(No Model.)

A. R. COTTON.

TOBACCO ELEVATOR.

No. 342,070. Patented May 18, 1886.

Fig. 1.

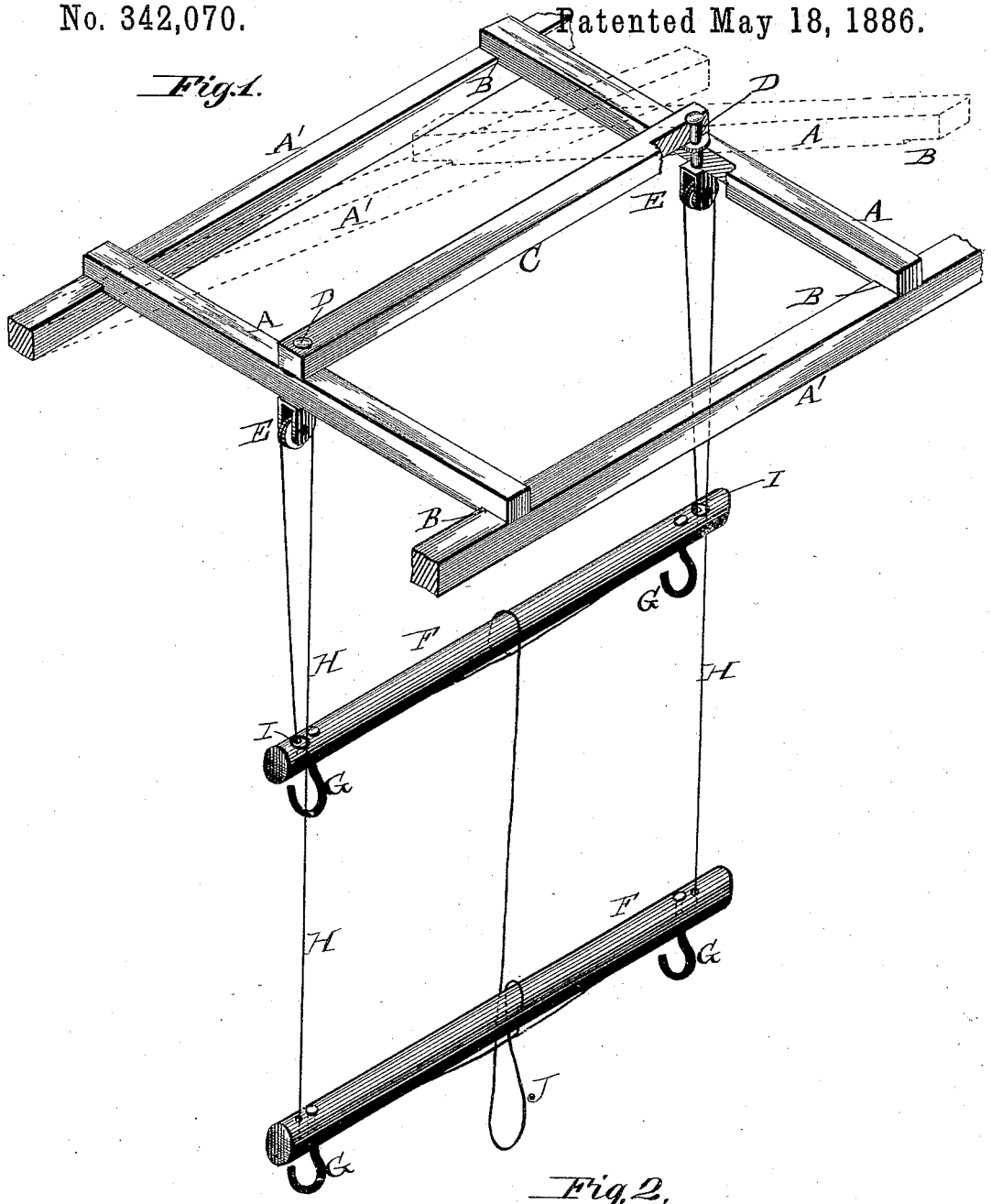
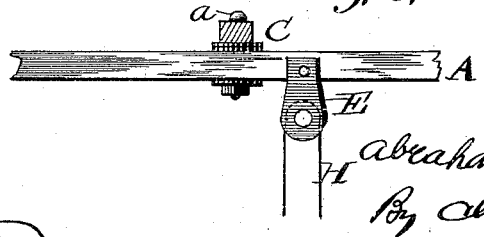


Fig. 2.



Witnesses:
B. C. Fendrick
Wm. L. Allan

Inventor:
Abraham R. Cotton
By Chas. J. Gooch
his attorney

UNITED STATES PATENT OFFICE.

ABRAHAM R. COTTON, OF VERSAILLES, KENTUCKY.

TOBACCO-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 342,070, dated May 18, 1886.

Application filed October 15, 1885. Serial No. 180,007. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM RANDOLPH COTTON, a citizen of the United States of America, residing at Versailles, in the county of Woodford and State of Kentucky, have invented certain new and useful Improvements in Elevators; 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 drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in the construction of tobacco-elevators.

My improved elevator consists, essentially, of a pair of cross-pieces adapted at their respective ends to rest upon the tier-rails of a tobacco-curing barn, and having pivoted connection at or about their center to a tie-rail and depending pulleys, two or more carrying-rails having tobacco-carrying hooks, and a system of cords for connecting the carrying-rails.

In the accompanying drawings, Figure 1 represents a perspective view of my improved elevator. Fig. 2 represents a modification of a portion thereof.

A represents the cross-pieces supporting the carrying and elevating devices. These cross-pieces are at each end recessed or cut away, as shown at B, or otherwise suitably formed to adapt them to fit and rest securely upon the tier-rails A′ of a tobacco-curing barn. At their respective centers they are pivotally connected to a tie-rail, C, by pulley-bolts D, from which depend, below the under side of the cross-pieces, case-screw pulleys E. If preferred, however, the cross-pieces and tie-rail may be pivotally connected together by bolts *a*, and the case-screw pulleys E may be attached to the sides of the cross-pieces, as represented in Fig. 2, or to the under sides thereof, as desired.

F represents the tobacco-carrying rails having depending hooks G, upon which the tobacco to be cured is placed. These rails F are shown in the drawings as round, but they may be of any desired shape. In each end of the carrying-rails is a hole through which the cord H, connecting the respective carrying-rails F, passes. This cord, as shown in the drawings, passes around the upper portion of the respective hooks and along the under side of the lower rail, from thence up through the holes in the ends of the rail to and over the pulley on one of the cross-pieces, and from thence down to and through one end of the upper carrying-rail, thence around the hooks on and through the other end of said upper rail to and around the pulley on the other cross-piece. This cord is double at the point between the cross-pieces and the upper carrying-rail, and upon these doubled portions rings I are strung, to confine the respective portions of the cord within its appropriate movements and positions as the carrying-rails are raised and lowered.

J represents the operating-cord, which connects those portions of the cord extending beneath the respective carrying-rails and connected to the carrying-hooks. By pulling downward upon that portion of the operating-cord attached to the cord encircling the hooks on the lowest rail said lowest rail will be drawn down and the other rail raised, while on pulling downward upon that part of the operating-cord connected to the upper rail that rail will be lowered and the other one raised.

By this construction the elevator can be very readily suspended from the tier-rails of a tobacco-curing barn by simply resting the cross-pieces thereon, the recessing of the ends of which adapts them to fit such tier-rails and remain steadily in position thereon during the operation of the carrier-rails. By pivotally connecting the cross-pieces to the tie-rail said cross-pieces and the tobacco-carrier can be turned around and suspended from and supported on rails or beams, or other supports generally, it not being necessary that the tier-rails or other supports for such cross-pieces shall extend in any particular direction. Moreover, by reason of their pivotal connection to the tie-rail they are adapted to be suspended from tier-rails or other supports of varying distances apart, as the cross-pieces can be turned on their pivots to any desired angle, and as each cross-piece can be turned on its pivot inde-

pendently of the other they can rest upon or be suspended from a pair of beams or rails of unequal distances apart.

By my improved construction the elevator is easily worked, the simple pulling down upon the operating-cord being all that is necessary to secure the raising and lowering of either of the carriers, as desired. It has the advantage of two carriers, one of which can be loaded while the other is being unloaded. It is capable of taking on either carrier two or more sticks of tobacco, or only one stick at a time, as may be desired. It is simple in arrangement, easily and inexpensively constructed, can be fitted to any barn, and be readily moved from one position to another. The tie-rail serves to brace and steady the cross-pieces in position, and prevent their moving or shifting during the operation of the carriers.

Although I have shown and described my elevator as especially adapted for the raising and lowering of tobacco, it is manifest that it is equally well adapted for the raising and lowering of other articles. For instance, one or more hods or baskets or other receptacles may be attached to the respective rails or bars F, within which mortar, bricks, or other articles may be contained, and by means of the operating-cord raised to the desired points, and the elevator can equally well be employed for transporting other articles from one story to another, or from one height to another of a building.

Having thus described my invention, what I claim is—

1. An elevator consisting of a tie-rail, cross-pieces pivotally connected thereto, pulleys depending from said cross-pieces, carrying bars or rails adapted to receive the material to be elevated, a cord or cords connecting said carriers and pulleys, and an operating-cord connected to said carriers for securing the alternate raising and lowering of the carriers, substantially as set forth.

2. An elevator having suspending cross-pieces adapted to rest upon suitable supports, a tie-bar to which said cross-pieces are pivotally connected, pulleys depending from said cross-pieces, rails or carriers adapted to receive the material to be elevated, and cords for connecting and raising and lowering said carriers, substantially as set forth.

3. An elevator consisting of suspending cross-pieces adapted to rest or fit upon suitable supports, a tie-bar to which said cross-pieces are pivotally connected, pulleys depending from said cross-pieces, rails or carriers adapted to receive the material to be elevated or lowered, and the operative cords, and cords connecting said carriers and pulleys for the purpose of securing the alternate raising and lowering of said carriers, substantially as set forth.

4. An elevator consisting of suspending cross-pieces adapted to rest or fit upon suitable supports, a tie-bar to which said cross-pieces are pivotally connected, pulleys depending from said cross-pieces, rails or carriers having depending-hooks, a cord loosely connecting said carriers and pulleys, to permit of the free movement of said carriers in opposite directions, an operative-cord for raising and lowering said carriers, and guide-rings for maintaining the position and securing the proper action of the connecting-cords, substantially as set forth.

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

ABRAHAM R. COTTON.

Witnesses:
W. S. BARBOUR,
A. SUBLETTE.