(No Model.)

J. HOLLINGSWORTH & O. DARWIN.

APPARATUS FOR DELINTING COTTON SEED.

No. 458,833. Patented Sept. 1, 1891.

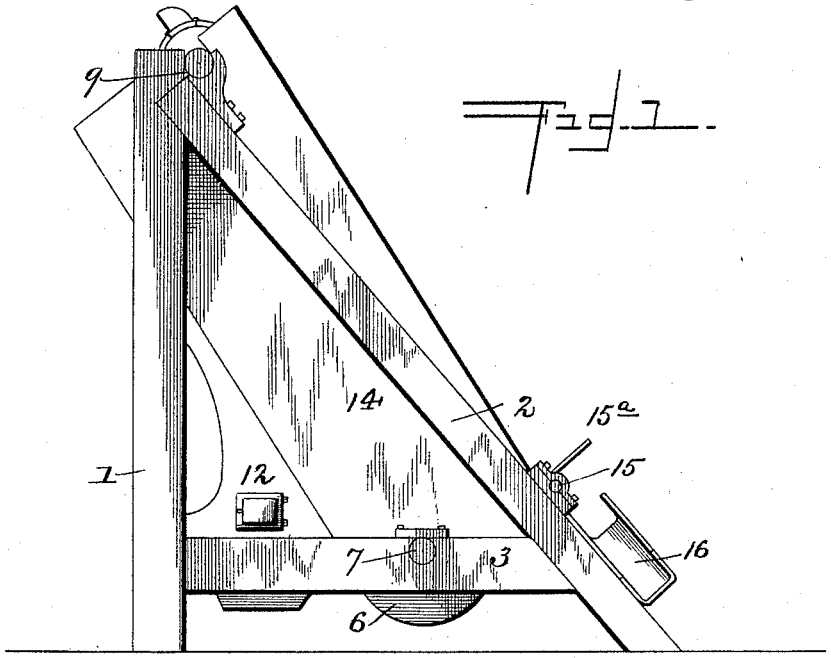

Fig. 1.

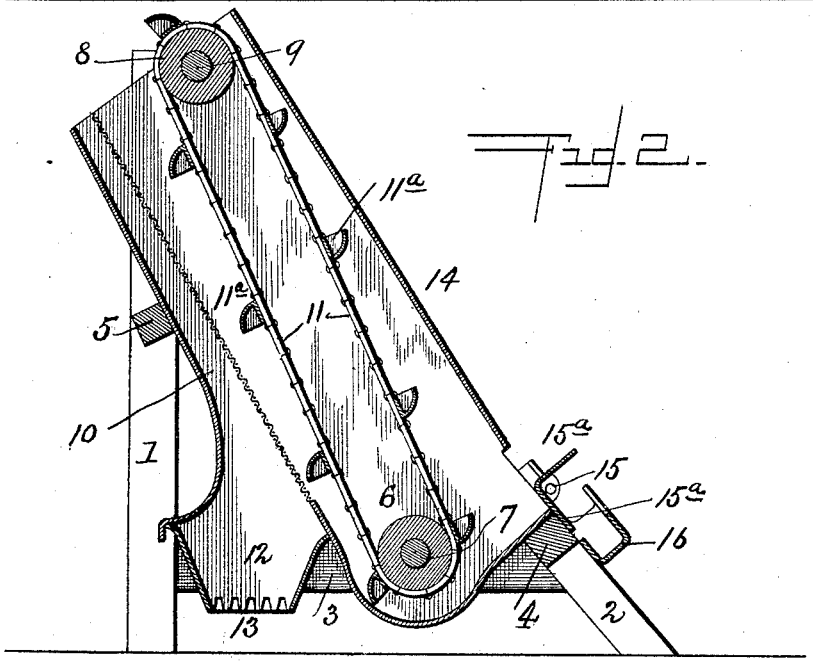

Fig. 2.

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UNITED STATES PATENT OFFICE.

JOSEPH HOLLINGSWORTH AND OVERTON DARWIN, OF WACO, TEXAS.

APPARATUS FOR DELINTING COTTON-SEED.

SPECIFICATION forming part of Letters Patent No. 458,833, dated September 1, 1891.

Application filed April 17, 1891. Serial No. 389,335. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH HOLLINGSWORTH and OVERTON DARWIN, both residents of Waco, in the county of McLennan and State of Texas, have invented certain new and useful Improvements in Apparatus for Delinting Cotton-Seed; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to improvements in apparatus for burning off or removing the lint from cotton-seed.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of an apparatus constructed in accordance with our invention. Fig. 2 is a central vertical section of the same.

In the said drawings the frame of the apparatus is shown as consisting of the uprights 1, inclined bars 2, side bars 3, and cross-bars 4 and 5. These parts may be made of any suitable material bolted or otherwise secured together.

The numeral 6 denotes a metallic sprocket-roller having short journals 7, which work in bearings in the side pieces 2. At the upper part of the frame there is a similar roller 8, which is also provided with journals 9, which work in bearings in said frame. Passing over these rollers is an elevator consisting of sprocket-chains 11 and buckets 11^a, so arranged that as the rollers are revolved by any suitable means the elevator will be actuated. As will be seen, the elevator occupies a diagonal position.

At the lower or under side of the elevator and parallel therewith is a hot-air flue 10, the lower end of the inner wall of which is curved and extended around the roller 6 and secured to the front cross-bar 4. The upper end of the flue is supported by cross-bar 5.

Located at the rear of the frame, at the lower part thereof, is a furnace 12, having a grate 13, which is secured to the side pieces 3 and rear cross-bar 5. The flue just above the furnace is made flaring, so as to fit over the same and form part thereof, its side being provided with doors for the insertion of fuel.

A hood 14 is placed over the upper side of the elevator, completely inclosing the same and forming with the inner wall of the flue a hot-air chamber. The lower part of this hood is secured to the cross-bar 4 and at its front lower edge is provided with an opening for feeding and discharging the seed. Extending centrally across this opening is a shaft 15, journaled in the inclined bars 2 and having two wings 15^a and 15^b, set at an angle to each other, forming a double door. This shaft may be provided with a suitable operating-handle. When the lower wing of the double door is closed, the upper one is open, so that the apparatus is charged, and when the upper wing is closed the lower one is open, allowing the grain to be discharged.

The operation will be readily understood. A fire is started in the furnace and the apparatus is charged through the opening in the lower part of the hood, the upper door or wing being opened for that purpose. The elevator is then actuated and the buckets thereof will catch the seed and carry it upward and then down over the inside or back of the flue and is discharged through the lower part of the opening in the hood, the lower wing being opened for that purpose. In its passage through the apparatus the lint is burned off.

All the parts of the apparatus are to be made of metal, and an inclined trough 16 is located below the discharge-opening to receive the seed as it comes from the elevator.

We prefer to form the inner wall of the hot-air flue of wire-cloth or perforated metal, so that the hot air can readily enter the hot-air chamber.

Having thus described our invention, what we claim is—

1. The combination, with the frame, of the inclined hood supported thereby, having an opening for introducing the seed and an opening for discharging the same near its lower end, the elevator consisting of the endless belt and the sprocket-rollers journaled in said

hood, the furnace located in the lower part of the frame, and the flue communicating with said furnace, substantially as described.

2. The combination, with the hood having an opening near its lower end, of the double door extending across said opening, comprising two wings at an angle to each other hinged or pivoted to said hood, substantially as described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

JOSEPH HOLLINGSWORTH.
OVERTON DARWIN.

Witnesses:
W. M. SLEEPER,
WM. W. KENDALL.