S. J. DORRIS.

Cotton-Gin Feeders.

No. 196,199. Patented Oct. 16, 1877.

Fig: 1.

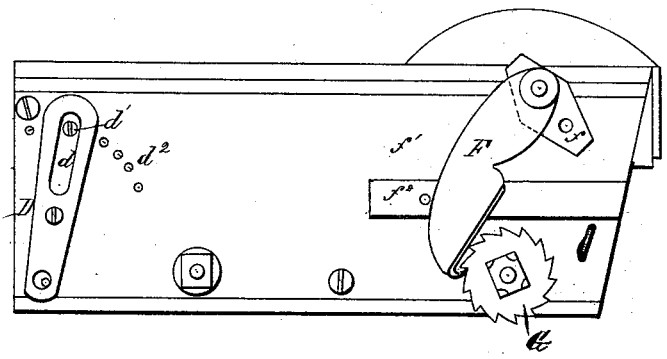


Fig: 2.

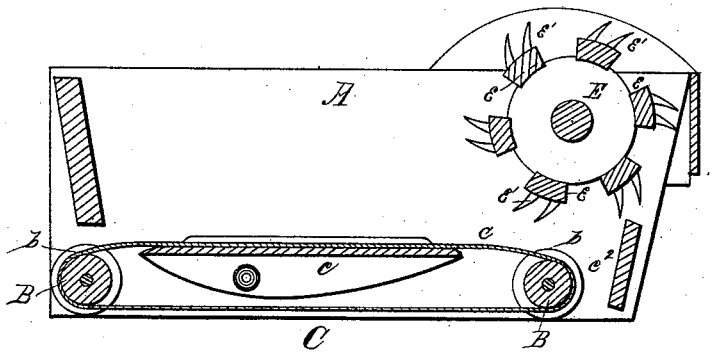
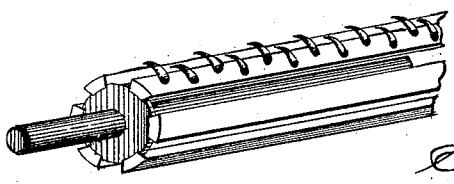


Fig: 3.



WITNESSES

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STEPHEN J. DORRIS, OF MILFORD, TEXAS.

IMPROVEMENT IN COTTON-GIN FEEDERS.

Specification forming part of Letters Patent No. **196,199,** dated October 16, 1877; application filed August 29, 1877.

To all whom it may concern:

Be it known that I, STEPHEN J. DORRIS, of Milford, in the county of Ellis and State of Texas, have invented certain new and useful Improvements in Cotton-Gin Feeders; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a side view of my improved cotton-gin feeder. Fig. 2 is a vertical section thereof, and Fig. 3 is a detached perspective view of the slotted toothed cylinder.

Corresponding parts in the figures are denoted by like letters.

This invention relates to certain improvements in cotton-gin feeders; and consists of the combination of the parts of which it is composed, as clearly pointed out in the claims.

In the annexed drawing, A refers to a receptacle the sides of which are each formed, preferably, in one piece, and having rollers B B journaled in its bottom, one at the forward and the other at the rear end thereof. These rollers are provided with rings or annular partitions *b b*, to separate and keep apart the belts C embracing the said rollers.

The belts C rest upon a bottom, *c*, in the receptacle A, and feed the cotton placed thereon to a toothed cylinder, which feeds it to the gin.

The ends of the axis of one of the rollers B B project through slots in the sides of the receptacle A, and are hung in levers D, fulcrumed to the said sides.

The upper ends of the levers D are provided with slots *d*, which receive adjusting-screws d^1 from any two of two series of apertures, d^2 d^2, one in each side of the receptacle, arranged in the arc of a circle.

By withdrawing the screws d^1 and moving the levers D from a vertical position to the right, and inserting the said screw in any one of the apertures d^2 d^2, it will be seen that the rear roller will have a limited movement, and the belts or aprons C be tightened and caused to partake of the rotary motion of the rollers, and thus be put in operation.

E is a cylinder hung in the opposite end of the receptacle A, and having a series of peripherical slats, *e e*, provided with dogged or angular teeth, alternating with each other, which, while they will pick up the cotton, will, by their arrangement and the spaces between the slats, not act conjointly to hold any hard substance, only momentarily, it slipping therefrom through the said cylinder down through the receptacle behind the gin-mouth, as at e^2. These slats *e e* are detachably connected to the cylinder-heads, and may be reversed when desired.

With the axis of the cylinder E is connected, by a crank, cam, or eccentric, *f*, the pawl F, which engages a ratchet, G, upon the axis of one of the rollers, B B, it being held to its work by a pin or projection, f^1, and a bar, f^2, fastened to the side of the receptacle A. This pawl, it will be observed, has an intermittent drawing motion, by means of which and its ratchet a similar motion is imparted to the belts or aprons C, to bring the cotton up to the toothed cylinder.

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

1. In a cotton-gin feeder, the slotted levers D *d* and their pivots, in combination with the belt-roller B, adjusting-screws d^1, and the receptacle A, having apertures d^2 arranged in the arc of a circle, substantially as and for the purpose set forth.

2. The receptacle A, having apertures d^2 arranged in the arc of a circle, in combination with the slotted levers D *d*, adjusting-screws d^1, rollers B B, having annular partitions or rings *b b*, belts C, cylinder E, pawl F, and ratchet G, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

STEPHEN J. DORRIS.

Witnesses:

W. F. WEEKLEY,

H. L. LANDRETH.