

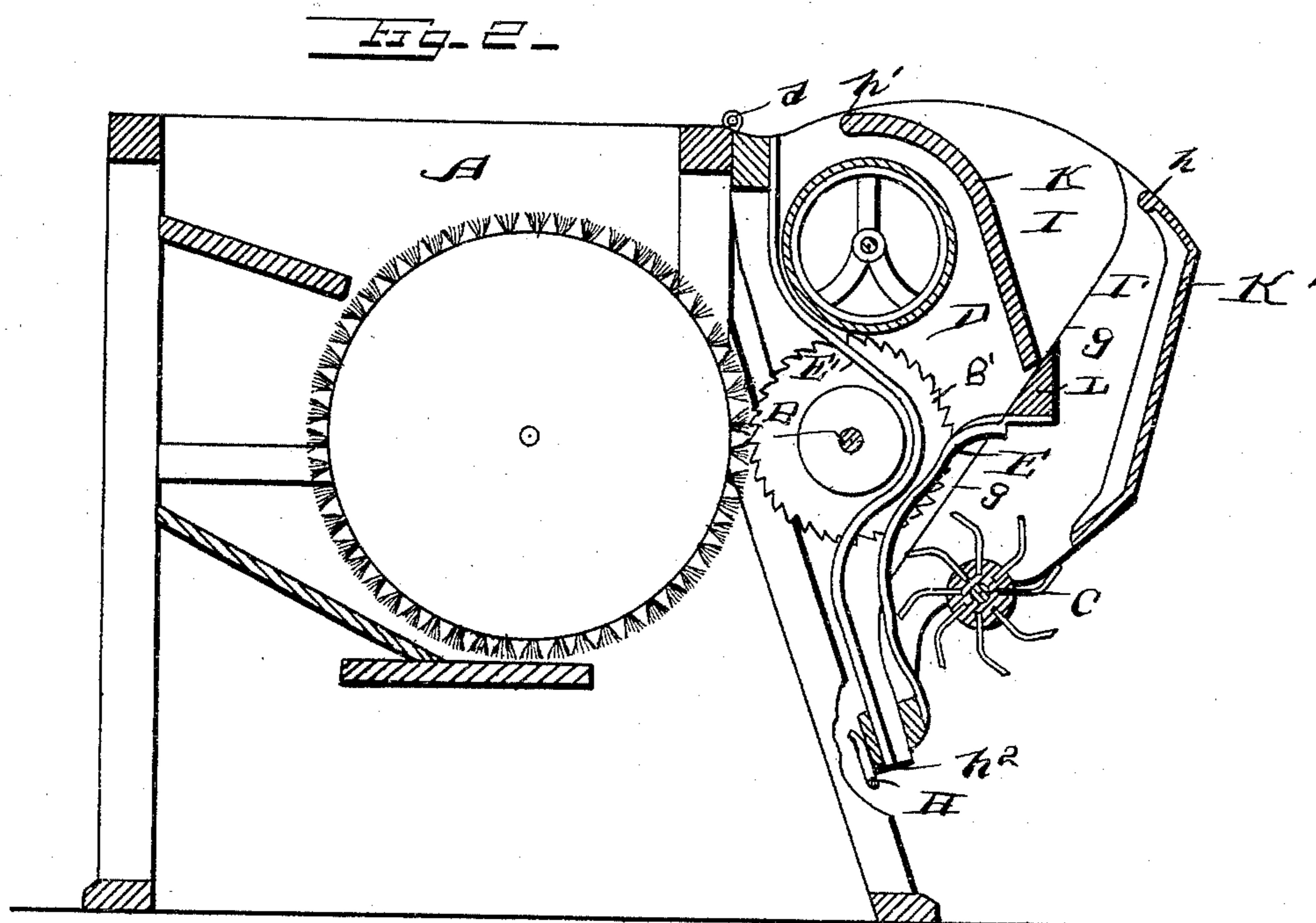
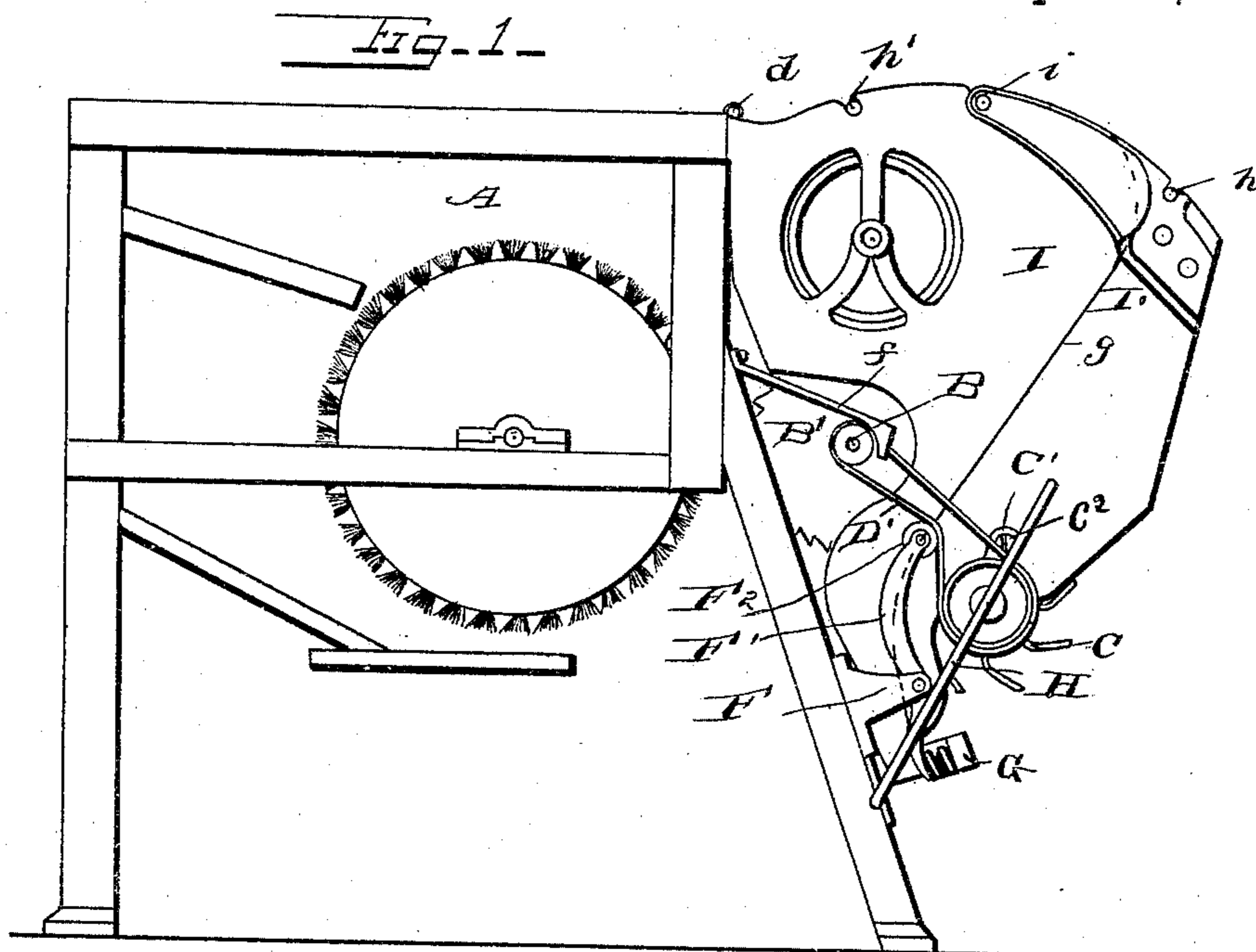
(No Model.)

W. G. BECKWITH.  
HULLER COTTON GIN.

2 Sheets—Sheet 1.

No. 482,672.

Patented Sept. 13, 1892.



Witnesses

Jesse Heller

Philip A. Masi

Inventor  
William G. Beckwith

by E. W. Anderson.

His Attorney

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

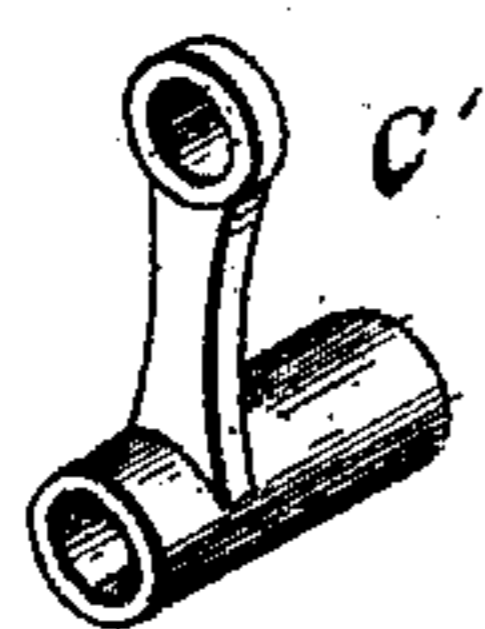


Fig. 4.

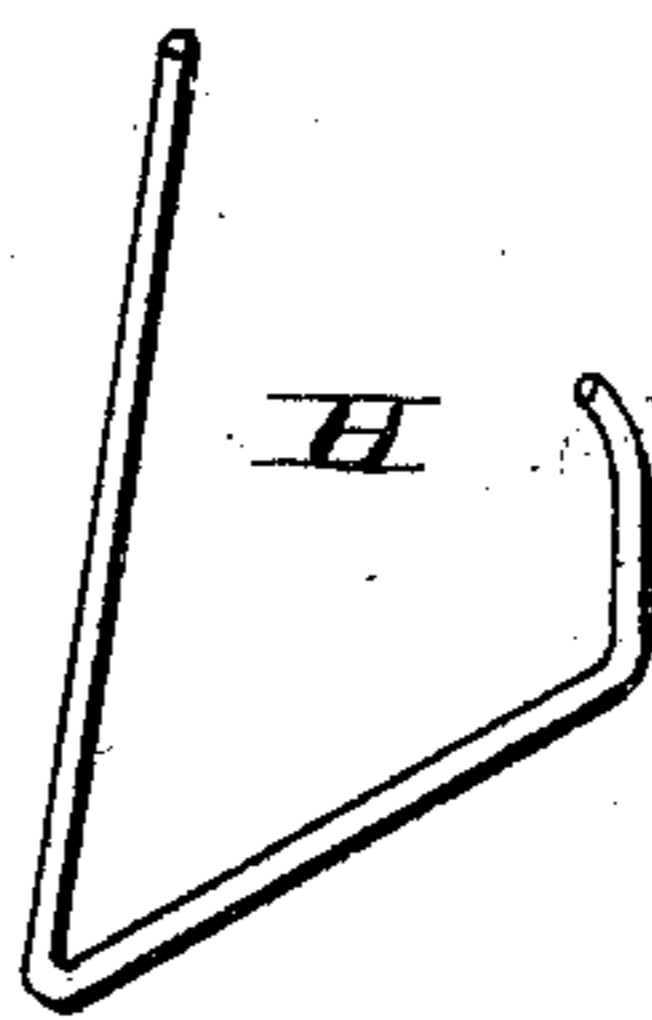


Fig. 5.

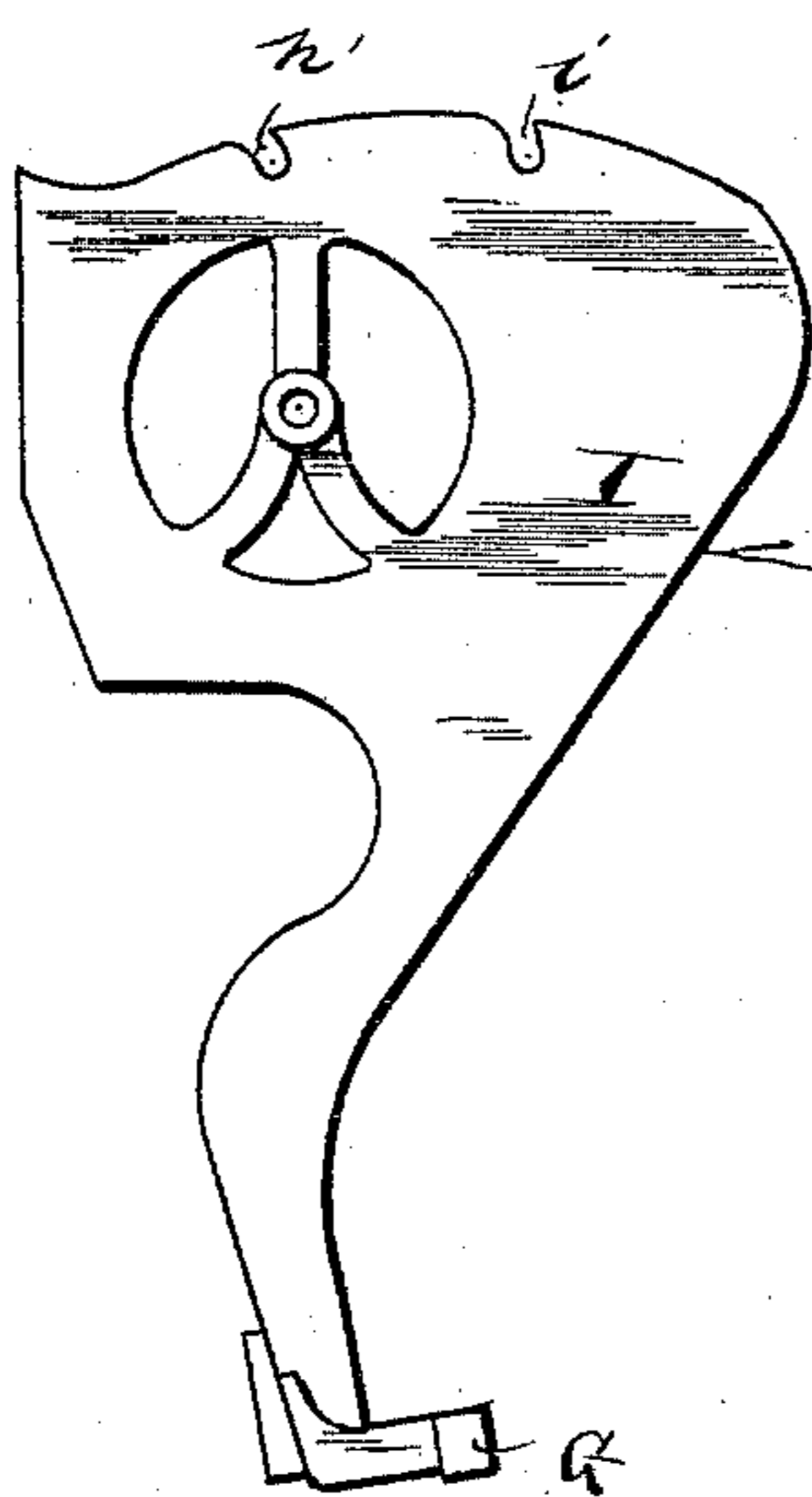
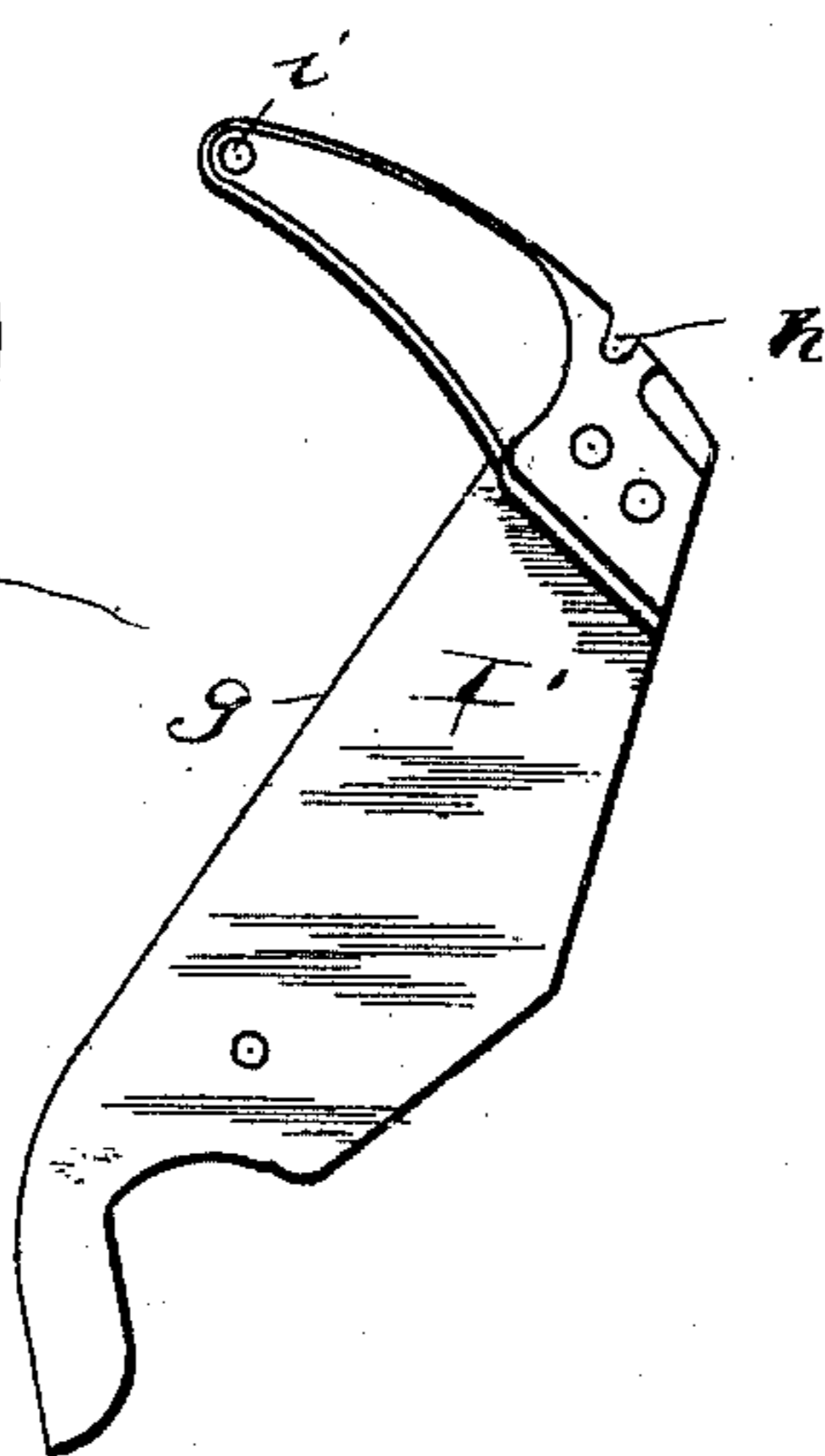


Fig. 6.



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# UNITED STATES PATENT OFFICE.

WILLIAM G. BECKWITH, OF PRATTVILLE, ALABAMA, ASSIGNOR TO THE DANIEL PRATT GIN COMPANY AND WASHINGTON L. ELLIS, SR., OF SAME PLACE.

## HULLER COTTON-GIN.

SPECIFICATION forming part of Letters Patent No. 482,672, dated September 13, 1892.

Application filed March 31, 1892. Serial No. 427,251. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM G. BECKWITH, a citizen of the United States, residing at Prattville, in the county of Autauga and State of Alabama, have invented certain new and useful Improvements in Huller Cotton-Gins; and I do 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 use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of an end view of this invention with casing end removed. Fig. 2 is a sectional view thereof, and Figs. 3, 4, 5, and 6 are details.

This invention has relation to certain new and useful improvements in huller cotton-gins; and it consists in the novel construction and combination of parts, as hereinafter specified.

The invention relates more particularly to means for regulating the belt which drives the spiked roller or beater that revolves toward the saws and serves to knock the seed-cotton up where the saws can catch it. It relates, further, to improvements in the huller or cotton-box head.

In the accompanying drawings, the letter A designates the end frame of the machine; B, the saw-shaft; B', the saws; C, the spiked roller or beater, and D the cotton-box head hung or pivoted at *d*. The spiked roller C is carried on a shaft having bearings in a bracket C', secured to the cotton-box head, and is driven by a belt D' from a pulley on the saw-shaft B. This roller revolves toward the saws, knocking the seed-cotton up where the saws can catch it. In the machine illustrated by means of a curved rib E in front of the ginning-rib E' the hulls are entirely separated from the seed-cotton, owing to the fact that the ribs are so placed as to allow the seed-cotton to pass, but are too close together to permit the passage of the hulls.

It frequently happens that hard substances get into the cotton, which hard substances be-

ing in the front of the gin and coming in contact with the saws are liable to injure them, and in this event it is necessary to raise the ribs from the saws quickly, and if the spiked roller continues to run during this time all the cotton which happens to be in the outer or huller breast is dropped down with the seed. To obviate this difficulty, we provide means now to be described, whereby as the ribs are raised from the saws the roller stops revolving and the cotton that is in the outer breast stays where it is until the gin is started again.

F is a stand or bracket secured to the frame and supporting a lever F', having a friction-roller or tightener F<sup>2</sup>, which normally acts on the belt D' to give it the necessary tension.

G is a spring-box on the tail-piece of the huller-head, which normally holds down the lever that tightens the belt.

H is a lever for operating the cotton-box to raise the breast from the saws, which movement of the breast causes the belt-tightener to fall away from the belt and slacks it sufficiently to relieve the driving-friction on the spiked roller-shaft. As the breast is again lowered the spring-box G contacts with the arm of the lever and throws the tightener into operation. The bearing bracket or box C' (shown in detail in Fig. 3) is made adjustable, so as to set the spiked roller different distances from the saws, according to the kind of cotton ginned. Said bracket is secured by means of the pin or screw C<sup>2</sup>, and by loosening this pin or screw and swinging the bracket inward or outward toward or away from the saws the adjustment is effected.

*f* is a guard for the belt D.

L is a bar to which the upper end of the huller-rib is fastened.

The huller or cotton box head is formed in two pieces united on the line *g*, the outer portion I being pivoted to the inner portion I' at *i* in such a manner that it is kept in position by gravity and requires no clamps or positive fastenings, so that it will readily yield to allow the passage of any hard substance between the inner and outer fronts K K' without any breakage of the parts, as would other-

wise be the case. The outer front is hinged on the pivot *h* and the inner front on the pivot *h'*.

5 *h*<sup>2</sup> is the tail-piece to which the lower end of the inner rib is affixed.

It is obvious that the specific arrangement of the various parts, as above described, may be varied without departing from the spirit and scope of the invention.

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

1. In a huller-gin, the combination, with the saws, the spiked roller, and the driving-  
15 belt, of the belt-regulator and its lever and the pivoted cotton-box head normally in contact with an arm of said lever, substantially as specified.

2. In a huller-gin, the combination, with  
20 the cotton-box head having a tail-piece, the spiked roller, the saw-shaft and saws, and the belt driving said roller from the saw-shaft, of the belt-regulator normally held against said belt, the lever carrying said regulator, the  
25 lower end of said lever being extended into position to be engaged by the tail-piece of the cotton-box head, substantially as specified.

3. In a huller-gin, the combination, with

the hinged or pivoted head, the spiked roller, its adjustable bearing, the saws, and the driving-belt, of the tightener-lever acting on said belt, and means on said cotton-box head for engagement with an arm of said lever when said head is in its normal position, substantially as specified. 30

4. In a huller cotton-gin, the combination, with the hinged or pivoted head, the spiked roller, and its driving-belt, of the tightener-lever acting on said belt, the spring-box on the tail-piece of the head, and the lever for  
40 operating the cotton-box, substantially as specified.

5. In a huller cotton-gin, the combination, with the spiked roller, the saws, the driving-belt, and the lever carrying the regulator for  
45 said belt, of the hinged or pivoted cotton-box head formed in two sections having a loose connection, one of said sections having a tail-piece adapted to engage an arm of said lever, substantially as specified. 50

In testimony whereof I affix my signature in presence of two witnesses.

W. G. BECKWITH.

Witnesses:

W. H. BARNES,  
T. A. FAY.