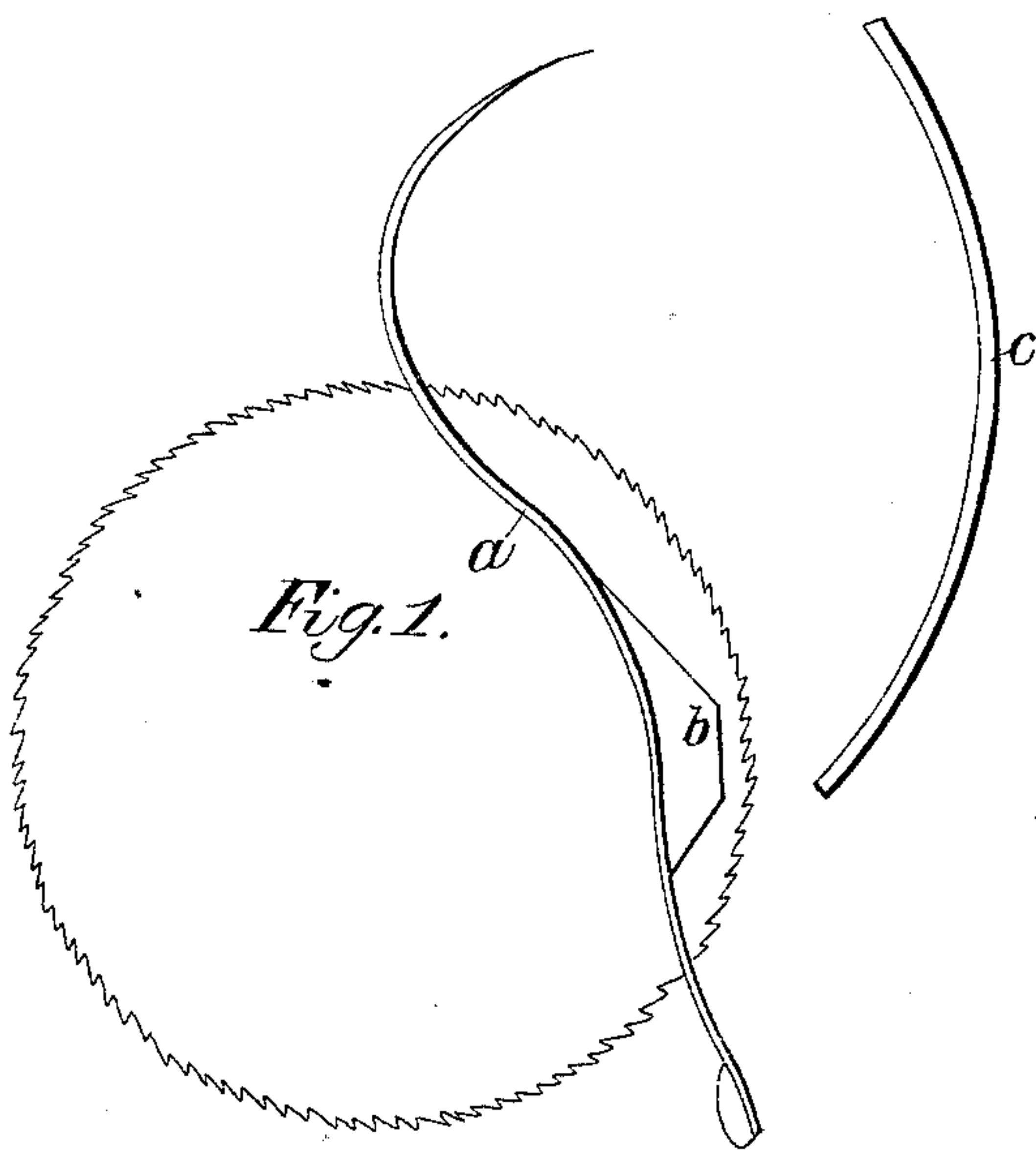


J. DU BOIS.

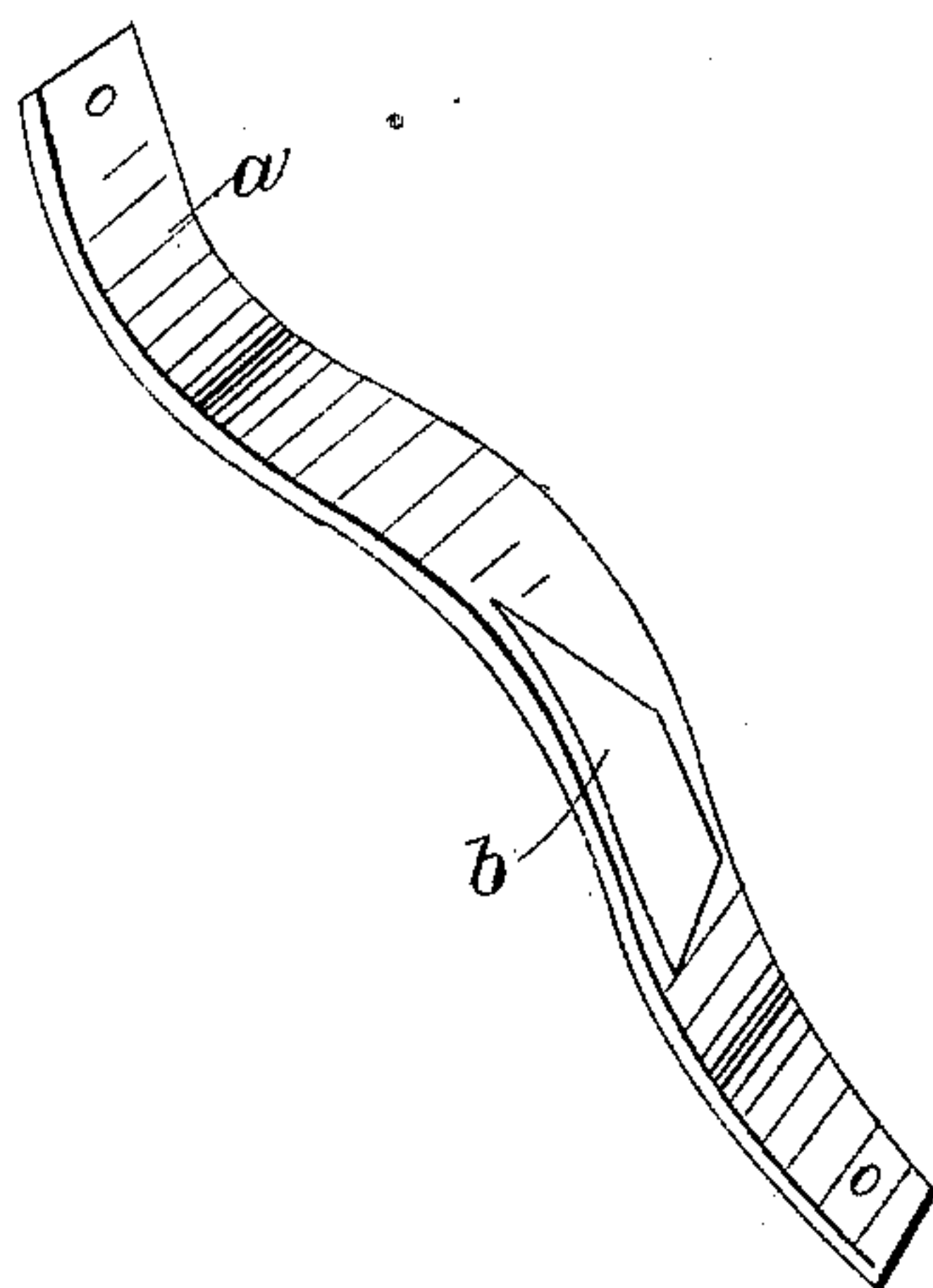
Cotton Gin.

No. 20,051.

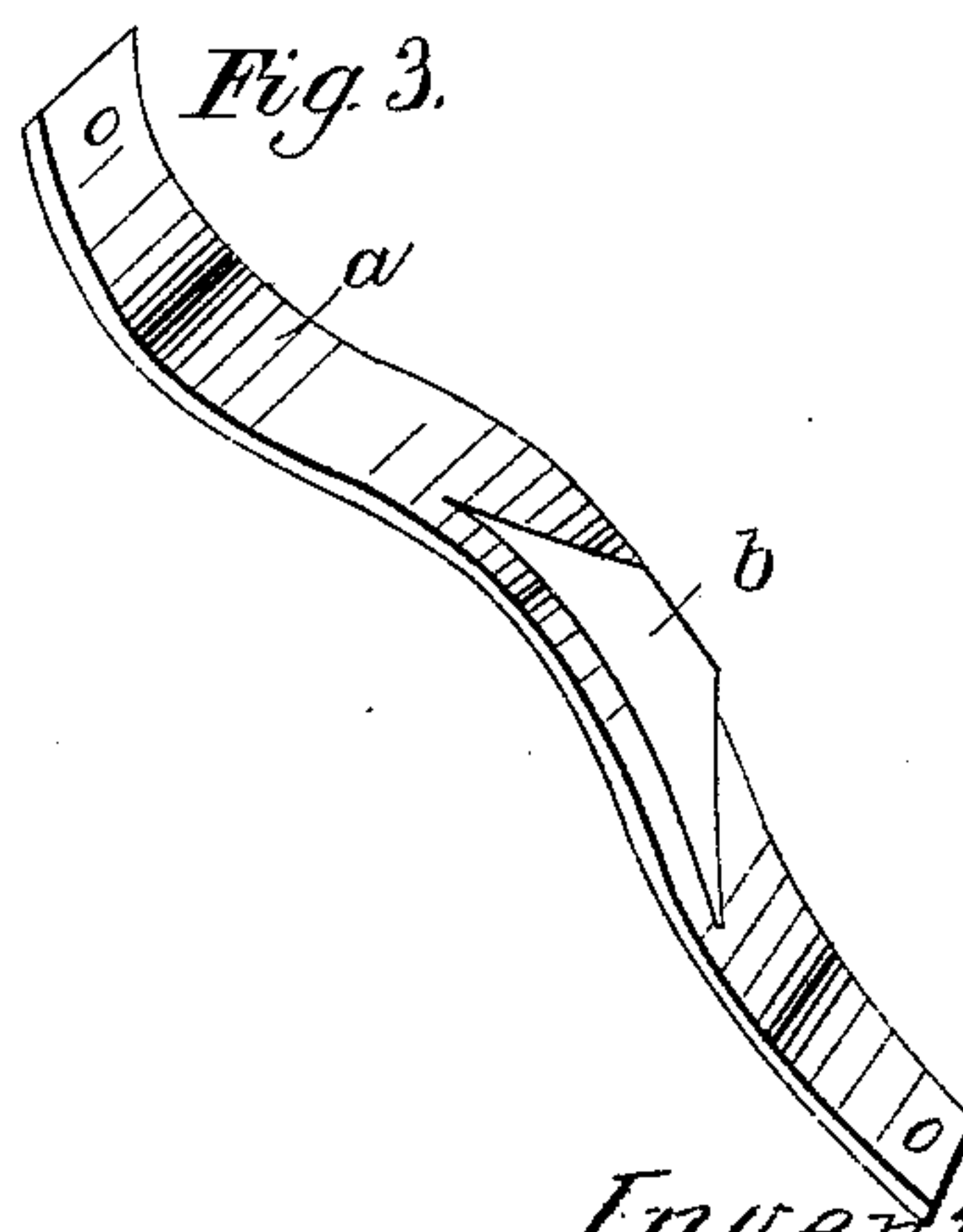
Patented April 27, 1858.



*Fig. 2.*



*Fig. 3.*



*Inventor,*  
*John Du Bois*

# UNITED STATES PATENT OFFICE.

JOHN DU BOIS, OF GREENSBOROUGH, ALABAMA.

## IMPROVEMENT IN COTTON-GINS.

Specification forming part of Letters Patent No. 20,051, dated April 27, 1858.

*To all whom it may concern:*

Be it known that I, JOHN DU BOIS, of the town of Greensborough, county of Greene, and State of Alabama, have invented a new and useful Improvement in Cotton - Gins; and I hereby do declare that the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical section of the saw and rib with the flange or projection *b*. Fig. 2 is a perspective view of the rib and flange *b* on the face of the rib near to one edge. Fig. 3 is a perspective view of the rib with the flange *b* on the middle of the face of the rib.

The same letters of reference indicate like parts on all the figures.

The nature of my invention consists in the construction, arrangement, and operation of a semi-hexagonal flange or projection on the face of the rib at the point where the seed, while being ginned, are discharged, to prevent their falling out before the lint is taken off, and to discharge them as soon as this is accomplished, and thereby increase the quantity of cotton ginned in a given time.

To enable others skilled in the art to make and use my invention, I will proceed to describe my invention, its construction, and operation.

The rib may be constructed in the ordinary manner, but more depressed and deeper in the saws than usual at the point where the seed are discharged and where the flange is located. The center of the flange *b* is placed about the point where the seed are discharged, as seen in Fig. 1, and about the lower end of the hopper-board *c*. The flange is a little more than one-eighth of an inch thick and about two and a half inches in length, more or less, and about one-half of an inch deep, more or less. The rib may be made thin at the place where the

flange is placed, and of sufficient width to be strong enough for practical purposes, and thereby serve for rib and flange at the same time. The flange may be placed about the middle of the face of the rib when the seed are small, otherwise near one edge, as in Fig. 2. The flanges are cast on the ribs, or otherwise attached to them. These ribs can be applied to gins in which the cotton is fed to the saws above them, and in the same roll-box where the lint is stripped from the seed by the teeth of the saws.

The operation of my gin is as follows: The cotton is fed into the roll-box in the usual way above and upon the saws, the flanges serving to keep the seed in contact with the teeth of the saws until the lint is taken off, when the seed will glide down between the flanges and saws, the flanges at the same time preventing the roll in its upward motion from carrying the seed back into the box. By this method the seed are discharged more freely than usual.

It is proper to remark that I use but one roll-box, like the Whiting gin, into which box or hopper the cotton is fed.

Having fully described the construction and operation of my improvement, what I claim, and wish to secure by Letters Patent, is—

The use of the flange *b* on the face of the rib, constructed, arranged, and operating in the manner described—that is to say, the flange situated opposite the lower edge of the hopper-board *c*, with the lower end extending below that point to separate the ginned seed from the cotton, and facilitate their passage from the roll-box.

JOHN DU BOIS.

Witnesses:

WARREN E. KENNEDY,  
RUFUS U. DU BOIS.