

(No Model.)

C. GILBERT.  
COTTON GIN.

No. 419,514.

Patented Jan. 14, 1890.

Fig. 1.

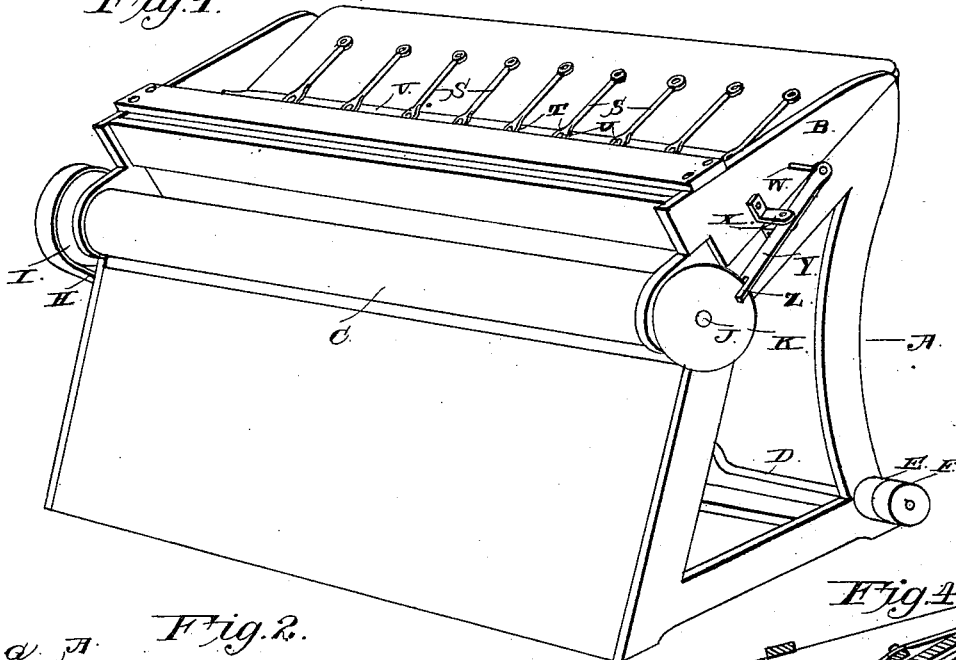


Fig. 2.

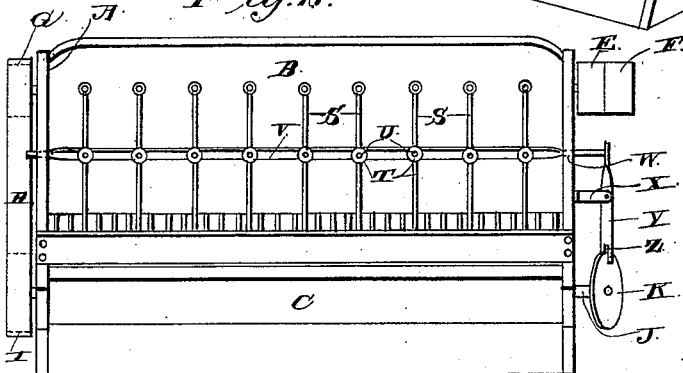


Fig. 4.

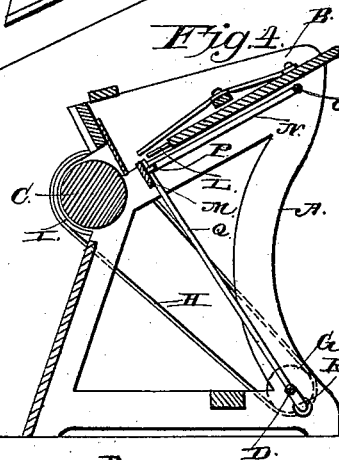
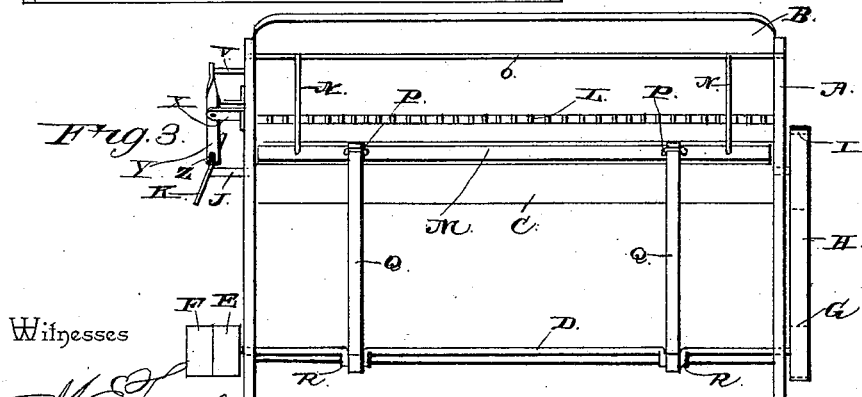


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

CEPHAS GILBERT, OF BRANFORD, FLORIDA.

## COTTON-GIN.

SPECIFICATION forming part of Letters Patent No. 419,514, dated January 14, 1890.

Application filed May 15, 1889. Serial No. 310,821. (No model.)

*To all whom it may concern:*

Be it known that I, CEPHAS GILBERT, a citizen of the United States, residing at Branford, in the county of Suwanee and State of Florida, have invented a new and useful Cotton-Gin, of which the following is a specification.

This invention relates to cotton-gins; and it has for its object to provide cotton-gins, especially of that class which are used for long-staple cotton, with an improved feeding device, which shall be simple in construction, durable, and effective in operation.

With these ends in view the invention consists in the improved construction and arrangement of parts, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a cotton-gin to which my improvement has been applied. Fig. 2 is a top view of the same. Fig. 3 is a rear view. Fig. 4 is a longitudinal vertical sectional view.

The same letters refer to the same parts in all the figures.

A designates the frame of the gin, which is provided with the hopper B, cylinder C, and which is provided at its lower rear end with the crank-shaft D, having pulleys E and F, which are respectively loose and fixed upon the said shaft, and through the medium of which latter motion may be transmitted to the operating mechanism of the gin from any suitable operating machinery. One end of the crank-shaft D is provided with a drum or band-wheel G, from which a belt or band H passes over a drum I, mounted securely upon one end of a shaft J of the cylinder C. The opposite end of the said shaft is provided with a cam-wheel K.

The lower end or discharge-opening of the hopper is provided with the downwardly-extending fingers L L, in front of which works the vertically-reciprocating plate M, which is mounted upon arms N, attached to a rock-shaft O, which is mounted in suitable bearings in the sides of the frame. The plate M is provided on its rear side with staples P, in which are secured the upper ends of pitmen Q, the lower ends of which are mounted upon the cranks R R of the shaft D.

Mounted pivotally upon the upper side of the inclined feed board or hopper D are a series of downwardly-extending arms S S, which may extend slightly beyond the fingers

L at the lower edge of the hopper or feed-board, and which are provided with flattened central portions T, which are perforated to receive the bolts U, by means of which the said arms are connected pivotally with a transverse rod or bar V, the ends of which extend through openings W in the sides of the frame. One side of the frame is provided with a laterally-extending bracket X, to which is pivoted a lever Y, one end of which is connected pivotally with the transverse rod or bar V, while the other end of said lever is provided with a notch Z, that straddles the rim or periphery of the cam-wheel K. It will be observed that when the latter rotates a vibrating motion is imparted to the lever Y, which in turn serves to reciprocate the rod or bar V transversely, thereby causing an oscillating or vibrating motion to be imparted to the arms S S, which in this manner are caused to feed the contents of the hopper evenly and gradually out through the discharge-opening.

The construction of this device is, as will be seen, exceedingly simple, and it is capable of being applied to cotton-gins of ordinary construction without materially altering the same.

Having thus described my invention, I claim—

In a cotton-gin, the combination of the inclined feed-board or hopper having downwardly-extending fingers, a rock-shaft arranged below said board and carrying a plate arranged vertically in front of the fingers, a transverse crank-shaft, pitmen connecting the cranks of the latter with the vertical plate, vibratory arms secured pivotally upon the feed-board, a transverse bar connected pivotally with said vibratory arms, a lever connected pivotally with said bar and having a bifurcated end, the gin-roll, a belt connecting a pulley on one end of the shaft of the latter with a pulley on one end of the crank-shaft, and a cam-wheel mounted on the other end of the gin-roll shaft and engaging the bifurcated lever, substantially as set forth.

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

CEPHAS GILBERT.

Witnesses:

GEO. W. DREW,  
F. E. RANKIN.