(No Model.)

J. F. JONES.

COTTON ELEVATOR.

No. 264,703. Patented Sept. 19, 1882.

Fig. 1

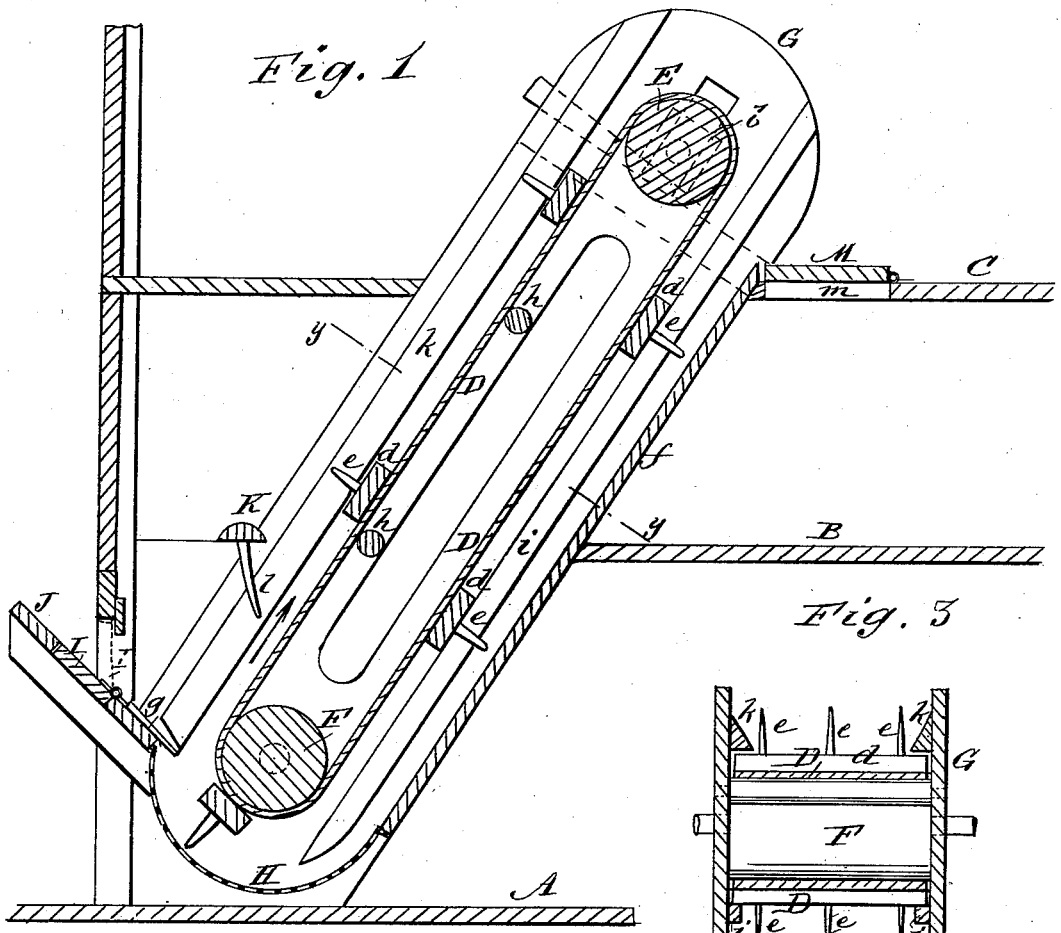
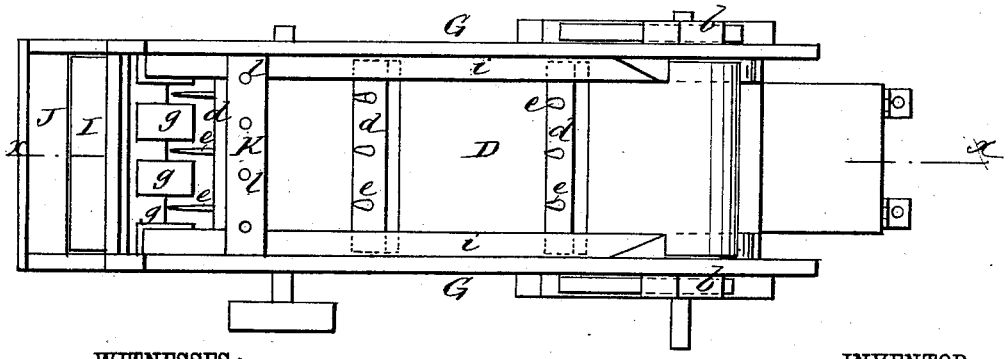


Fig. 3

Fig. 2



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UNITED STATES PATENT OFFICE.

JORDAN F. JONES, OF LAUREL, NORTH CAROLINA.

COTTON-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 264,703, dated September 19, 1882.

Application filed July 15, 1882. (Model.)

To all whom it may concern:

Be it known that I, JORDAN F. JONES, of Laurel, Franklin county, North Carolina, have invented a new and useful Improvement in Elevators, of which the following is a full, clear, and exact description.

This invention more particularly relates to elevators for lifting seed-cotton in gin-houses to the different floors thereof; and it consists in the construction and combination of various parts of the apparatus, whereby the cotton may be taken from a wagon while on a pair of scales which weighs it, and be very expeditiously transferred, free from rocks and packing, onto any one or more of the upper floors of the gin-house, substantially as herein described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a sectional elevation on the line *x x* in Fig. 2, through the floors of a gin-house and elevator within the building. Fig. 2 is a plan view of the elevator, and Fig. 3 a transverse section thereof on the line *y y* in Fig. 1.

The elevator is placed in a frame representing the frame of the building or gin-house, of which A B C indicate the ground and two upper floors, or there may be more. Said elevator is composed in part of an inclined endless belt, D, of leather or any other suitable material, arranged to pass over or around upper and lower pulleys or drums, E F, to the lower one of which motion is communicated by a pulley or gearing upon its shaft, while the shaft of the upper pulley may be supported in sliding boxes *b* to provide for keeping the belt at a proper tension, or any other suitable mode of driving and hanging the belt may be adopted. The belt D has secured on it cross-bars *d d*, armed with hooks or teeth *e e* for carrying up the cotton. Said belt works within a case or box, G, of corresponding inclination with the belt, and the sides of which serve to support the shafts of the belt-pulleys. This box may be open on its front and top, but has a back board, *f*, and sieve H at its bottom. The motion of the belt D is as indicated by arrow in Fig. 1.

I is a door hinged below in the side of the building and opening outward therethrough, so as to form, when open, a section of the hopper or feed-board J, as shown by full lines in Fig. 1. When closed, as represented by dotted lines in the same figure, it may form part of the outside wall or exterior portion of the building. The cotton is thrown from the wagon, after the latter, with its load, has been weighed, onto this combined door and feed-board section I, when open, and passes down from thence onto a series of lower divided feed-board extension-strips, *g g*, between which the teeth *e e* of the belt pass, and which prevent any heavy delivery of cotton into the sieve H, where it might pack, and allow of rocks, dirt, and other impurities falling through out of the way.

Arranged underneath the front or rising portion of the belt D are rollers *h h* for keeping the belt in its proper position. The returning or falling portion of the belt rests by its cross-bars *d* on strips *i i*, which prevent its sagging and causing the teeth *e e* to touch the back *f*, that would interfere with the running of the belt, the back board, *f*, being necessary to return any cotton which may not be discharged at top of the elevator.

Arranged up along the interior of the sides of the box H, over the edges of the belt D, are beveled strips *k k*, which serve to keep the cotton from the edges of the belt, where it would gather and get under the belt.

Arranged also above the feed-board and over the belt, in moderate proximity to the feed-board, is a stationary bar, K, armed with downwardly-projecting teeth or spikes *l l*, which keep the cotton back to restrict it to a proper quantity on the belt and prevent its packing thereon or running over the box H, and to cause it to run free and easy.

Situated immediately beneath the upper delivery end of the belt D is an opening, *m*, covered by a lid or door, M. This provides, when the lid is closed, for delivery of the cotton onto the upper floor, and when the door is open for its delivery onto the floor beneath.

I am aware that on the endless chain or band of a hoist or elevator rollers have been employed; that teeth or brackets have been used on endless carriers; that means have been

employed to support the belt on the under side, and that a feed and delivery chute at suitable case-openings are old; but

What I claim as new and of my invention is—

1. In combination with the inclined elevating-belt D, the door I in the side of the building, constructed and arranged so that when thrown open it forms a feed-board or feed-board section to said belt, substantially as specified.

2. An elevator-box having the metallic screen extended around the entire arc within which the belt makes its turn around the bottom roll, F, as shown and described.

3. In an elevator, the combination, with the tooth-bars *d*, arranged across the belt, of the parallel strips *i*, receiving the teeth between them and the bars on them, substantially as and for the purpose set forth.

4. In combination with the box G and endless elevating-belt D, the beveled upper side strips, K, arranged to cover the edges of the belt, essentially as and for the purposes herein set forth.

5. The combination, with the box G and endless elevating-belt D, having toothed cross-bars *d*, of the stationary cross-bar K, provided with teeth *l*, and arranged in proximity to the lower or feeding end of the belt and over the same, substantially as and for the purposes specified.

JORDAN F. JONES.

Witnesses:
J. A. MAY,
J. P. TIMBERLAKE.