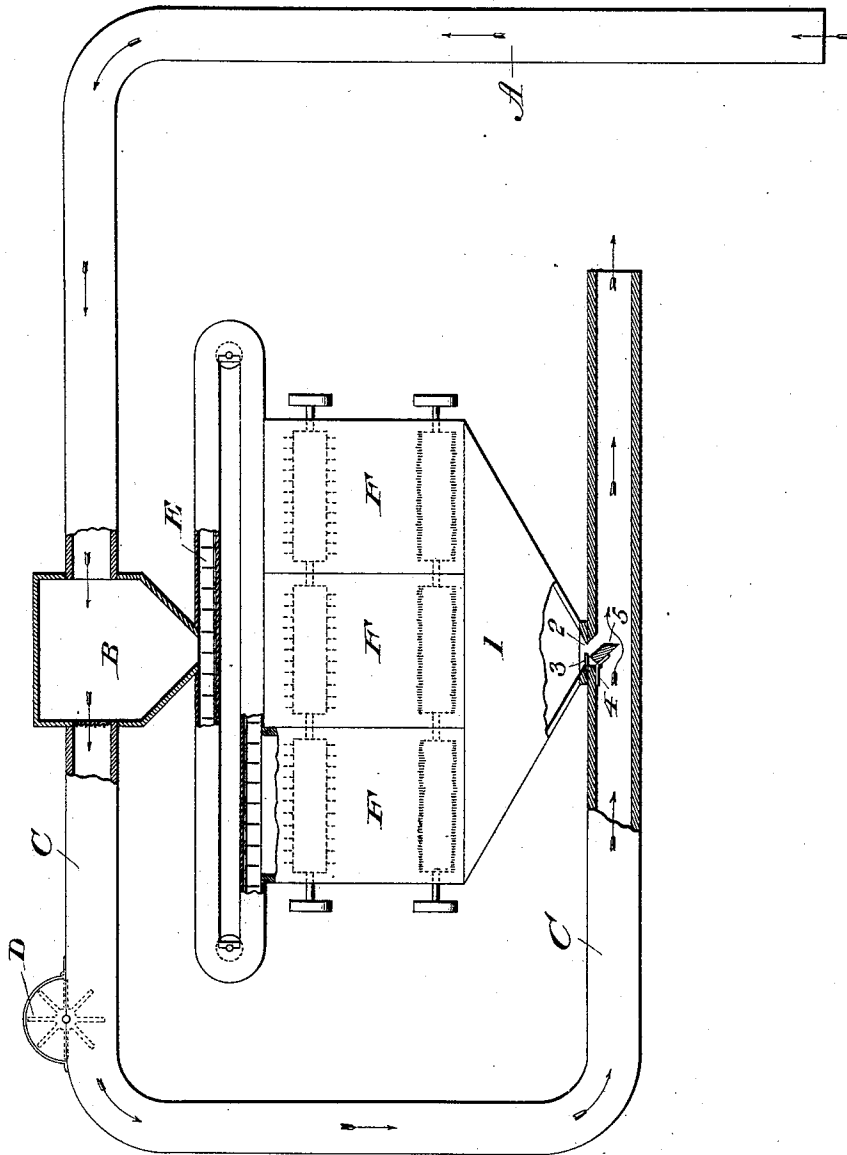


(No Model.)

J. CORNELISON.
PNEUMATIC FEEDER FOR COTTON GINS.

No. 482,916.

Patented Sept. 20, 1892.



Witnesses

L. S. Elliott.

E. M. Johnson

Jesse Cornelison.

Inventor

by  Attorney

UNITED STATES PATENT OFFICE.

JESSE CORNELISON, OF OAKLAND, INDIAN TERRITORY.

PNEUMATIC FEEDER FOR COTTON-GINS.

SPECIFICATION forming part of Letters Patent No. 482,916, dated September 20, 1892.

Application filed April 28, 1892. Serial No. 431,051. (No model.)

To all whom it may concern:

Be it known that I, JESSE CORNELISON, a citizen of the United States of America, residing at Oakland, in the Chickasaw Nation, Indian Territory, have invented certain new and useful Improvements in Pneumatic Feeders for Cotton-Gins; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in apparatus for handling seed-cotton.

The object of the invention is to provide means for handling the cotton and seed, conveying it to the gin, and removing the seed from the gin after the cotton has been separated therefrom by the same blast of air which elevates the cotton.

In the drawing which illustrates my invention I have shown sufficient of an apparatus for handling seed-cotton to show the application of my invention thereto.

A designates a pneumatic conveyer, which is connected with the exhaust-chamber B, said exhaust-chamber being also connected by an air-pipe C with a fan D. The exhaust-chamber is connected with a feeder E, and said feeder takes the cotton from the exhaust-chamber to the gins F, where it is operated upon in the usual manner. The portion of the gin into which the cotton-seed falls after having been separated from the cotton is provided with a suitable funnel or chute 1, which leads into the air-pipe C by means of an opening or aperture 2, which is provided with a plate 3, which intersects a portion of the opening and covers the joint adjacent to and above the pintle of the hinge 4, which secures in place a swinging valve 5, the edge of the aperture opposite the plate 3 being beveled, as shown, while the edge of the valve is also beveled. The valve 5 is of light material and swings downward in the pipe C, so that the current of air which is induced by the fan D will strike said valve and bring it to an inclined position, and should the funnel or chute 1 be partially filled with seed they will fall into the pipe C and be carried out of the

same by the air-current. When the fan is in operation, should the chute 1 be free of cotton-seed, the tendency would be to draw air through the gin and distributors E, which by the construction shown is obviated, as the suction of air would close the valve and cut off this means of entrance through the gin to the exhaust-chamber.

The pneumatic conveyer and exhaust-chamber, which are provided with a screen, fan, air-pipe, and gin, are of the usual construction, and are referred to for the purpose of illustrating the application of my invention thereto.

The valve 5 being applied in the manner shown cannot become clogged, and by the use of my improvement the air-current is utilized to convey the cotton-seed to a suitable receptacle, the same current also conveying the cotton to the gin.

Instead of employing a single chute, each gin may be provided with a separate chute and valve, each one connecting with the exhaust-pipe C.

Having thus described my invention, I claim—

1. In combination with a cotton-gin having a pneumatic conveyer for the cotton, an exhaust-chamber B, having a screen over the opening therein, which connects with the conveyer, and an opening for delivering the cotton from the conveyer to the gin, and an exhaust-fan for creating an air-current through the conveyer and through a discharge-pipe, said discharge-pipe being connected to the cotton-gin by a valved aperture, substantially as shown.

2. In combination with a cotton-gin having a pneumatic conveyer leading into an exhaust-chamber having a screen, means for delivering the cotton from the exhaust-chamber to the gin, and a pipe extending from the exhaust-chamber to the under side of the gin, the gin being connected by a chute to the aperture in the pipe C, said aperture having a swinging valve hinged to the side thereof, so that it will be brought to an inclined position by the exhaust-air impinging against the same, substantially as shown, and for the purpose set forth.

3. The combination, with a cotton-gin and an exhaust-pipe connected to each other by a

chute, and an aperture between the chute and exhaust-pipe, of a hinged valve 5 and a plate 3, located above said hinge, substantially as shown and for the purpose set forth.

- 5 4. The combination, with a cotton-gin and an exhaust-pipe, of a chute connecting the same, an aperture 2, having a beveled edge, a swinging valve 5, also having a beveled edge, and

a plate 3, located above the hinge, substantially as shown, and for the purpose set forth. 10

In testimony whereof I affix my signature in presence of two witnesses.

JESSE CORNELISON.

Witnesses:

M. P. CORNELISON,
W. W. CARSON.