

J. H. MITCHELL.
Cotton-Harvesters.

No.154,762.

Patented Sept. 8, 1874.

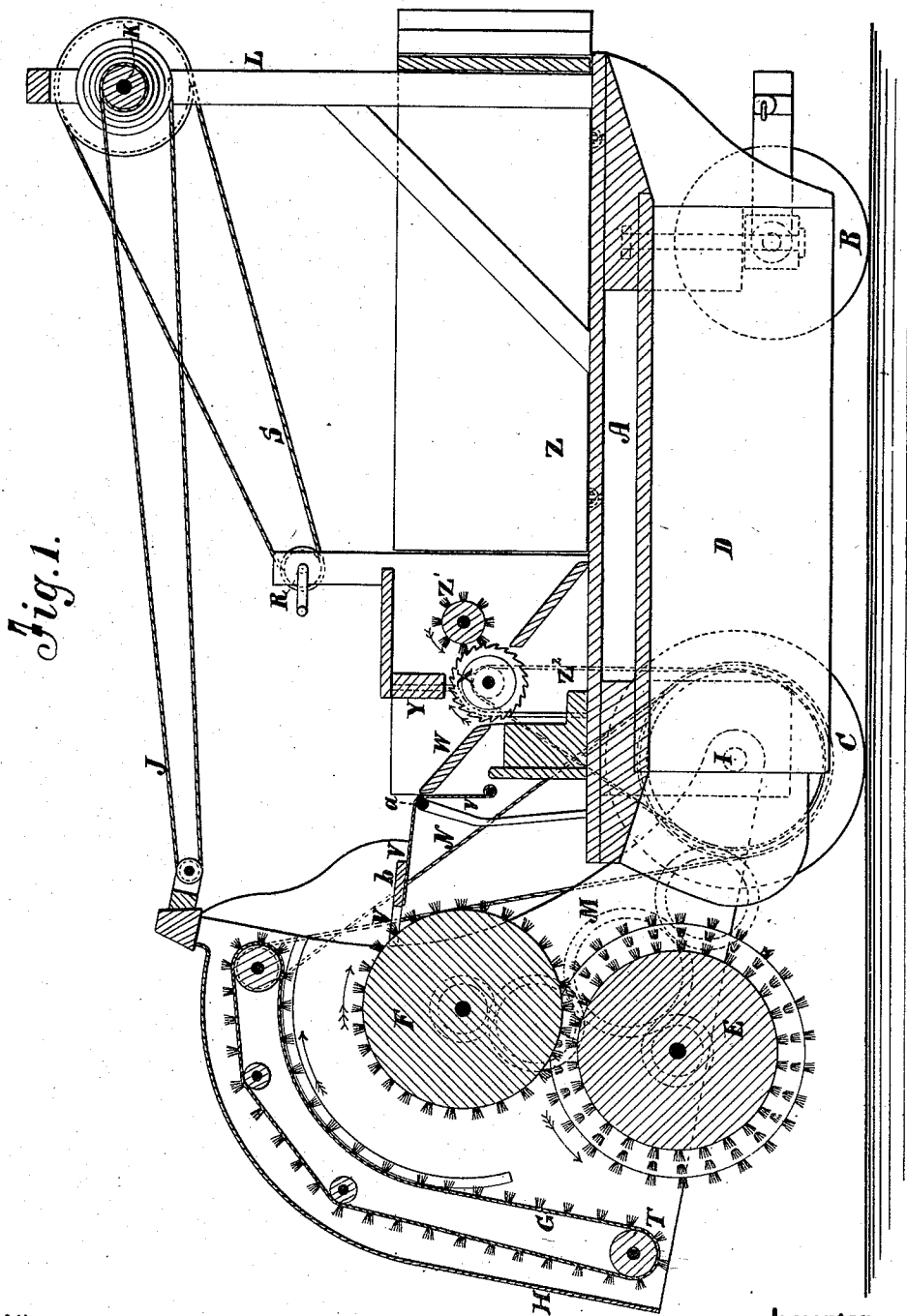


Fig. 1.

Witnesses:

A. Bernerendorf.
Sedgwick

Inventor:

J. H. Mitchell

Per

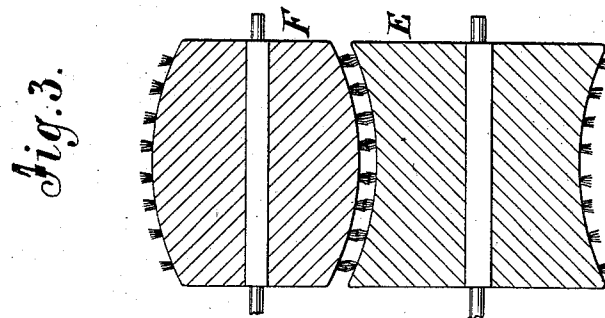
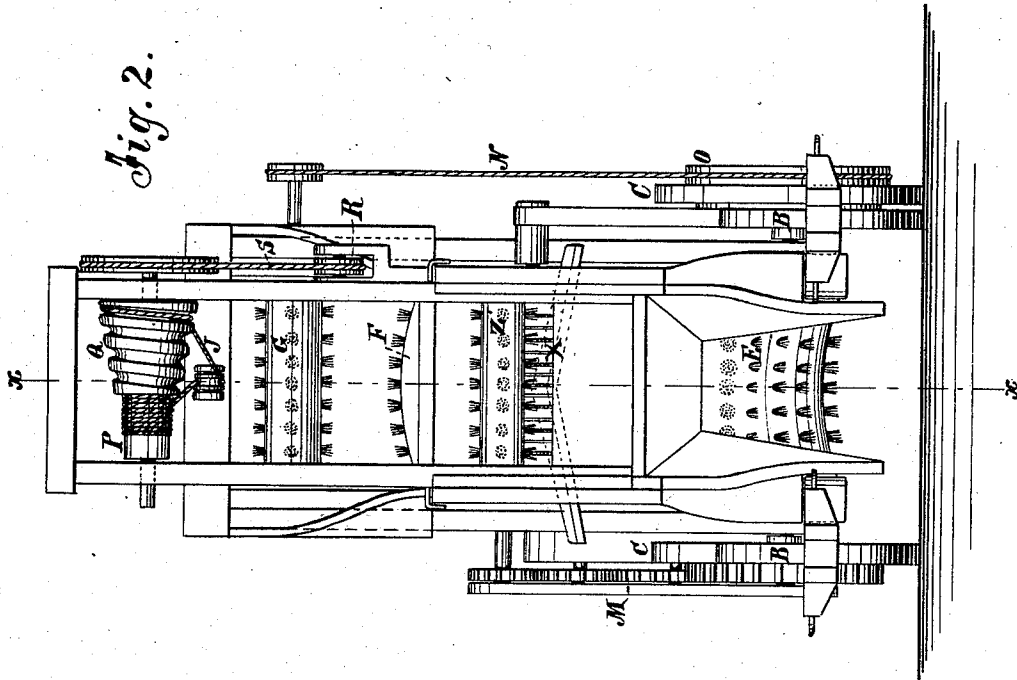
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Attorneys.

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Witnesses:

A. Remmeckenhoff.
Adams

Inventor:

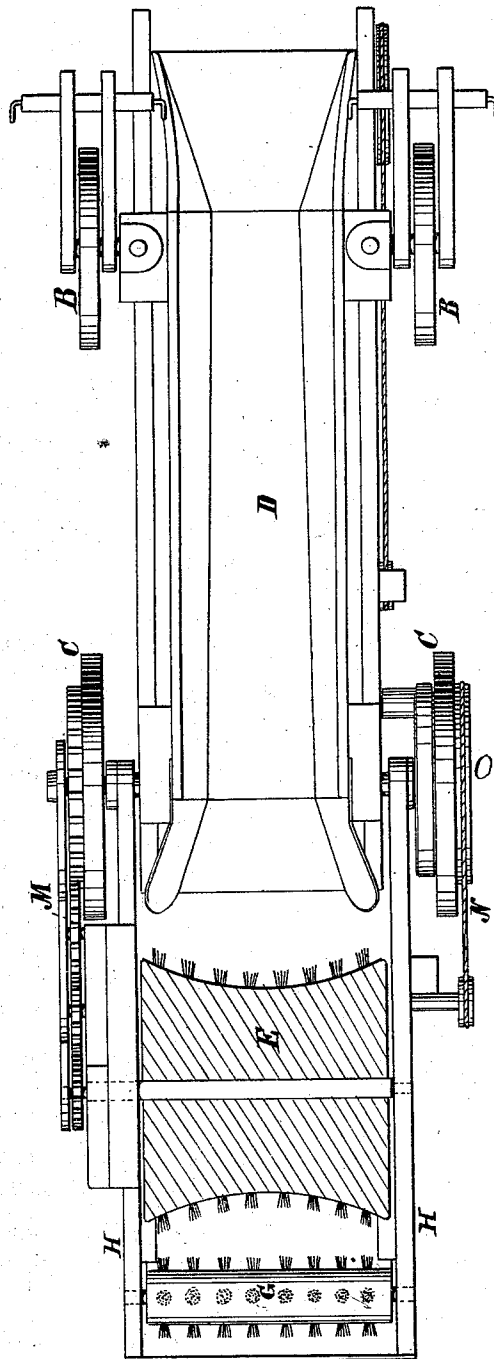
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Fig. 4.



Witnesses:

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Chas. Quick

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UNITED STATES PATENT OFFICE.

JOHN H. MITCHELL, OF FRIAR'S POINT, MISSISSIPPI.

IMPROVEMENT IN COTTON-HARVESTERS.

Specification forming part of Letters Patent No. 154,762, dated September 8, 1874; application filed October 4, 1873.

To all whom it may concern:

Be it known that I, JOHN H. MITCHELL, of Friar's Point, in the county of Coahoma and State of Mississippi, have invented a new and Improved Cotton-Picking Machine, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claims.

Figure 1 is a longitudinal sectional elevation of my improved cotton-picking machine, the section being taken on the line *x x* of Fig. 2. Fig. 2 is a front elevation. Fig. 3 is a longitudinal sectional elevation of the revolving brushes. Fig. 4 is partly a plan view of the bottom and partly a horizontal section.

Similar letters of reference indicate corresponding parts.

A represents a truck on four wheels, B C, the wheels being on short axles, so as to provide a channel or receptacle, D, along the bottom, about as high as the cotton-brush, for the machine to pass over the rows. The front of said channel flares out to gather in the brush. Behind the truck is a large horizontal concave brush-roller, E, also a convex brush-roller, F, and also an endless-belt brush, G, suspended in the hood H, which is pivoted on the axis I of the hind wheels of the truck, and suspended at the top by the endless rope J from the roller K on the upright frame L at the front end of the machine. The revolving brushes are geared by a train of wheels, M, with one of the hind truck-wheels, and the endless brush is geared with one of said wheels by a belt, N, and pulley O, so that they may be raised and lowered at will without interfering with the gearing. They are raised and lowered by revolving the drum K one way or the other, said drum having one part of the rope J wound on a small cylindrical portion, P, of it and the other part on a spirally-grooved part, Q, by which the length of the rope is varied. The drum is turned by the crank-shaft R and the endless rope S. The lower

revolving brush E, turning in the direction of the arrow 1 against the cotton-brush, strips off the cotton and carries it up to brush F, which takes most of it, and brush G receives any which may be thrown off from the two rotary brushes, while the heavy matters, such as the shucks, stems, and the like, fall down through the space T. From apron V an attendant, first picking out what refuse matters he can, delivers it onto chute W, from which it is taken by the cleaning-saws X under the rubber Y for breaking the balls and separating it from them, and from these saws it is brushed off into the main receiver Z by the revolving brush Z¹, while the matters separated fall into receptacles below to be discharged from the side of the box from time to time. Said brush and the saws are driven by a belt, Z², from one of the hind truck-wheels. The apron V is of flexible material and hangs at one end from the rod *a*, so as to draw forward and back as the hood swings toward and from said rod, thus adapting itself to the varying distance between the part *b* of the hood to which the apron is attached and the chute W.

The machine is designed to be used after frost, when the cotton strips easy, and will probably run over the rows twice, once each way.

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

1. The rotary concave and convex picking-brushes E F and endless brush G, combined with a truck, and operated substantially as specified.

2. The combination of the flexible apron V, with the brush F and the chute W, substantially as specified.

JOHN H. MITCHELL.

Witnesses:

GEORGE WINSTON,
JAMES A. BERRY.