W. S. REEDER.

COTTON-GIN.

No. 169,584. Patented Nov. 2, 1875.

FIG. 1.

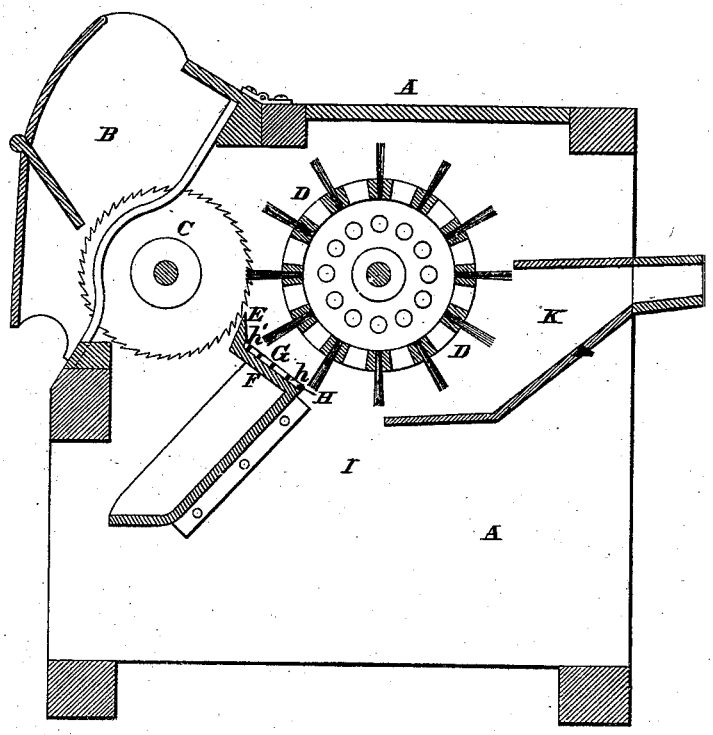
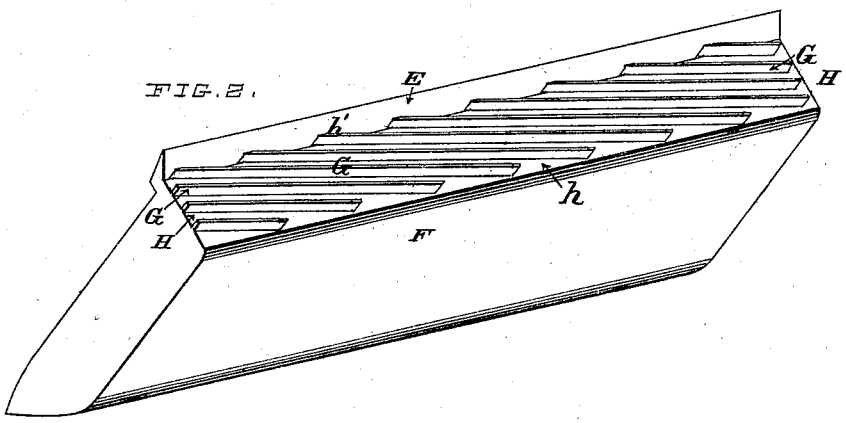


FIG. 2.



ATTEST.

Robt. Burns.
R. Hutchins

INVENTOR.

William S. Reeder
By Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM S. REEDER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO KINGSLAND, FERGUSON & CO., OF SAME PLACE.

IMPROVEMENT IN COTTON-GINS.

Specification forming part of Letters Patent No. **169,584**, dated November 2, 1875; application filed August 10, 1875.

To all whom it may concern:

Be it known that I, WILLIAM S. REEDER, of the city and county of St. Louis and State of Missouri, have invented a certain new and useful Improvement in Cotton-Gins, of which the following is a specification:

My improvement consists in the provision beneath the stripping-brush of a number of obliquely-arranged blades, over which the cotton passes just after disengagement from the saws, and which act, in conjunction with the brush, to remove impurities from the cotton. The impurities fall into oblique channels between the blades, and have free discharge at the lower ends of the channels, without being again brought in hard contact with the cotton.

Figure 1 is a longitudinal vertical section of the gin. Fig. 2 is a perspective view of the blades.

A is the main frame or box of the machine; B, the hopper; C, the saw, and D the rotary brush by which the cotton is stripped from the saws. No novelty is claimed in the foregoing parts. Beneath the line of contact of the saws and brush is the edge E, behind which the cotton passes as it is brushed from the saw-teeth. Just behind the edge E is a surface, F, from which project a number of blades, G, extending obliquely to the course and the axis of the brush. H H are the channels between the blades, which channels receive the motes and other impurities. These impurities pass down the channels, and are discharged at their lower ends *h* into the mote-chamber I, the cotton being driven out of the spout K. The plane of the blade-edges is such that the space between such blades and the brush D is smaller at the lower edge, *h*, than at the upper edge, *h'*, so that the action of the brush upon the cotton increases in violence as it is carried over the blades until it reaches the lower edge, *h*.

My purpose in inclining the blades is partly to impart a degree of spiral motion to the cotton, so as to cause the motes in every part to be presented to the blades for removal of the motes from the cotton. Another purpose is that each channel shall have a free discharge for the motes at its lower end, so that the impurities in the channels shall not be brought into hard contact with the cotton, so as to become again mixed with it, as would be the case if the impurities were made to pass over the edges of the blades in escaping from the channels.

Having described my invention, with its purpose and principle of action, what I claim as new and of my invention is—

The blades G, arranged obliquely and forming oblique channels H, in combination with the stripping-brush D, substantially as and for the purpose set forth.

WILLIAM S. REEDER.

Witnesses:

SAML. KNIGHT,

ROBT. BURNS.