

J. WRIGHT.
COTTON-GIN FEEDER.

No. 172,680.

Patented Jan. 25, 1876.

Fig. 1.

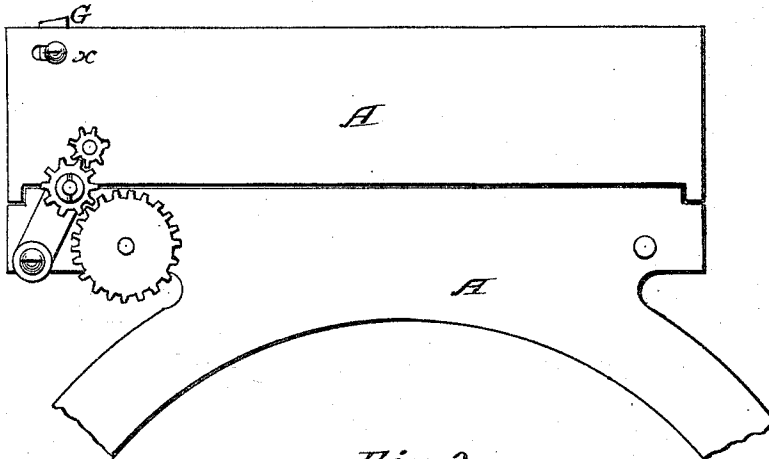


Fig. 2.

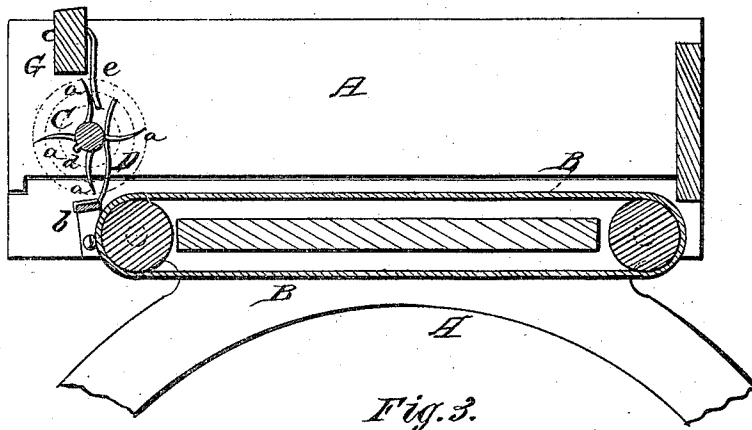
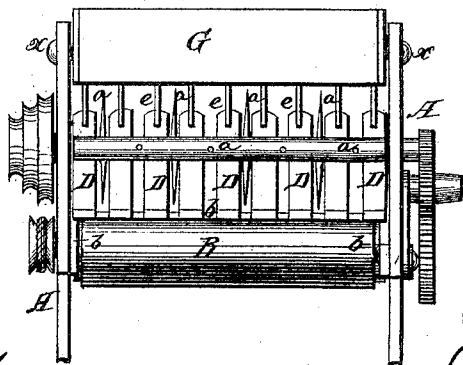


Fig. 3.



Witnesses:

F. C. Dietrich

W. L. M. Arthur

Inventor:

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Per: *C. H. Watson & Co.* Attorneys:

UNITED STATES PATENT OFFICE.

JAMES WRIGHT, OF BARTON, ALABAMA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO J. C. SMITH, JR., OF JACKSON, TENNESSEE.

IMPROVEMENT IN COTTON-GIN FEEDERS.

Specification forming part of Letters Patent No. **172,680**, dated January 25, 1876; application filed
November 23, 1875.

To all whom it may concern :

Be it known that I, JAMES WRIGHT, of Barton, in the county of Colbert and State of Alabama, have invented certain new and useful Improvements in Double-Breasted 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.

The nature of my invention consists in the construction and arrangement of a double-breasted feeder for cotton-gins, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a side elevation. Fig. 2 is a longitudinal section, and Fig. 3 is an end view.

A represents a suitable frame, provided with an endless-belt bottom, B, made of leather or other suitable material, over which the cotton is fed. The smooth surface of the belt permits the cotton to slip or slide, and prevents crowding or flooding the breast.

At the front end of the frame is a revolving shaft, C, provided with teeth, *a*, of any desired shape, which work through the elastic or spring breast D. This breast is formed of a series of spring-plates, secured at their lower ends to a bar, *b*, and extending upward a suitable distance apart; or it may be made of a single spring-plate slotted at suitable intervals from the upper edge downward.

In case some of the teeth of the cylinder fail to shed the cotton, it would be carried around between the breast and the cylinder; but the breast, being elastic, gives way until the cotton is removed. The breast being open at the top, there is nothing for the cotton to lodge against, as it is forced up by the action of the teeth, and hence its upward movement is not stopped.

In the shaft or cylinder C is inserted a strip, *d*, which prevents the cotton from packing between the breast and the cylinder, for, as the shaft revolves and the breast rests upon the shaft, the cotton is liable to pack or clog

and be held on the shaft by the pressure of the spring-breast D; but as the strip *d* raises the breast at every revolution of the shaft, the cotton passes around, and does not pack or clog. Above the shaft or cylinder C is a top breast, G, provided with guides *e e*, extending downward, as shown. This breast produces a rotary or a uniform rolling motion of the cotton from the breast, and presents a fresh supply of cotton to each row of teeth as they pass through the breast. The breast G is fastened in the frame A by screws X passing through slots in the frame, so as to be adjusted to regulate the amount of feed required.

As soon as the belt moves up a supply of cotton to the breast there is nothing to force it but the gentle pressure of the cotton behind, which is always uniform; and in case there is a double supply the pressure is always uniform, or nearly so, and the breast never can be overrun or flooded, for the cotton will slide on the face of the belt whenever the supply becomes too great.

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

1. The elastic or spring breast D, constructed, as described, with open top, in combination with the endless belt B and revolving cylinder C, with teeth *a*, substantially as and for the purposes herein set forth.

2. The toothed cylinder C, provided with the bar *d*, in combination with the spring-breast D, substantially as and for the purpose specified.

3. The combination, with the endless belt B and toothed revolving cylinder C, of the elastic or spring breast D, open at the top, as described, and the adjustable top breast G, with guides *e*, substantially as and for the purposes herein set forth.

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

JAMES WRIGHT.

Witnesses:

JAMES RUTLAND,
WM. RAMSEY.