

(No Model.)

C. C. TATE.
Breast for Cotton Gins.

No. 239,883.

Patented April 5, 1881.

Fig: 1.

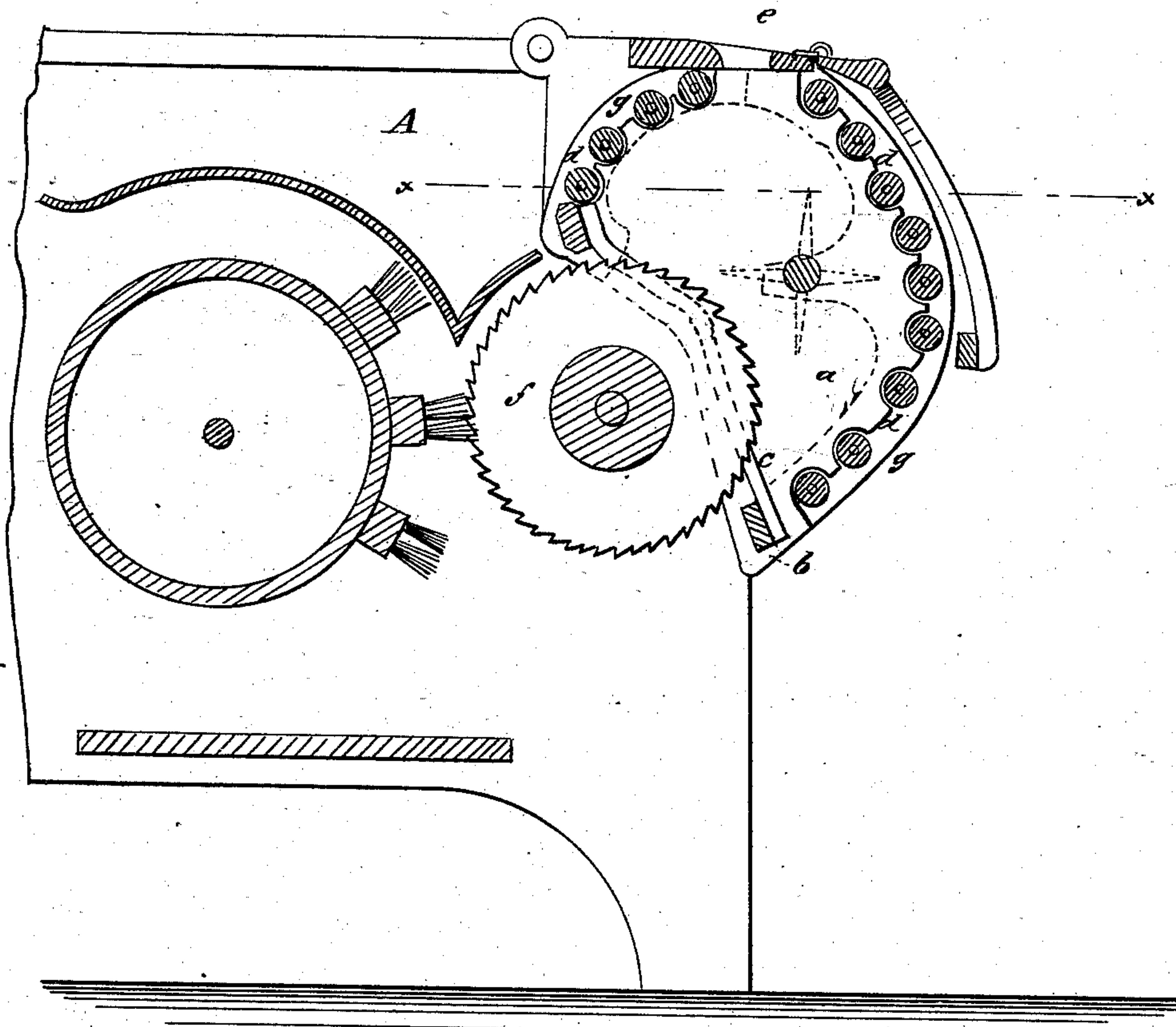
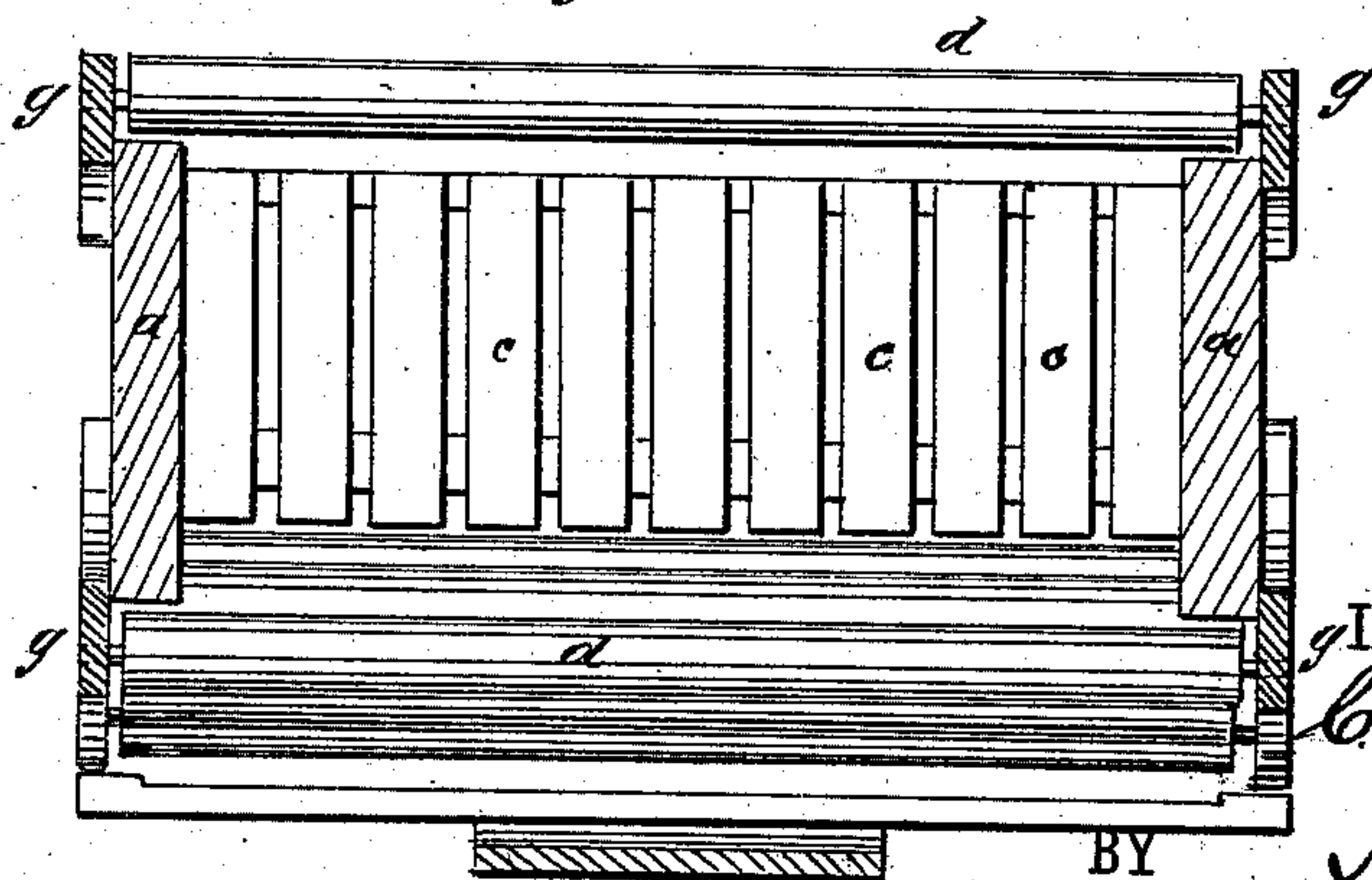


Fig: 2.



WITNESSES:

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to Beulgiroch

INVENTOR:

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BY

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UNITED STATES PATENT OFFICE.

CHARLES C. TATE, OF BROWN'S STATION, ALABAMA.

BREAST FOR COTTON-GINS.

SPECIFICATION forming part of Letters Patent No. 239,883, dated April 5, 1881.

Application filed December 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. TATE, of Brown's Station, Dallas county, Alabama, have invented a new and Improved Breast for Cotton-Gins, of which the following is a specification.

The invention consists in combining, with the breast-heads, horizontal rolls arranged on arms thereof, as hereinafter described.

10 In the accompanying drawings, forming part of this specification, Figure 1 is a vertical longitudinal section of the front portion of a cotton-gin fitted with my improvements.

Fig. 2 is a sectional plan view on line *x x* of 15 Fig. 1 of the roll or cotton box.

Similar letters of reference indicate corresponding parts.

A is the frame of the gin.

20 *a a* are heads forming the ends of the roll-box or seed-cotton chamber, which heads are tied together by bars *b*, and fitted for adjustment as usual.

c c are bars attached to heads *a*, and forming the grate through which the saws *f* work.

25 *d d* are horizontal rollers, forming the front and back of the roll-box. These rollers are journaled in arms *g*, that are attached upon

the heads *a*, so that the rollers turn freely, and they are placed a short distance apart, (about half their diameter,) thus forming a rolling 30 surface from the feed-opening *e* to the end of grate *c* at each side.

In operation the roll of cotton bears upon and turns against rollers *d*, which being fitted to turn freely, the friction is reduced to a 35 minimum and less power is required to draw the cotton through the grate. The friction is thus reduced at the most distant point from the power, where there is the greatest gain from reduction of friction. 40

The rollers *d* will be made of any suitable material, and of suitable size.

Having thus described my invention, I claim as new and desire to secure by Letters Patent— 45

In cotton-gins, the combination, with the heads *a* of the breast, of the horizontal rolls *d*, journaled in arms *g*, substantially as and for the purposes described.

CHARLES COLEMAN TATE.

Witnesses:

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W. H. JONES.