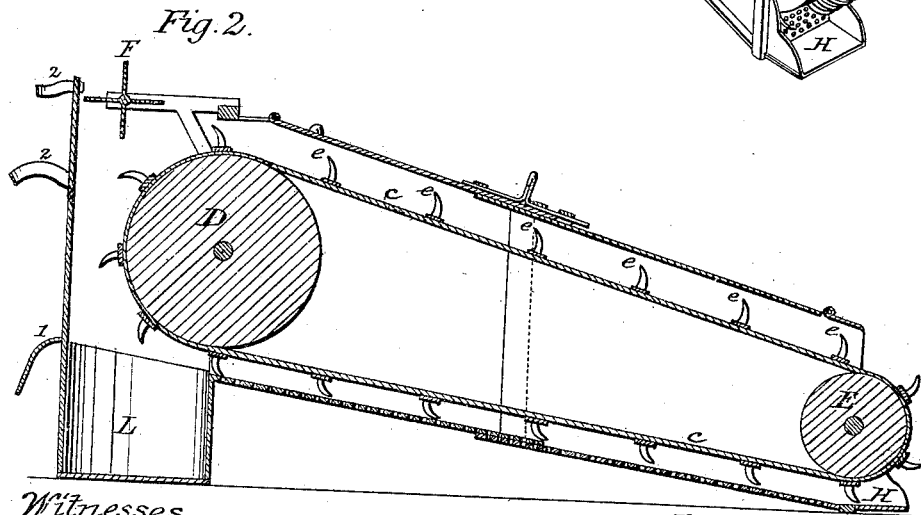
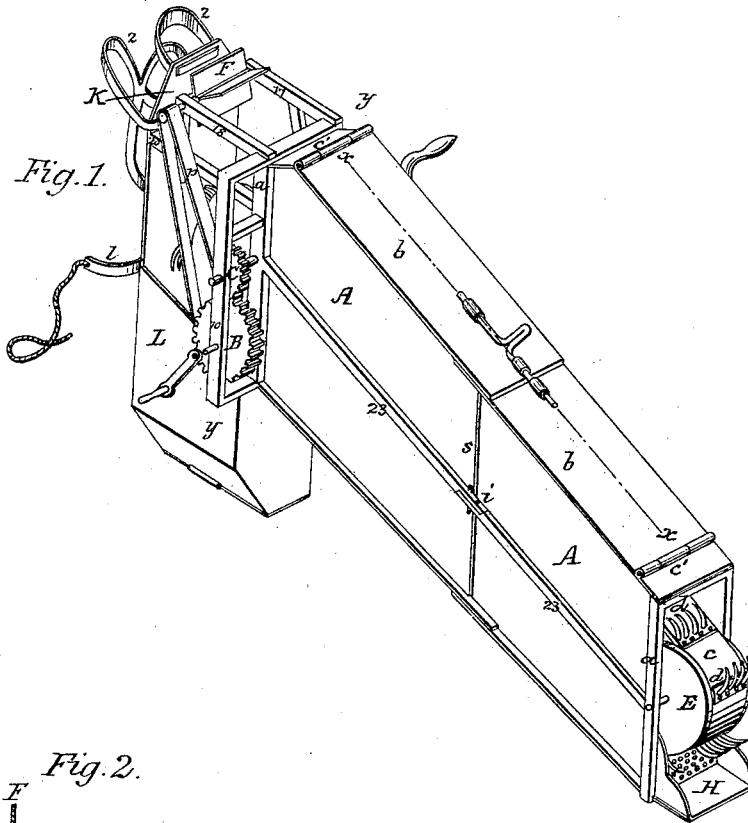


B. I. DREESON.
Cotton Picker.

2 Sheets—Sheet 1.

No. 108,461.

Patented Oct. 18, 1870.



Witnesses.
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Inventor.
Barthold J. Dreese.
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B. I. DREESON.

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Fig. 3.

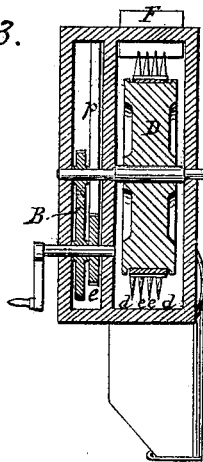


Fig. 4.

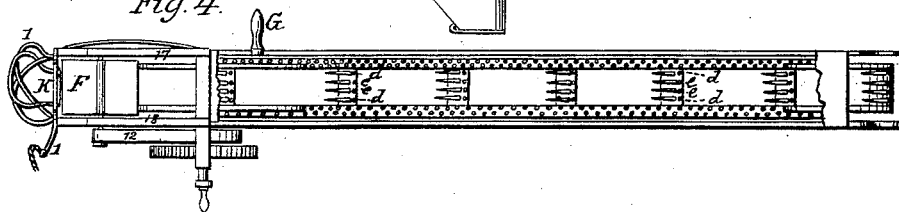


Fig. 5.



Fig. 6.

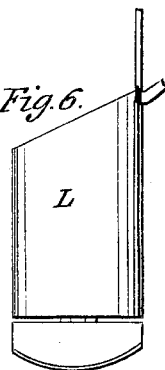
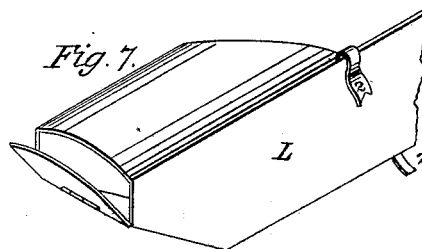


Fig. 7.



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UNITED STATES PATENT OFFICE.

BARTHOLDT I. DREESON, OF MARION COUNTY, TEXAS.

IMPROVEMENT IN COTTON-PICKERS.

Specification forming part of Letters Patent No. **108,461**, dated October 18, 1870.

To all whom it may concern:

Be it known that I, BARTHOLDT I. DREESON, of the county of Marion and State of Texas, have invented an Improvement in Machines for Picking Cotton from the Boll on the Stalk, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of my machine. Fig. 2 is a longitudinal sectional view through the line *x x*. Fig. 3 is a transverse sectional view through the line *y y*. Fig. 4 is a plan view with the top removed. Fig. 5 is a section of the belt with the picking-knives attached. Figs. 6 and 7 are views of the receiving-box detached from the machine.

To enable others skilled in the art to make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing, A represents the body or outer casing of my machine, made of thin sheets of tin, zinc, or other suitable material, secured to the frame *a a*. This casing has on each side, at the central line *s*, loose lapping seams, which allow the casing to be extended or shortened to adjust the band *c c*.

23 is an adjusting-rod, constructed in two parts, and secured together at the center by the pin *i*, by means of which the band *c c* is easily tightened or slackened, at the pleasure of the operator, as the adjusting-rod regulates the space between the pulley-wheels D E.

The top plates, *b b*, are hinged at *c' c'*, and open and close at the center, being secured, when shut, by means of a slide-bolt or other suitable fastening. Through these hinged tops the operator can readily remove any impediment to the proper working of the knives which might enter the casing A.

The bottom of the casing is made of open wire-gauze of meshes sufficiently large to allow a free passage for any sand or other dirt which may have entered the machine. This wire-gauze, like the top plates, is also made to open and close at its center, the two parts being hinged at the opposite ends of the frame *a a*.

B is a cogged wheel working with a crank, and having its bearings in the frame *a*, and the post 10 securely attached to the said frame.

Working into the cogged wheel B is the small cogged wheel C, having similar bearings with the former.

On the shaft of the small wheel B is secured the large pulley-wheel D, which revolves within one end of the frame *a a*. This large pulley-wheel is connected by a band, *c c*, with the smaller pulley-wheel E, having its bearings in the opposite end of the frame *a a*.

d d and *e e* are knives or blades for picking the cotton from the boll.

The knives *d d* may be made with two or more prongs each, in the shape of a sickle, and then they act as sides to each of the section of blades *e e*, thus preventing the cotton from falling on either side of the belt while being carried along from the top of the pulley-wheel E to the top of the pulley-wheel D.

The knives *d d* are attached to the outer edges of the belt *c c*, with the single knives *e e* placed at equal distances between them. The single knives *e e* are also to be made in the shape of a sickle, so that they will readily enter and take hold of the cotton. I secure the knives *d d* and *e e* to the belt *c c* (see Fig. 5) by first passing their butts through two metallic plates, *v v*, with an intervening elastic plate, *m*, and securely fastening them together, and then securing or attaching the plate to the belt *c c*.

I usually make my knives about two inches high and three inches long, and being hollow-ground and having the edge of an ordinary case-knife.

The knives *d d* should be placed about three-sixteenths of an inch from each edge of the belt *c c*, and the knives *e e* should be distributed between the two outer knives, and about one-eighth of an inch apart. These knives, thus arranged upon the band *c c*, acting as the cotton-picker, slide through the loose fibers of the cotton and retain hold of the cotton-seed, which cannot slip through one-eighth-inch apertures. In consequence of the natural adhesion of the fiber to the seed the knives will carry all the cotton from the boll, because the cotton is more easily detached from the boll than from the seed.

The operation of the machine, then, is simply this: In the ascent of these knives through the fiber they catch the cotton, and then carry it along the line from the top of one of the

pulley-wheels, E, to the top of the other, D, the side knives *d d* preventing the cotton from falling over either side of the belt *c c*. On the descent of the knives over the pulley-wheel D the cotton falls from the knives, and is forced by the fan F into the box below.

F is an ordinary revolving fan, having its bearings in the small frame 17 18, attached to the upper part of the frame *a a*, and above the large pulley-wheel D. This fan is connected by a band-gearing, *p*, with a small band-wheel, *e'*, upon the shaft of the large cogged wheel B. This fan-wheel I usually make about three inches in diameter and about five inches in length.

The belt *c c* should be about seven feet long, three and one-fourth inches wide, and from three-eighths to one-half inch thick, with about eighteen sections or rows of picking-knives.

G is a guide, extending about two inches above the casing A, usually on the left side, and secured by passing the rod forming the guide entirely around the casing; or it may be secured in any other suitable and convenient manner. This guide is grasped in the hand of the operator, who is able by its use and the use of the brace K to guide with ease and rapidity the picker toward any point he may desire to grasp the cotton.

H is a catch-board, of tin or other suitable material, with looped sides, extending from the lower front of the casing A about three and one-half inches. This catch-board is designed to protect the picking-knives against weeds and other obstructions from below.

K is a cross-brace attached to the bar 20, extending from the frame supporting the fan F. When the machine is in use this brace is brought up firmly against the breast of the operator, where it is secured by means of straps *l l*, and thus enables him, with the assistance of the guide G, to direct and control the picker as may be desired.

L is a receiving-box attached to the rear of the frame *a a*, and behind the large pulley-wheel D, so as to catch and hold the cotton as it falls from the knives *d d* and *e e*.

The straps *l l* on the receiving-box L are to secure the whole machine, when in use, to the body of the operator.

I am aware that machines for picking cotton have been invented with endless belts and bearing-teeth to pick and carry the cotton to the box, and therefore I do not claim, broadly, a machine for picking cotton thus constructed.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

A cotton-picker having the casing A, lapping seams on the line *s*, adjusting-rod 23, and pin *i*, constructed as described, in combination with the pulley-wheels D E, belt *c*, and knives *d d e e*, all arranged and operated substantially as and for the purpose set forth.

B. I. DREESON.

Witnesses:

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